

Seasonal Topology Update: Procedure Recommendation

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Resource Adequacy

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Seasonal Topology Whitepaper Overview

■ Background

- The current installed reserve margin (IRM) study considers the transmission system topology reflective of summer operating conditions updated annually in consideration of the NYISO reliability planning process and operating studies
- Results presented at the 3/4/2026 and 3/31/2026 ICS meetings indicated that marginal increases to individual interface limits during the winter months are not expected to impact loss of load expectation (LOLE)
 - While changes to certain downstate interfaces demonstrated potential impacts on LOLE, the magnitude of change assessed was greater than expected for actual seasonal updates

■ Today's Objective

- Discuss the current topology update process and recommendations for incorporating seasonal topology updates
- Review the recommended IRM study topology update timelines for the upcoming Preliminary Base Case (PBC) and Final Base Case (FBC)

Annual IRM Topology Update Process

IRM Study Topology Update Process

- **The topology model in the IRM study is updated both annually and on an as-needed basis:**
 - Topology updates are incorporated when there are changes to the transmission system. Interface limits are updated on an annual basis using the following information:
 1. Updated Northeast Power Coordinating Council (NPCC) database information for interties with external control areas and interfaces within the external control areas
 2. Direct inputs from Transmission Owners for certain areas (e.g., Load Zones J and K)
 3. Remaining internal NYCA interface limits are based on applicable NYISO reliability planning studies and operating studies
- **Recommended changes to the current update process for seasonal considerations (outlined on the next slide) apply to inputs that are based on NYISO studies (Item #3 above)**

Seasonal Topology Update Recommendations

1. Starting with the previous year's "Sensitivity Case 2: No Internal NYCA Transmission Constraints" (S02) results, identify internal NYCA transmission interfaces that have observed increases in flow during the winter months above the applicable summer transmission limit
2. For the interfaces identified in Step 1, confirm whether such interfaces are observed to be binding during the winter months in the previous year's PBC when constrained by the summer limits annually
3. For the interfaces that are binding during winter months, consider a winter transfer limit update based on the most up-to-date NYISO studies available during PBC development for the current IRM study cycle
 - At this time, as the planning studies do not incorporate seasonal topology assumptions, the NYISO's operating studies will be leveraged to inform winter topology inputs for the IRM study
4. Propose the appropriate seasonal limits as part of the topology update process during PBC development
5. Finalize seasonal transfer limits during FBC development including any recommended updates from NYISO studies available after development of the PBC

