

2025 - 2026 IRM Proposed MARS Topology Updates

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Agenda

- **Updated topology for the 2025 - 2026 installed reserve margin (IRM) study**
 - Update the West Central reverse limit
 - Update the Central East forward limit
- **Dover Phase Angle Regulator (PAR)**
- **Topology review process proposal**
- **Next steps**

Proposed West Central Reverse Limit

- The West Central reverse limit in the IRM has been 2,275 MW since 2022
- Based on the Summer 2024 Operating Study (published in June 2024), the NYISO proposes to update the West Central reverse limit to 2,200 MW
 - The Summer 2024 Operating Study captures the increased thermal ratings on the limiting circuit segments due to the redistribution of flows attributed to changes in load patterns in the West (Load Zone A) and Genesee (Load Zone B) area
 - No significant changes to the conditions affecting the Summer 2024 West Central reverse limit are expected for summer 2025
- NYISO tested the updated West Central reverse limit on the 2024-2025 IRM Final Base Case (FBC) and confirmed no IRM or LCR impact due to the change

West Central Limit (MW)	Positive	Negative
2024-2025 IRM study	1,500	2,275
Proposed change for 2025-2026 IRM study	1,500	2,200
<i>Delta</i>	<i>N/A</i>	<i>-75</i>

Proposed Central East Forward Limit

- **The Central East forward limits were updated in the 2024-2025 IRM study, based on the derate due delay of the Dover PAR**
 - NYISO Operations incorporated these changes in the updated Central East Voltage Limit Study (CEVC-24) published in September 2023
<https://www.nyiso.com/documents/20142/3692791/Central-East-Voltage-Limit-Study-2024-FINAL.pdf>
- **There are no impacts to Central East + Marcy South group limit (Total East interface).**
 - The limit for the Total East interface is a thermal limit which is unaffected by the Marcy STATCOM.
- **With Marcy STATCOM scheduled to be out-of-service until May 2025 (based on currently posted outage data)¹, the Central East forward limit will be impacted**
 - The Central-East Voltage Collapse Transfer Limits Component Values data published by NYISO Operations in December 2023 provides the voltage collapse limit for Central East interface under different system conditions. This data identifies a 75 MW derate for an outage of the Marcy STATCOM for all Oswego complex combinations
<https://www.nyiso.com/documents/20142/2268509/CE-VC-Static-limit-posting-FINAL-20231222.pdf>
- **NYISO tested the updated Central East voltage collapse limits on the 2024-2025 IRM FBC and confirmed no IRM impact due to the change**

