

Interregional Coordination Update

Joseph Ciabattoni

Manager, Interregional Market

Operations

MC Webinar

January 21, 2020

www.pjm.com | Public PJM©2019



MISO/PJM Joint Stakeholder Meeting



The most recent Joint and Common Market meeting was held on November 19, 2019



The next joint stakeholder meeting will be hosted by MISO on February 25, 2020 via WebEx and Conference Call



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



Tentative Planned 2020 PJM-MISO JCM Topics

Planning Issues

Interregional Planning

Market Issues

- Freeze Date
- M2M Enhancements

Administrative

- M2M Settlement Adjustments
- Issue Status
- Biennial Review

Looking for additional Stakeholder topics

Joseph.Ciabattoni@pjm.com



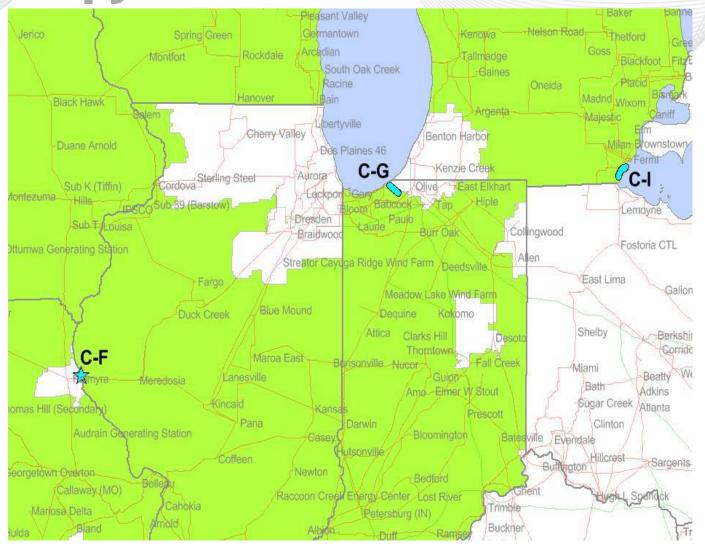
PJM-MISO Issue Status & Market-to-Market Settlement Adjustments

- Issue status and drill down reports available at below websites:
 - PJM/MISO Joint and Common Market Initiative
 - Joint and Common Market
- No pending market-to-market settlement adjustments
 - Pseudo-Tie Overlapping Congestion (PTOC) Settlement Hearings were initiated per FERC's order in June

(5)



Interregional Market Efficiency Project



- Provisionally approved by PJM Board
- Waiting for MISO Board approval
- Flowgate C-G: Bosserman to Trail Creek 138kV
 - Historically binding M2M constraint. Congestion driven by nearby retirements, which increase east to west flows in northern Indiana.

www.pjm.com | Public 5



- PJM and NYISO discussed changes to the current Firm Flow Entitlement (FFE) calculation:
 - FERC approved the PJM/NYISO filing on August 28, 2019
 - PJM and NYISO are coordinating implementation plan Q 1-2, 2020
 - Requires an implementation filing with FERC

www.pjm.com | Public PJM©2019



- 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
 - FERC filing for changes (as it applies to PJM and LGE-KU) expected in Q1, 2020
 - Updates will be reviewed with PJM Stakeholders prior to FERC filing



Key Takeaways

- MISO/PJM pursuing turning off Constraint Relaxation on M2M flowgates
- Constraint Relaxation was deactivated:
 - MISO for internal constraints on Feb 1, 2012
 - PJM for internal constraints on Feb 1, 2019
- Removal of Constraint Relaxation allows constraints that would otherwise unbind to bind at the penalty factor
- More consistent dispatch and market signals



Status

- JOA changes were filed with FERC on December 19, 2019
- Waiting for FERC response
- Target for deactivating Constraint Relaxation on MISO/PJM M2M flowgates: Q1, 2020



Appendix



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





 PJM and MISO are conducting a two-year Interregional Market Efficiency Project (IMEP) study in 2020/2021

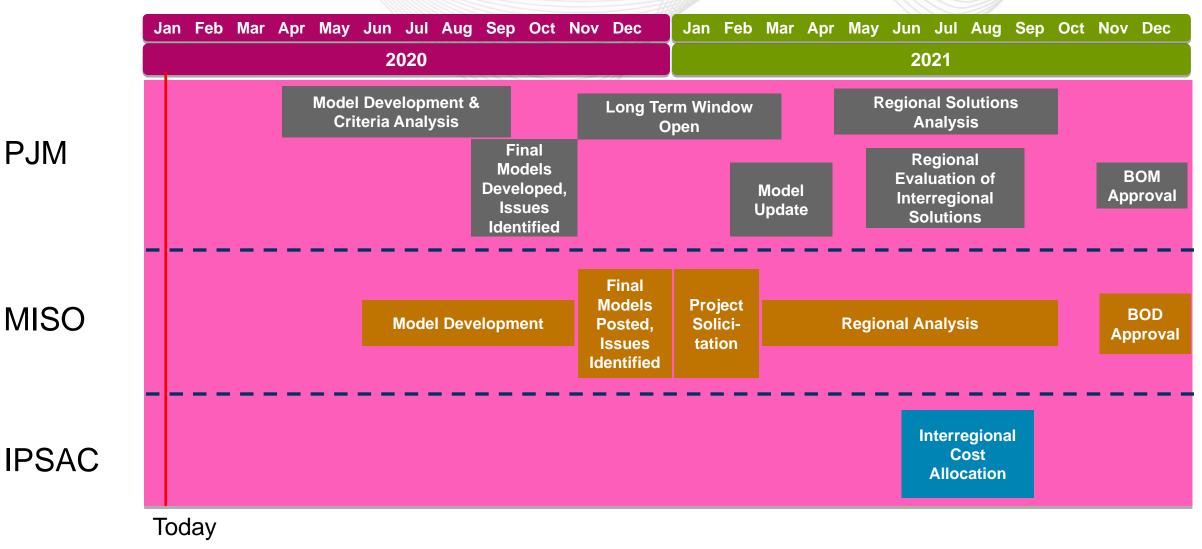
- Issues identification and benefit determination conducted in each regional process consistent with current effective JOA
- Interregional proposals must:
 - Address at least one identified issue in each region (could be same issue if identified by both RTOs)
 - Be submitted to both regional processes



- Benefits to each RTO are determined by that RTO using their respective regional process and metrics (Tariff)
 - Note inconsistent study years and discount rates
- Costs are allocated inter-regionally based on pro rata share of benefits, as determined above
- Interregional projects must meet the B/C criteria in each RTO (based on allocated costs), qualify as an MEP under both the MISO and PJM process, and be approved by each RTO's board
- Final recommendations will be presented to the PJM Board of Managers for consideration in the November-December (2021) time frame



Market Efficiency - Estimated Timeline



www.pjm.com | Public PJM©2019