

NYC PPTN Update

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Electric System Planning Working Group (ESPWG)

Thursday, March 21, 2024

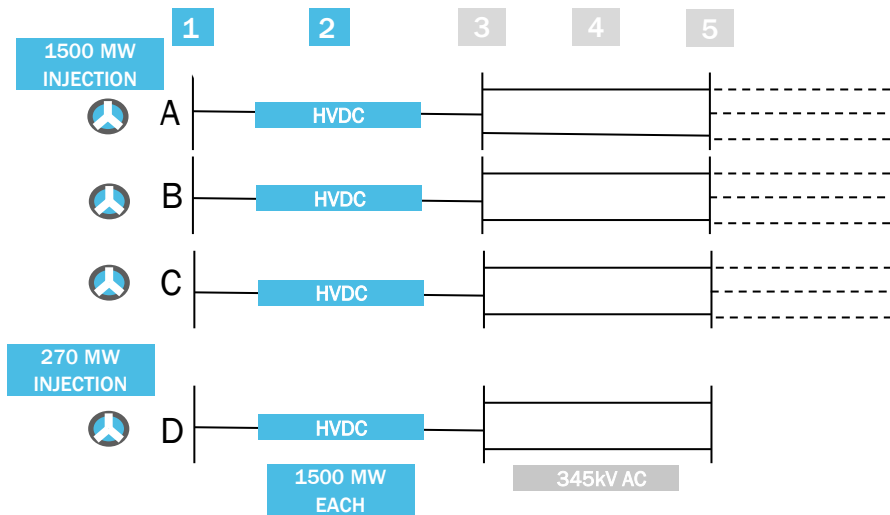
Agenda

- **Viability and Sufficiency Assessment**
- **Evaluation & Selection Metrics**
- **Project Data Submission Updates**
 - Updates to Attachments B and C to the PPTPP Manual
 - Updates to New York City PPTN Information Request Sheet
 - Baselines Case Update
- **Schedule & Next Steps**

Viability and Sufficiency Assessment

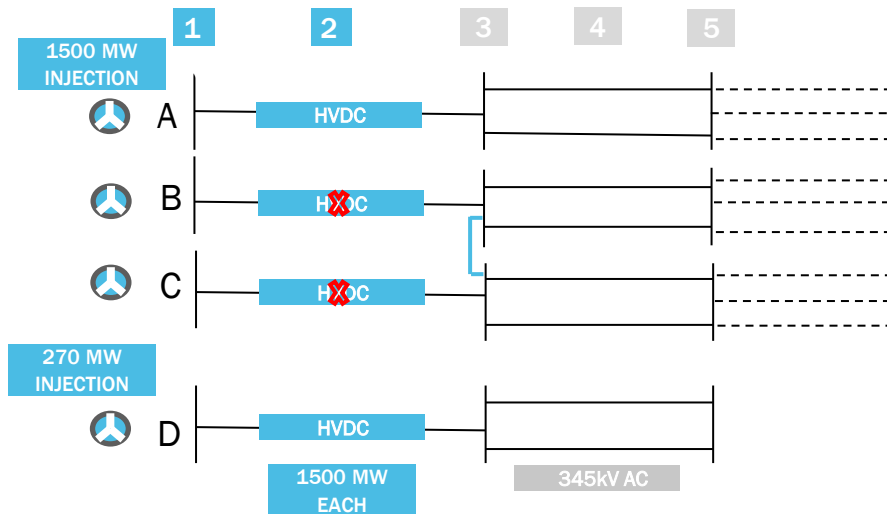
Project Example for VSA

- The example project below will be used in the following slides to clarify application of reliability standards in the VSA