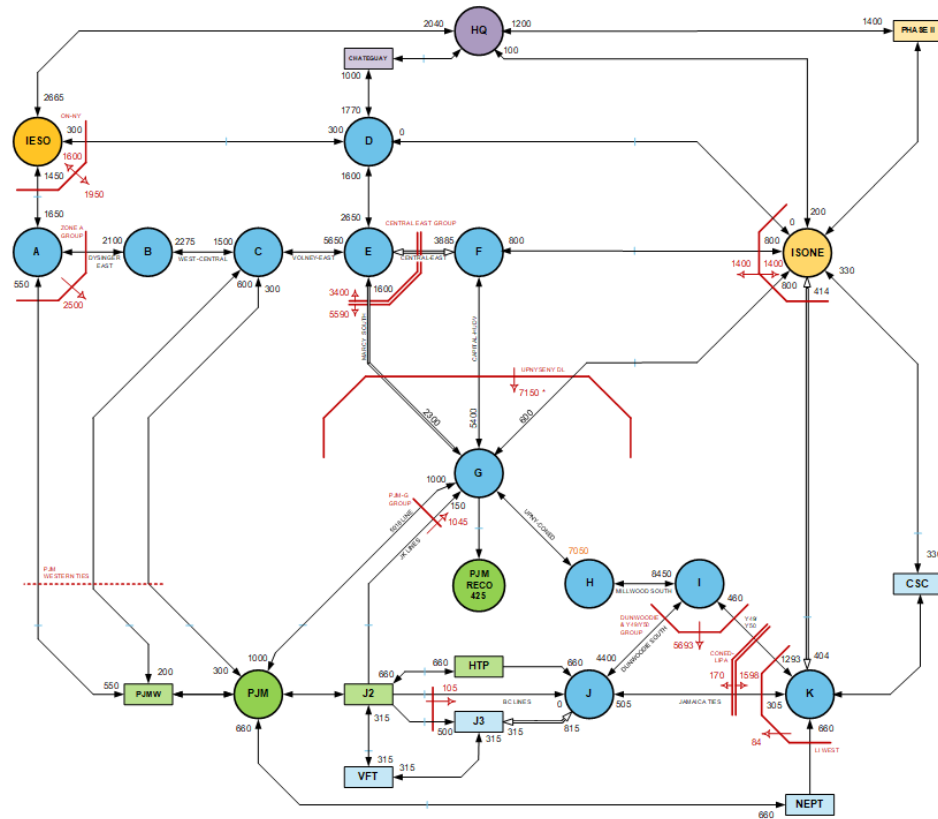
Forward Limits (MW)	Central East
2024-2025 IRM PBC	3885/3805/3725/ 3640/3540/3460
Proposed Change for 2025-2026 IRM PBC	3810/3730/3650/ 3565/3465/3385
<i>Delta</i>	<i>-75/-75/-75/-75/-75/-75</i>

¹<http://mis.nyiso.com/public/pdf/ttcf/20240621ttcf.pdf>

Dover PAR

- All components of the Segment B portion of the “AC Transmission” project were initially expected to be in-service by the end of 2023. Therefore, the 2024-2025 IRM Preliminary Base Case (PBC) reflected improved transfer limits due to Segment B portion of the project fully in service
- Dover PAR development was halted in June 2023 due to permitting challenges
- Topology within the 2024-2025 IRM FBC study assumes the Dover PAR out-of-service as part of the Segment B portion of the “AC Transmission” project
 - For the 2024-2025 IRM study, ICS agreed to update the Central East limit, leveraging the updated Central East voltage limits published by NYISO Operations
 - Based on analysis by the NYISO, ICS determined there was no IRM impact resulting from a potential update to the UPNY/SENY limit to account for the delay of the Dover PAR, and therefore, agreed to not update the UPNY/SENY transfer limits for the 2024-2025 IRM study
- **NYISO continues to monitor Dover PAR progress and will return to a future ICS to propose updates to the topology to reflect the anticipated Dover PAR status**
 - Any updates to the topology for the Dover PAR would be recommended for the 2025-2026 IRM FBC

