

Interregional Coordination Update

Mike Handlin Manager, Interregional Market Operations Market Implementation Committee January 11, 2023



MISO/PJM Joint Stakeholder Meeting



The most recent Joint and Common Market meeting was held on August 29, 2022.



The next joint stakeholder meeting will be hosted by MISO in February, 2023 (date TBD) via WebEx



Meeting materials are posted approximately one week in advance at the <u>PJM/MISO Joint and Common Market Initiative</u> as well as the <u>Joint and Common Market</u> websites



February, 2023 MISO-PJM JCM Topics & Questions

Planning Interregional Planning Issues Submit topics for the JCM Meeting to ••Freeze Date Market Issues Michael.Handlin@pjm.com M2M Enhancements M2M Settlements Administrative Issue Status



- PJM-MISO Issue Status & Market-to-Market Settlement Adjustments
- Issue status and drill down reports available at below websites:
 - PJM/MISO Joint and Common Market Initiative
 - Joint and Common Market
- Biennial Review of MISO-PJM Joint Operating Agreement:
 - <u>https://pjm.com/markets-and-operations/energy/market-to-market.aspx</u>
- Pending market-to-market settlement adjustments
 - None





- CMP members continues to meet on a regular basis working through Freeze Date data analysis
- Baseline data established for proposed collaborated solution
- Further analysis being performed on impacts of Firm Flow Entitlement solution





- PJM and TVA continue to review the Joint Reliability Coordination Agreement (JRCA)
 - General review of JRCA
 - Updating Article IX Planning section
 - Adding LGE-KU to the JRCA
 - PJM, LGE-KU and TVA are still working on this agreement
 - FERC filing for changes (as it applies to PJM and LGE-KU) expected in Q1 2023
 - Updates will be reviewed with PJM Stakeholders prior to FERC filing
 - OC, MC Webinar



Coordinated System Plan (CSP) Study

CSP studies could include:

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

JRPC decision is to conduct a 2022 CSP TMEP

- Based on ~\$519 million congestion on M2M flowgates in 2020 & 2021
- Preliminary data presented at February 17, 2022 IPSAC meeting



Coordinated System Plan (CSP) TMEP Study

Of the preliminary \$519M of congestion

- \$191M of congestion was determined to be non-persistent or mitigated by future upgrades
- TMEP study in 2022 covers the remaining \$328M of congestion
- 23 TMEP study candidates taken under consideration
 1 TMEP candidate recommended



ComEd:Baseline

Powerton Sub 138kV Wave Trap

Peoria **TAP1649** Wallace E.D. Edwards **TAP1647** Edwards CE Powerton Powerton Transmission Lines 69 KV Towerline 120 KV 120 kV 138 KV 138 KV 161 KV 161 KV 230 kV 230 KV 345 KV 345 KV 500 kV 500 kV 765 KI 1.75 3.5 7 Miles 765 KV

Problem Statement:

TMEP Candidate: Yes

Process Stage: First Review

Greater than \$1 M of historical congestion identified on the Powerton-Towerline 138kV tie-line with MISO (Ameren)

Existing Facility Rating: SN/SE/WN/WE = 195 / 214 / 211 / 229

Proposed Facility Rating: SN/SE/WN/WE = 207 / 268 / 252 / 298

Reference: PJM/MISO JOA – Article 9 – Interregional TMEP Analysis

Assumptions: 2-year historical congestion (2020, 2021)

Analytical Framework: 2022 Coordinated System Plan Study

Proposed Solution:

TMEP-2022-01: At Powerton Substation (ComEd), replace most limiting facility, 800A wave trap with 2000A wave trap, on the Powerton-Towerline 138kV line terminal.

Cost/Benefit Analysis:

- Estimated TMEP Cost: \$0.2 M
- Annual TMEP Congestion Benefit: \$ 1.827 M/Year (2-Years Hist. Cong. Avg.)
- Expected TMEP Future Congestion Relief: \$ 7.31 M = 4 x \$ 1.827 M/Year (Sum of \$ 1.827 M annual congestion benefit over 4 years period after study year).

Criterion: TMEP Capital Cost < Expected TMEP Future Congestion Relief

\$0.2 M <

\$ 7.31 M

Alternatives: None

Required In-Service: 6/1/2025



TMEP Study Timeline

November – December 2022

• Joint review of results and agreement of analysis

February 2023

Recommendation to PJM / MISO Boards







PJM-MISO Freeze Date and Firm Flow Entitlements

- Reference date of April 1, 2004, known as "Freeze date", is used as a mechanism to determine firm rights on flowgates based on pre-market firm flows.
 - CMP Members (PJM, MISO, SPP, TVA, Manitoba Hydro, and LGE/KU) have been developing a collaborative solution to update these firm rights
- CMP Members are working on the final items for the Phase 2 solution:
 - Phase 2 implementation date will be determined when individual Planning discussions are completed by each entity
 - CMP members have developed design components for the Phase 2 solution
 - Firm Flow Entitlement (FFE) solution is almost finalized; Firm Flow Limit (FFL) remains an open item
 - Discussions will continue to finalize design components and whitepaper
 - Stakeholder education will occur during future MIC and JCM meetings
 - Stakeholders will be updated prior to FERC filing







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