2027-2028 IRM Study: Recommended Topology Update Timeline

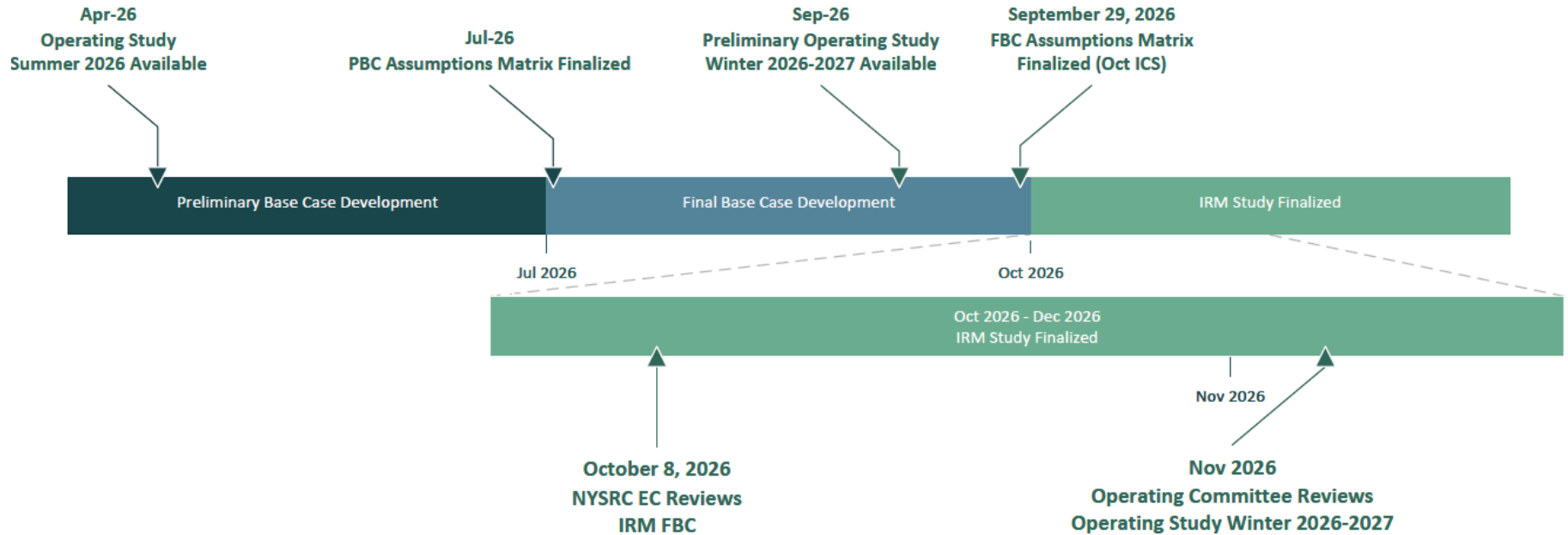
Study Timeline: 2027-2028 IRM PBC

- **September 2025:**
 - 2026-2027 IRM sensitivity case results available, including S02 case
- **October/November 2025:**
 - Final NYISO Winter 2025-2026 Operating Study available
- **April 2026:**
 - 2026 Quarter 1 Short-Term Assessment of Reliability (STAR) available
 - Only considered for summer topology assumptions
- **April/May 2026:**
 - Final NYISO Summer 2026 Operating Study available
- **June 2026:**
 - Recommended seasonal topology updates for 2027-2028 IRM PBC reviewed with ICS, including:
 - Any summer transfer limit updates for internal NYCA interfaces, based on consideration of applicable NYISO planning studies and/or NYISO Summer 2026 Operating Study
 - Any winter transfer limit additions for selected internal NYCA interfaces, based on consideration of NYISO Winter 2025-2026 Operating Study

Study Timeline: 2027-2028 IRM FBC

- **July 2026:**
 - 2026 Quarter 2 STAR available
 - Considered for potential summer topology assumption updates
- **September 2026:**
 - Draft of NYISO Winter 2026-2027 Operating Study available
 - 2027-2028 IRM sensitivity case results available, including S02 case
 - Review potential winter transfer limits updates from PBC with ICS, including:
 - Updated winter transfer limits based on the preliminary winter transfer limit values from the draft version of the NYISO Winter 2026-2027 Operating Study
 - Preliminary values from the draft version of the NYISO Winter 2026-2027 Operating Study require subsequent approval by the NYISO Operating Committee
 - If preliminary winter transmission limit values are incorporated into the FBC and not subsequently approved by the NYISO Operating Committee, NYISO would recommend ICS/Executive Committee consider the need for removing such updated winter limits from the FBC
- **The NYISO recommends that this process apply for future IRM study cycles using a similar timeline**
 - For example, the 2028-2029 IRM study would begin with consideration of the S02 case from the 2027-2028 IRM study for identifying potential internal NYCA transmission interfaces to assess for seasonal limit updates

Recommended Topology Update Timeline: 2027-2028 IRM Study



2027-2028 IRM PBC: Recommended Seasonal Topology Considerations

Winter Limit Impact Assessment Results

- **As discussed at the 3/4/2026 ICS meeting, the results of the 2026-2027 IRM S02 case indicated a potential change in winter power flow behavior if the following limits were unconstrained**
 - Marcy-South (E-G), UPNY-ConEd (G-H), Dunwoodie South (I-J), Jamaica Ties (J-K) and Reverse (K-J), Y49/Y50 (I-K) and Reverse (K-I), Dysinger-East Reverse (B-A), West-Central Reverse (C-B), and Volney East Reverse (E-C)
- **The presentation at the 3/4/2026 ICS meeting identified the following interfaces as potentially impactful to study results with winter transfer limit increases because the summer limits were binding during the winter months**
 - West-Central Reverse (B-C), Marcy-South Forward (E-G), Y49/Y50 (I-K) Reverse, and Jamaica Ties (J-K) for both directions of flow
- **If the recommendations are approved, the NYISO would consider modeling seasonal transfer limits during PBC development**
 - NYISO Summer 2026 and Winter 2025-2026 Operating Studies, and NYISO reliability planning study data will be assessed for the following interfaces: West-Central Reverse (B-C) and Marcy-South Forward (E-G)
 - The NYISO will continue to request transfer limits for the Y49/Y50 (I-K) and Jamaica Ties (J-K) interfaces from the applicable Transmission Owners

Questions?

Our Mission and 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