2024-2025 IRM Topology For New York Control Area



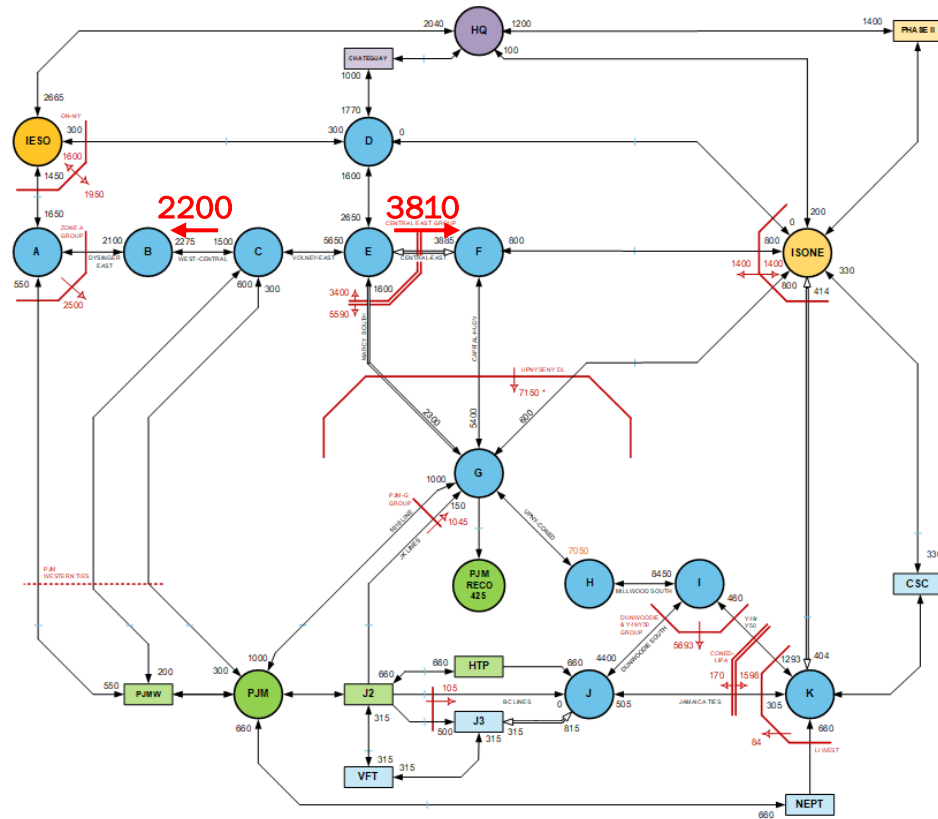
Notes

1. PJM to NY emergency assistance (EA) assumption for calculating the PJM-NY Western ties, PJM-G Group, and ABC Line Group flow distribution limit: 1500MW
2. NYCA EA simultaneous import limit: 3,500 MW
3. External areas representation based upon information received from the NPCC OP & WG

Legend

- Interface
 - Unidirectional Interface
 - Interface w/ Dynamic Ratings
 - Interface Group
 - Interface Group w/ Dynamic Ratings
 - Monitoring Interface Group
 - NYCA EA Interface Group Marker
 - xx "Dummy Bubble" i.e. no load
- NOTE: An interface is considered to not have a MW limitation if no number is specified

Proposed Updates for 2025-2026 IRM PBC Topology For New York Control Area



Notes

1. PJM to NY emergency assistance (EA) assumption for calculating the PJM-NY Western Res, PJM-G Group, and ABC Line Group flow distribution limit: 1500MW
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Legend

- ↔ Interface
 - Unidirectional Interface
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 - Interface Group
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 - - - - Monitoring Interface Group
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Topology Review Process Proposal

- **Historically, NYISO Planning has provided the topology inputs utilized for the IRM study, originating from the most recent Reliability Needs Assessment (RNA)**
 - RNA topology methodology and limits are reviewed and approved by the Transmission Planning Advisory Subcommittee (TPAS)
 - Proposed IRM topology updates have also historically been reviewed and approved by TPAS
- **Recently, IRM studies have been incorporating inputs from NYISO Operations studies such as the Summer Operating studies to update the IRM Topology**
 - The Summer 2022 Operating Study identified a West Central reverse limit of 2,275 MW. This limit was adopted for the 2023-2024 IRM study after presentation and review at TPAS
 - Operating Study methodology and limits are reviewed by the System Operations Advisory Subcommittee (SOAS) and approved by the Operating Committee (OC)
- **NYISO proposes to no longer seek TPAS review and approval of proposed IRM topology updates and instead leverage SOAS/OC approvals for limits and studies that originate from NYISO Operations**
 - TPAS review and approval of proposed IRM topology updates does not appear necessary for using studies and limits that have previously been reviewed and approved at the SOAS/OC
 - Proposed IRM topology updates will continue to be reviewed with ICS for approval by the Executive Committee

Next Steps

- Subject to the proposed adjustments to the West Central reverse limit (see Slide 3) and the Central East forward limit (see Slide 4), the NYISO proposes to maintain the existing topology used in the 2024-2025 IRM FBC for the 2025-2026 IRM PBC
- Following recommendations from ICS, any further updates to topology will be incorporated in the 2025-2026 IRM FBC

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Vision

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