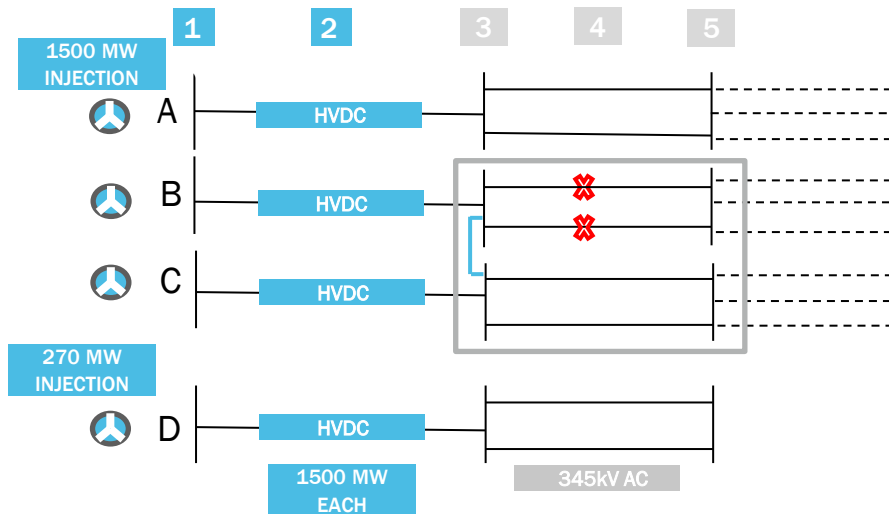
- Total OSW capacity = 4,770 MW
 - (3) 1,500 MW each
 - (1) 270 MW
- HVDC rating (#2) = 1,500 MW each
- AC connector rating (#4) = 750 MW each

VSA For Project Example



- Radial connection of offshore facilities A & D ends at component 5
- Radial connection of offshore facilities B & C ends at component 3
- Injection of 4,770 MW is not required for loss of component 2 under N-1 or N-1-1 conditions
- Injection of 3,000 MW + 270 MW is acceptable under N-1 condition
- Injection of 1,500 MW + 270 MW is acceptable under N-1-1 condition

VSA For Project Example



- Radial connection of offshore facilities A & D ends at component 5
- Radial connection of offshore facilities B & C ends at component 3
- Injection of 4,770 MW is required for loss of component 4 under N-1 or N-1-1 conditions
- In the absence of the AC connection between component 3 the radial connection of offshore facility ends at component 5

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
- The NYISO presented potential evaluation and selection metrics at the NYISO technical conferences and at the February 6th ESPWG meeting
- In addition to demonstrating how solutions meet the viability and sufficiency criteria, Developers must clearly and succinctly highlight specific characteristics and benefits of their solutions under the evaluation metrics. Information should be shared as part of the project proposal in Attachment C under ‘Project Overview’ section

Impact on Operating Reserve

- **The NYISO currently procures operating reserves according to the largest single loss of source on the system**
 - Established by NYSRC Reliability Rules, Section E
 - Currently set at 1,310 MW
- **For the NYC PPTN, the NYISO will not limit injections to the existing single loss of source of 1,310 MW**
- **An analysis of the impact of any injections higher than 1,310 MW will be studied in project evaluations**

Operating Reserve Models

- **NYISO currently models operating reserves requirements explicitly in production cost simulations**
- **For projects that include a single transmission element $> 1,310$ MW, NYISO may perform one or both of the following evaluations:**
 - Static operating reserve equal to new single loss of source for all hours
 - Variable operating reserve equal to hourly single largest loss of source
 - If single cable flow $> 1,310$ MW, operating reserve requirement = cable flow
 - If single cable flow $\leq 1,310$ MW, operating reserve requirement = 1,310 MW

Operating Reserve Evaluation

- **NYISO may consider the following when determining the impact of individual projects on operating reserves**
- **Cost**
 - Increase in production costs (\$)
- **Operation**
 - Changes in curtailment energy (MWh)
 - Changes in transmission congestion (hours)
 - Potential reserve deficiency conditions (MW, hours)

Example Operating Reserve Impact

- Existing single loss of source = 1,310 MW
- Single cable proposed w/ 1,400 MW limit
- Assume in one simulation hour flow = 1,350 MW
- Sensitivity Simulations
 - Static: simulation run w/ 1,400 MW reserve requirement (+90 MW above 1,310 MW)
 - Variable: simulation run w/ 1,350 MW reserve requirement (+40 MW above 1,310 MW)
- **Simulation results could show that the increase in operating reserve requirements results in:**
 - The need to commit an additional generator, increasing production cost
 - An increase in OSW curtailment due to new commitment/dispatch
 - Inability to meet reserve requirement due to lack of available resources

Project Data Submission Updates

Attachment C Updates

- NYISO presented proposed changes to Attachment C at the December 19, 2023 ESPWG, which can be accessed in the December 19th meeting material
- Further proposed changes to Attachment C requesting modeling data in specific format along with editorial changes are included in today's meeting material
- Final version of Attachment C will be posted to NYISO's website with the PPTP Manual before opening of the solicitation window

