

PJM-MISO IPSAC

November 22, 2024







- Coordinated System Plan (CSP) Study Status Update
- PJM Regional Process and Criteria
 - PJM 2024/25 Market Efficiency Cycle
- MISO Regional Process Update
- Annual Issues Review Notice









Coordinated System Plan (CSP) Study Status Update







- CSP 2022
 - December 15, 2022 IPSAC Meeting
 - TMEP solution selected was the Powerton-Towerline 138kV Wavetrap
 - RTO Boards approvals (PJM February 2023, MISO March 2023)
 - PJM B3760 / MISO MTEP 24573
 - Construction Status 100% Complete
 - Required In-service Date June 1, 2025
 - Actual In-service Date September 9, 2024







- After discussions with stakeholders at the March 25, 2024 Interregional Planning Stakeholder Advisory Committee (IPSAC), the MISO-PJM Joint RTO Planning Committee decided not to initiate a Coordinated System Plan (CSP) study in 2024
- The CSP determination was based on the following rationale:
 - Interregional Market Efficiency Project (IMEP):
 - No interregional constraints were identified in the respective regional processes
 - Targeted Market Efficiency Project (TMEP):
 - RTOs believed it prudent to assess the impact of planned upgrades and congestion persistence with an additional year of market data
 - Interregional Reliability Projects; Interregional Public Policy Projects; Ad-Hoc studies:
 - No drivers were identified to warrant a study







PJM Regional Process Status Update





2023 RTEP Window 1 - Status



- PJM opened the 2023 RTEP W1 on July 24, 2023 and closed on September 22, 2023
 - Window focused on resolving reliability constraints outside the area currently covered by the 2022 RTEP W3 scope.
- Total 266 flowgates (130 competitive Vs. 136 non-Competitive)
- 20 total proposals submitted from 9 different entities (7 Incumbents & 2 Non Incumbents)
 - 7 Greenfields
 - 13 Upgrades
- Selected solutions were presented for 1st Read and 2nd Read at the October 31, 2023
 <u>TEAC</u>, December 5, 2023 TEAC, January 5, 2024 TEAC, February 6, 2024 TEAC,
 <u>March 5, 2024 TEAC</u> meetings.
- February and August 2024 PJM board approval.





2023 RTEP Window 2 - Status



- PJM opened the 2023 RTEP W2 on March 6, 2024 and closed on April 5, 2023
 - Window focused on resolving reliability constraints
 - AEP forecasted load growth in the Columbus, Ohio area.
 - Thermal issues in PSEG around Hinchmans area
 - 500kV line #588 Fentress Yadkin End of Life (EOL) in Dominion
- 21 total proposals submitted from 6 different entities
 - 6 Greenfields
 - 15 Upgrades
- Selected solutions were presented for 1st Read and 2nd Read at the <u>April 30, 2024 TEAC</u>
 June 4, 2024 TEAC, and <u>July 9, 2024 TEAC</u>, meetings.
- August 2024 PJM board approval.





2024 RTEP Window 1 - Status



- PJM opened the 2024 RTEP W1 on July 15, 2024 and closed on September 17, 2024
 - Window focused on resolving reliability constraints
 - Heavy transmission flows west to east driven by load increase in Dominion/East.
 - Regional reinforcement needs in AEP, ATSI, BGE, ComEd, Dominion, PECO, and PPL
 - Cumulative impacts due to shift in generation flow as a result of overall system load increase and +2GW generation deactivation
- 94 total proposals submitted from 16 different entities
 - 40 Greenfields
 - 48 Upgrades
 - 6 Joint Proposals (Parent Projects representing combinations of select projects from above)
- Evaluation process is underway
 - Solutions were presented for 1st Read 2nd Read, and Short List at the October 8, 2024 TEAC, November 6, 2024 TEAC, and final shortlist of regional proposals at the November 19, 2024 meetings.
- Targeting Q1 2025 Board approval December and January for TEAC first and second reads.







PJM 2024/25 Market Efficiency Cycle





2024/25 ME Cycle Assumptions Overview



- Simulations performed using PROMOD IV v11.5, engine "I".
- Study Years for the 2024/25 ME Cycle
 - 2025, 2029, 2032, 2035, and 2039.
- PROMOD Database posted on <u>ME secure page</u> (2029, 2032 modeled years)
 - Fall 2023 Data Release from Hitachi Energy
 - Fuel/Emissions price forecasts from Hitachi Energy, May 2024 update.
 - Load forecast from PJM 2024 Load Forecast Report.
 - Topology based on the final 2028 Summer Peak powerflow (RTEP 2023 18-month Reliability cycle)
 - Includes all RTEP baseline projects approved by the PJM Board up to including reliability
 Window 1 2023.







