

NYISO System & Resource Planning Status Report

October 31, 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: <https://www.nyiso.com/library>.
(Current)
The 2022 RNA key findings include:
 - The margin to maintain reliability over the next ten years could be eliminated based upon likely changes in planned system conditions. However, this RNA finds no long-term actionable reliability needs for the New York State Bulk Power Transmission Facilities as planned from 2026 through 2032 for assumed system demand and with the assumed planned projects meeting their proposed in-service dates.
 - New York City reliability margins are very tight decreasing to approximately 50 MW by 2025 primarily due to the planned unavailability of simple cycle combustion turbines to comply with the DEC’s Peaker Rule. The reliability of the grid is heavily reliant on the timely completion of planned transmission projects, chiefly Champlain Hudson Power Express (CHPE). Increased demand, significant delays in projects, or additional generator deactivations could all cause deficiencies in New York City. Some generation affected by the DEC Peaker Rule may need to remain in service until CHPE or other permanent solutions are completed to maintain a reliable grid.
 - Demand forecast uncertainty or potential heatwaves of various degrees pose risks throughout the next ten years, especially in 2025. In fact, the long-term demand forecast for New York City, to be updated in early 2023, is expected to increase due to strong commercial and residential growth along with increased electrification of transportation and home appliances.
 - A winter reliability scenario was included in the RNA and found that if at-risk generation (*i.e.*, approximately 6,300 MW of existing gas-fueled generation) is unavailable for December through February in winter 2031-2032, reliability would be diminished but still within the loss-of-load-expectation criterion. However, this gas shortage condition would not meet statewide system reliability margins based on deterministic transmission security design criteria as early as winter 2031-32 for expected winter weather conditions. Under cold-snap conditions (reflective of a 1-in-10 year or 90/10 load forecast) the statewide system margins become deficient in winter 2030-31.
- The NYISO commenced the 2023-2032 Comprehensive Reliability Plan (“CRP”) with completion targeted for December 2023. While the system margins were 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 includes discussions and analysis of the transition to the grid of the future. **The draft report was reviewed by the Operating Committee on**

October 11, 2023 and the Management Committee on October 25, 2023. Both the Operating Committee and Management Committee unanimously recommended approval of the CRP by the Board. The CRP will be reviewed by the Board at the November meeting. (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). The NYISO is in the process of assessing the proposals. (Current)
 - If proposed solutions are not viable or sufficient to fully meet the identified reliability need, interim solutions must be in place to keep the grid reliable. One potential outcome could include relying on generators that are subject to the DEC Peaker Rule to remain in operation until a permanent solution is in place. The DEC Peaker Rule anticipated this scenario when it authorized the NYISO to designate certain units to remain in operation beyond 2025 on an as-needed basis for reliability. The NYISO would only designate the peakers to continue operating as a last resort if it does not expect solutions will be in place by the time the identified reliability need is expected in 2025.
- **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. (Updated)**
- **The 2023 Quarter 4 STAR commenced on October 15, 2023 and will be issued by January 13, 2024. (Updated).**

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 are being developed and vetted with stakeholders through Q4 2023 when assumptions will be “locked down.” (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 will be held on November 6, 2023 to discuss the baseline assumptions and criteria for the Viability & Sufficiency Assessment and provide additional information to developers. 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. (Current)
- 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. (Updated)**
- 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. (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. (Updated)**