Attachment B Updates

- NYISO presented proposed changes to Attachments B at the December 19, 2023 ESPWG, which can be accessed in the December 19th meeting material
- Further proposed changes to Attachment B focusing on restructuring the data request for detailed cost estimates are included in today's meeting material
- Final version of Attachment B will be posted to NYISO's website with the PPTPP Manual before opening of the solicitation window

New York City PPTN Information Request

- **For NYC PPTN, NYISO will request Developers to provide information as outlined in the “New York City PPTN Information Request” document**
 - This information is in response to question 13 of Attachment B to the PPTPP Manual
 - Developers must append the filled-in document to Attachment B
- **NYISO presented the “New York City PPTN Information Request” document at the March 8, 2023 ESPWG**
- **Updates to this information request document are included in today’s ESPWG meeting material and include:**
 - Developers to provide geospatial data files in specific format
 - Items to be included in cost estimate information
 - Project modeling information

Baseline Cases - Update

- **The following information is available on request subject to satisfying the requirements to access CELL:**
 - Viability and Sufficiency Assessment Baseline Case - Summer Peak
 - Baseline Light Load Case
 - Developer Technical Guidance Document
 - Supporting Material
- **NYISO is seeking feedback on the available material**
- **Questions should be sent to stakeholder_services@nyiso.com with the subject line “NYC PPTN”**

Schedule & Next Steps

Solicitation Schedule

- Solicitation window opens on April 4, 2024

| 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 (Q2)* |
| | Solutions due in 60 days | June 4, 2024 (Q2)* |
| Viability & Sufficiency Assessment | Perform Viability & Sufficiency Assessment | Q2 - Q4 2024* |
| | Project information release, facility characterization, and stakeholder review | Q2 - Q3 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 | Q1 2025* |
| | Evaluate top-tier projects and issue draft report | Q1 - Q2 2025 |
| | Board review and action | Q2 - Q3 2025 |

*Denotes change to schedule presented at January 23, 2024 ESPWG meeting

Next Steps

■ Solicitation Kickoff

- 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 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 NYISO's website for updates

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

Supplemental Information

Requesting Information from NYISO

- **Preliminary baseline cases will be available on request by completing CEII/NDA form with the NYISO [here](#)**

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

I affirm that the requested information is needed and will be used solely for the following purpose: *

Development of a NYC PPTN project

Describe in detail

- **Changes to baseline cases may occur up to the solicitation for solution**
- **Updated cases will be available to individuals with an executed NDA**

Requesting Information from Con Edison

- System information can be requested by completing form here on the NYISO website

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

Please designate "Transmission Owner" here

Other Information & Acknowledgements

Specify what information you are looking for *

New York City Public Policy Transmission Need system information from Transmission Owner

1. Substation breaker diagram for [insert name] substation
2. Rating sheet for [insert name] feeder
3. Field walk at [insert name] substation

I affirm that the requested information is needed and will be used solely for the following purpose: *

A potential NYC PPTN solution was evaluated using information provided by NYISO. Following transmission constraints require additional transmission system data to finalize a proposal.

Describe in detail

Con Edison requests specific transmission constraints be listed here by including the affected feeder names and/or substations.

Feedback

- The 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 stakeholder_services@nyiso.com with the subject line “NYC PPTN”
- The 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

PSC Order

NYC PPTN Report

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

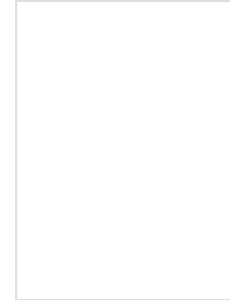
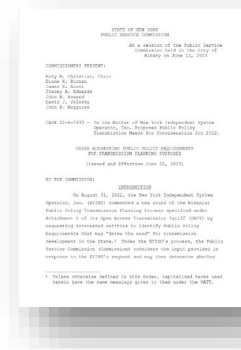
[NYC PPTN Update](#)

February 22, 2024

[NYC PPTN Update](#)

March 8, 2024

[NYC PPTN Update](#)



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 \(Jan 2024\)](#)

[DPS PSC Order Q&A Document \(Feb 2024\)](#)

[DPS NYC PPTN Letter to NYISO](#)

[Attachment B, Q13 – NYC PPTN Information Request Form](#)

