NYISO System & Resource Planning Status Report
October 31, 2022

Comprehensive System Planning Process (CSPP):

Reliability Planning Process:

- The NYISO commenced the 2022 Reliability Needs Assessment ("RNA") in April with completion targeted for November 2022. **The final RNA report was presented to OC on October 13th and MC on October 26th with both groups recommending board approval. The next step is Board review and approval in November 2022.** The RNA baseline evaluation, from which actionable Reliability Needs are identified, considers firm plans for facility additions, modifications, and retirements through 2032. In addition, the NYISO evaluates scenarios to provide information on reliability challenges to better understand the difficult operating conditions expected as the grid transitions to meet state energy policy requirements. **(Updated)**
    - The initial RNA results identified one potential reliability need at the Porter 115 kV bus due to low voltage in winter starting 2025-26. The low voltage conditions result from system changes due to the Smart Path Connect Project. As the low voltages will be addressed in the interconnection process, this will not be identified as a reliability need in the RNA. (Current)
    - The NYISO continues to identify razor-thin transmission security margins in New York City beginning in 2025 coincident with the final implementation of the DEC Peaker Rule. Margins turn positive in 2026 but are entirely dependent on the timely entry of the Champlain Hudson Power Express project (CHPE) prior to summer 2026. Scenario analysis demonstrates that without CHPE, the New York City margin would be less than 100 MW through 2027 and is deficient starting in 2028.
    - The RNA results did not identify any adequacy violations.
    - 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 2022 Quarter 3 Short-Term Assessment of Reliability ("STAR") was issued October 13, 2022 and did not identify any needs. The 2022 Quarter 4 STAR commenced on October 15, 2022 and will be issued by January 13, 2023. (Updated)**

Economic Planning Process:

- The NYISO published the final 2021-2040 System & Resource Outlook report on September 22nd. The scope of the 2021-2040 System & Resource Outlook included development of advanced planning models to simulate 20-years of power system and energy market performance, and presentation of analytical findings through a comprehensive report. The Outlook has identified numerous transmission needs throughout New York State driven by public policy and economics. The draft Outlook report was reviewed with stakeholders at ESPWG and was unanimously recommended for approval by BIC and MC at their August meetings. The Board of Directors approved the report in September 2022. (Current)
- Some of the major findings of the Outlook include:
    - An estimated 20 GW of new renewable generation needed for 70% by 2030 goal
    - Total installed capacity must triple for 100% by 2040 Goal. At least 95 GW of new generation projects and/or modifications to existing plants will be needed.
    - As more wind, solar, and storage plants are added to the grid, Dispatchable Emission-Free Resources (DEFRs) must be developed and added to the system at scale to reliably serve demand when intermittent generation is unavailable.
    - Renewable generation pockets occur throughout the system as new renewable projects are added. The pockets result in local transmission congestion and renewable curtailment, which inhibit policy achievement. Four pockets will particularly benefit from transmission expansion. The Finger Lakes (Z1), Southern Tier (Z2), Watertown (X3), and Long Island.
- **The NYISO held a public information session for all stakeholders on October 25, 2022, which reviewed the Economic Planning process and the 2021-2040 System & Resource Outlook. (Updated)**
- A "lessons learned" meeting will be held in November to provide stakeholders with a forum to provide feedback for study and process improvements prior to the kickoff of the next Outlook.
- The 2023-2042 System & Resource Outlook will begin in Q2 2023. (Current)

Public Policy Transmission Planning Process:

- NextEra Energy Transmission New York, Inc. commenced construction of its Empire State Line Proposal 1 for the Western NY Public Policy Transmission Need in March 2021. The major 345 kV transmission components went into service in May 2022. The remaining network upgrades will enter into service by November 30, 2022. (Current)
- 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. The projects are on schedule to commence service in December 2023. (Current)
- On March 18, 2021, the PSC issued an order finding that the state Climate Leadership and Community Protection Act (CLCPA) constitutes a Public Policy Requirement driving the need for:
    - Adding at least one bulk transmission intertie cable to increase the export capability of the LIPA-Con Edison interface, which connects NYISO's Zone K to Zones I and J, to

ensure that the full output from at least 3,000 MW of offshore wind is deliverable from Long Island to the rest of the state; and
    - Upgrading associated local transmission facilities to accompany the expansion of the proposed offshore export capability.

  Following completion of baseline and scenario assessments and cases, the NYISO issued the project solicitation in August 2021. The NYISO is evaluating 16 viable and sufficient transmission projects for efficiency or cost-effectiveness. The NYISO Board of Directors may then select the more efficient or cost-effective transmission solution to meet the Public Policy Transmission Need. (Current)
- The 2022-2023 cycle of the Public Policy Transmission Planning Process commenced on August 31, 2022, with a request for interested parties to submit proposed transmission needs being driven by Public Policy Requirements to the NYISO. Following the 60-day request window (comments due October 31, 2022), the NYISO will file the proposals with the PSC for its consideration to identify Public Policy Transmission Needs. (Current)

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. JIPC members are participating in DOE's Atlantic Offshore Wind Transmission Study, which started in December. The JIPC posted the final 2021 Northeast Coordinated System Plan in July 2022 after receiving no stakeholder comments on the draft. The next Interregional Planning Stakeholder Advisory Committee (IPSAC) meeting will be held on December 5, 2022. (Current)

EIPC:

- EIPC has issued a white paper on "Planning the Grid for a Renewable Future" that identifies challenges and offers recommendations to ensure the reliability of the transmission grid as system operators work to integrate an increasing level of renewable resources. The paper is posted at:https://eipconline.com/s/EIPC-Hi-Renewables-WHITE-PAPER-FINAL-FOR-POSTING-10-5-21.pdf (Current)
- The Production Cost Task Force (PCTF) and Technical Analysis Working Group (TAWG) continue to evaluate the impacts of a high renewable scenario on generation and transmission performance. (Current)