2024 ME Input Assumptions workbook posted on <u>ME public page</u>.

- Generation Expansion based on queue status as of May 14, 2024.
 - Includes NJ SAA 1.0 (See tab NJ SAA 1.0 in 2024 ME Input Assumptions workbook).
 - Includes additional capacity, FSA level, needed in 2032 to meet the assumed 17.8% Installed Reserve Margin (See tab FSA Level Added Through 2032 in 2024 ME Input Assumptions workbook).
 - Updated 2032 Generation Expansion to be consistent with the queue units identified as "Fast Lane".





2024/25 ME Base Case Status



- Market Efficiency Training scheduled for November 19, 2024.
- 2024/25 ME Base Case Status.
 - Upgraded PROMOD IV version to 11.5.
 - Updated 2029 and 2032 modeled years posted (XML files compatible with PROMOD 11.5).
 - Updated winter bus load model to match Winter Peak RTEP cases.
 - Updated MISO generation model.
- Other files posted.
 - 2024/25 ME Window Benefits Cost Evaluation Tool.
 - Updated PROMOD procedure for executing scenarios.





2024/25 ME Base Case Next Steps



- 2024/25 ME Base Case Next Steps.
 - Add modeled years 2035 and 2039.
 - Update PJM generation expansion for announced deactivation and queue unit status changes.
 - When available, update the ME Base Case topology with selected 2024W1 solutions.
 - PV Analysis to determine the limits for the reactive interfaces.

- 2024/25 Long-Term Market Efficiency Window anticipated to open during Q1 2025.
 - Once the congestion drivers are finalized.
 - The final Market Efficiency Base Case to be posted before the start of the window.







MISO Regional Process Status Update







- The 2024 MISO Transmission Expansion Plan (MTEP24) will go before MISO Board of Directors in December 2024 for approval
 - The draft MTEP24 Report is posted to the MISO public website
- Projects targeting MTEP 2025 are under evaluation and will be discussed at the respective MISO sub-regional planning meetings beginning in Q1 2025
 - MTEP25 preliminary project list is posted to the MISO website
 - MTEP25 powerflow models will be available in Q1 2025
- The <u>Final MISO Long Range Transmission Planning (LRTP) Tranche 2.1</u>
 <u>Portfolio</u> during the final LRTP workshops on 9/24 and 9/25 and was posted as part of the draft MTEP 24 Report pending MISO Board approval in December.







Notice of Annual Issues Review





Annual Issues Review Process (JOA §9.3.7.2)



- In the 4th quarter, RTOs exchange planning information (to be completed in December 2024):
 - Regional issues and newly approved projects near the seam
 - New regional issues
 - M2M historical congestion
- RTOs to jointly review above in January/February 2025
- Receive Third Party issues in first quarter, but no less than 30 days before Issues Review IPSAC
- Issues Review IPSAC
 - Held in the first quarter of each year
 - Must provide 60 calendar day notice of scheduled date
 - Stakeholder feedback due 30 days prior to IPSAC
- Within 45 calendar days after the Issues Review IPSAC the JRPC shall determine the need for a Coordinated System Plan study
- JRPC notifies the IPSAC of its decision within 5 business days





Coordinated System Plan



Annual Issues Review (including stakeholder feedback) provides basis for JRPC to determine Coordinated System Plan (CSP) study needs

CSP studies could include:

- Interregional Market Efficiency Project (IMEP)
- Targeted Market Efficiency Project (TMEP)
- Interregional Reliability Project (IRP)
- Public Policy
- Ad Hoc studies







- The 2025 Annual Issues Review IPSAC meeting is scheduled for March 7, 2025
- MISO and PJM will review and solicit stakeholder feedback at the meeting
 - Regional issues & solutions
 - 3rd party issues
- Issues and plans will be/have been discussed at regional meetings
 - PJM issues presented at <u>TEAC meetings</u>
 - MISO issues presented at <u>Subregional Planning Meetings</u> (SPMs)







- 3rd parties may submit input to the Annual Issues Review process
- MISO and PJM will send an email request to their respective planning distribution lists, or you may contact the email addresses below
- Feedback is required by COB February 5, 2025 (30 days prior to IPSAC meeting) to both MISO and PJM
 - PJM: <u>inter.regional.planning.team@pjm.com</u>
 - MISO: interregionalplanning@misoenergy.org







- Stakeholder input due: February 5, 2025
- Annual Issues Review IPSAC: March 7, 2025
- JRPC determines whether to perform a CSP study in 2025: April 21, 2025 (at the latest)
 - JRPC will inform IPSAC within 5 days of the decision







Open Discussion







PJM:

inter.regional.planning.team@pjm.com

MISO:

interregionalplanning@misoenergy.org



