NYISO System & Resource Planning Status Report November 30, 2023

Comprehensive System Planning Process (CSPP):

Reliability Planning Process:

- The 2022 Reliability Needs Assessment ("RNA") was published in November 2022. The final 2022 RNA and companion datasheet are posted at: <u>https://www.nyiso.com/library</u>. (Current)
- The 2023-2032 Comprehensive Reliability Plan ("CRP") was published November 2023. While system margins are very low, there were no Reliability Needs identified in the 2022 RNA. Therefore, a solicitation for solutions was not necessary at the time. The CRP, which sets forth a plan for the bulk power system over a 10-year horizon, finds growing risks to reliability on the grid, including: generator deactivations, extreme weather, uncertain demand trends due to electrification, and slow or delayed development of new generation resources. The final CRP report and companion datasheet are posted at: https://www.nyiso.com/library. (Updated)
- The 2023 Quarter 2 Short-Term Assessment of Reliability ("STAR") issued on July 14, 2023 and identified a Short-Term Reliability Need in summer 2025 in New York City. (Current)
 - This reliability need is primarily driven by a combination of forecasted increases in peak demand and the assumed unavailability of generators affected by the DEC Peaker Rule. The reliability need is a deficiency in the transmission security margin that accounts for expected generator availability, transmission limitations, and updated demand forecasts using data published in the 2023 Gold Book. Specifically, the New York City zone (Zone J) is deficient by as much as 446 MW for a duration of nine hours on the peak day during expected weather conditions (95 degrees Fahrenheit) when accounting for forecasted economic growth and policy driven increases in demand.
- On August 4, 2023, the NYISO solicited market-based solutions to the 2025 reliability need from interested parties, along with a regulated solution from Con Edison. Parties had 60 days from the issuance of the NYISO's solicitation to propose solutions (responses were due October 3, 2023). On November 20, 2023, the NYISO published the <u>Short Term Reliability</u> <u>Process Report</u> addressing the 2025 reliability need. (Updated)
 - No market-based solutions were proposed.
 - Con Edison proposed a regulated transmission solution that would include the construction of a new 345 kV switching station, reconfiguration of two existing 345 kV substations, and the installation of about 16 miles of 345 kV underground cable. Con Edison stated that this solution could not be completed until well after the currently anticipated in-service date of CHPE in 2026. As such, this solution was not viable to address the need in 2025.
 - Orenda proposed a solution comprised of several small battery storage projects, totaling a maximum of 27 MW over four hours (or up to 12 MW over the nine-hour duration of the need) but required an RMR agreement to accelerate development

and construction to be in service by May 1, 2025. Orenda's proposed project was determined by the NYISO to not be viable and sufficient.

- The permanent solution to address this need is the Champlain Hudson Power Express ("CHPE") project planned to enter service in spring 2026.
- To ensure the continued reliability of electric service in New York City, the NYISO has designated the generators on the Gowanus 2 & 3 and Narrows 1 & 2 barges to temporarily remain in operation after the DEC Peaker Rule compliance date until permanent solutions to the Need are in place, for an initial period of up to two years (May 1, 2027). There is a potential for an additional two-year extension (to May 1, 2029) if reliability needs still exist, as provided by the DEC Peaker Rule. Through the quarterly STAR studies, the NYISO will continuously evaluate the reliability of the system as changes occur and will carefully monitor the progress of the CHPE project toward completion.
- The 2023 Quarter 3 STAR was issued on October 14, 2023 and did not identify any new Short-Term Reliability Process Needs. A significant assumption update made in the 2023 Quarter 3 STAR was the inclusion of additional large load interconnection projects primarily in western and central New York, which are currently undergoing evaluations in the interconnection process. While the STAR found that the statewide system margin would be sufficient (the margin is less than 100 MW in 2025 during normal operations for expected weather), the rapid growth of large load projects poses a risk to the future reliability of the New York grid if it is not matched with equivalent addition of new resources. (Current)
- The 2023 Quarter 4 STAR commenced on October 15, 2023 and will be issued by January 13, 2024. (Current)

Economic Planning Process:

- The 2023-2042 System & Resource Outlook model development process has begun, and the study kickoff was held at the June 2023 ESPWG meeting. (Current)
 - The NYISO has updated and benchmarked the engineering models used in the Outlook study. Numerous model and methodology improvements are being applied based on feedback received from stakeholders. Results from this process will be presented at upcoming ESPWG meetings. (Current)
 - Modeling data and assumptions for the Outlook capacity expansion and production cost models were "locked down" as of Q4 2023; development of these models is ongoing. (Current)
 - The 2023-2042 System & Resource Outlook is targeted for completion in Q2, 2024. (Current)

Public Policy Transmission Planning Process:

• The selected projects for the AC Transmission Public Policy Transmission Needs are a joint proposal by LS Power Grid New York and the New York Power Authority (NYPA) for Segment A (Central East), and a joint proposal by National Grid and New York Transco for Segment B (UPNY/SENY). Construction commenced on both projects in February 2021, with project components entering service in phases. The projects' primary components are targeting to commence service in December 2023. The Developer of Segment B informed the NYISO and stakeholders that there is an expected delay to one of the components—the Dover

substation and PARs on the tie line to ISO-NE—due to a legal challenge to the local permit that resulted in an injunction to further develop the site. NY Transco presented findings from their Knickerbocker Series Compensation sub-synchronous resonance (SSR) Study at the October 2, 2023 TPAS meeting. The study recommends that two Hitachi SSR relays be installed at the Knickerbocker substation with low-level trip settings to ensure minimal risk of generator damage. (Current)

- On March 18, 2021, the PSC issued an order (referred to as the "Long Island Offshore Wind Export PPTN") finding that the state Climate Leadership and Community Protection Act (CLCPA) constitutes a Public Policy Requirement driving the need for transmission to ensure delivery of at least 3,000 MW of offshore wind connected to Long Island. On June 13, 2023, following extensive evaluation of 16 viable and sufficient transmission projects, the NYISO Board of Directors selected Propel NY's (a partnership of NY Transco and NYPA) T051 Alternate Solution 5 project as the more efficient or cost-effective transmission solution to meet the Long Island Offshore Wind Export PPTN. Development agreements are in progress. (Current)
- On June 22, 2023, the PSC declared a Public Policy Transmission Need to integrate offshore • wind into New York City ("NYC PPTN"). The NYISO is reviewing the Order, discussing it with stakeholders, and initiating the process for soliciting solutions to the need. In the Order, the PSC encouraged Con Edison to establish a process to make information about interconnection locations available to interested transmission developers. Con Edison held a technical conference on October 23, 2023 to provide an overview of their electric system and potential interconnection sites; see Con Edison's website for more information. The DPS also held a technical conference of the Cable Working Group on October 24, 2023 to discuss the role of the multi-agency siting working group and provide an overview of the cable constraints assessment siting principles. A NYISO technical conference was held on November 6, 2023 to discuss the baseline assumptions and criteria for the Viability & Sufficiency Assessment and provide additional information to developers. A second NYISO technical conference is scheduled for December 7, 2023 to provide information on evaluation & selection criteria. The NYC PPTN project solicitation is targeted for Q1 2024. (Updated)

Interregional Planning:

JIPC/IPSAC:

- The Joint ISO/RTO Planning Committee (JIPC) is continuing to exchange data and information, review transmission needs in neighboring regions, review interconnection projects with interregional impacts, and maintain an interregional production cost database. The JIPC posted the final 2021 Northeast Coordinated System Plan in July 2022 after receiving no stakeholder comments on the draft. JIPC updated stakeholders on planning activities during the May 23, 2023 Interregional Planning Stakeholder Advisory Committee (IPSAC) meeting. The next IPSAC meeting is scheduled for December 8, 2023. (Updated)
- JIPC members are participating in DOE's Atlantic Offshore Wind Transmission Study, which started in December 2022. Resulting from that study and related workshops, the DOE

released on September 19, 2023, an Atlantic Offshore Wind Transmission Action Plan setting forth recommendations through 2050. The full study is still ongoing and is scheduled to be published by end-of-year 2023. (Current)

 ISO-NE sent a letter to JIPC requesting a study to determine whether the current limitation (as memorialized in a three-party joint operating agreement among ISO-NE, NYISO, and PJM) on ISO-NE's largest single loss of source contingency can be increased from 1,200 MW to 2,000 MW. The three members of the JIPC agreed to perform a coordinated study led by ISO-NE, with study kickoff in the fourth quarter of 2023. Currently a search for a consultant to perform study work is being performed. (Current)

EIPC:

 The Eastern Interconnection Planning Collaborative (EIPC) remains involved in a number of interregional planning initiatives, including as key members of the Technical Review Committee for the DOE National Transmission Planning Study. EIPC is also in discussions with FERC and NERC regarding evaluation of interregional transfer capability. This includes support of the NERC Interregional Transfer Capability Study (ITCS) ordered by the U.S. Congress to study the reliable transfer of electric power between neighboring transmission planning regions. NERC kicked off the study on October 31, 2023 with a meeting of the ITCS Advisory Group at which NERC presented a project plan that culminates in a FERC filing in December, 2024. (Current)