

Interregional Coordination Update

Joseph Ciabattoni Manager, Interregional Market Operations Markets Committee Webinar July 20, 2020



MISO/PJM Joint Stakeholder Meeting

C

The most recent Joint and Common Market meeting was held on February 25, 2019



The next joint stakeholder meeting will be hosted by PJM on August 18, 2020 in-person or 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



Tentative 2020 PJM-MISO JCM Topics

Interregional Planning

Market Issues

Planning

Issues

Freeze DateM2M Enhancements

Submit additional Stakeholder topics Joseph.Ciabattoni@pjm.com

Administrative

M2M Settlement Adjustments

3

- Issue Status
- Biennial Review



- 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
 - Pseudo-Tie Overlapping Congestion (PTOC) Settlement

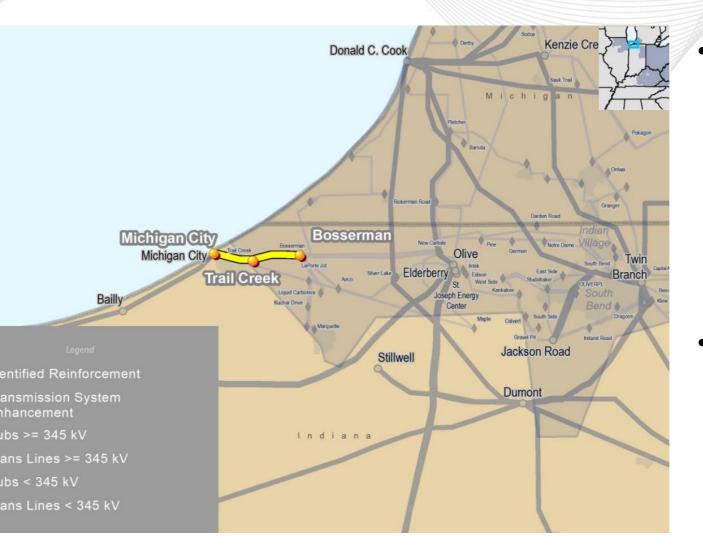




Pseudo-tie Congestion Overlap Final Settlement

- Final settlement filed with the FERC on March 18, 2020
- Was approved by the FERC on May 29, 2020
- Will be processed in the June monthly bill
 - Issued on July 8, 2020
- Billing Line Item Excess Congestion BLI# 2217





Interregional Market Efficiency Project

- The PJM Board approved project b3142 (BT-481), the rebuild of Michigan City to Trail Creek to Bosserman138kV lines, December 3, 2019
 - The approval is conditional on MISO approval of same project
- MISO included Project NC-11 in Appendix B of MTEP19 Approved by Board
 - MISO expects approval at the September 2020 Board Meeting



PJM / NYISO Initiatives

- PJM and NYISO discussed changes to the current Firm Flow Entitlement (FFE) calculation:
 - PJM and NYISO implemented updated FFEs on April 7, 2020





- 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
 - Final language is being moved through the TOA-AC and PC for planning changes
 - FERC filing for changes (as it applies to PJM and LGE-KU) expected in Q3, 2020
 - Updates will be reviewed with PJM Stakeholders prior to FERC filing
 - OC, MC Webinar



- Status
 - JOA changes were filed with FERC on December 19, 2019
 - MISO-PJM submitted a clarification filing on February 18, 2020
 - FERC accepted the filing March 6, 2020
 - Deactivation of Constraint Relaxation on MISO-PJM M2M flowgates was delayed due to software issues
 - Software testing was successfully completed
 - Expected implementation July 13
 - Pending system conditions based on warmer weather
 - Notice will be sent if this date changes



Pseudo Tie Complaints

- Complaints failed to demonstrate
 - Pseudo tie test were unjust and unreasonable
 - Test was not applied in an inconsistent manner
- FERC directed PJM to amend the tariff to provide greater notice and transparency with regard to both
 - Market to Market Test
 - Electrical Distance Test
- PJM submitted two compliance filings on July 6, 2020
- PJM Dynamic Transfer web page
 - <u>https://pjm.com/about-pjm/member-services/dynamic-transfers.aspx</u>



- PJM will provide a copy of the results of the Market-to-Market Flowgate Test to the pseudo-tie applicant as well as related work papers, if requested;
- PJM post on its website the material assumptions that are used in its modeling software in the conduct of the market-to-market flowgate test and that are applicable to all tested generators, e.g., (a) the definitions of the sink and source used in the market-to-market flowgate test and (b) the definition of eligible coordinated flowgates as applicable to the market-tomarket flowgate test; and
- upon request, PJM meet with each pseudo-tie applicant to discuss specific modeling assumptions and the results of the market-to-market flowgate test of the individual pseudo-tie applicant.
 - <u>https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=15575789</u>



- PJM provide a copy of the results of the electrical distance requirement to the pseudo-tie applicant as well as related work papers, if requested;
- PJM post on its website the material assumptions that are used in its modeling software in the conduct of the electrical distance requirement and that are applicable to all tested generators, e.g., the general process used to define the facilities included in the Electrical Distance requirement for each pseudo-tie applicant; and
- Upon request, PJM meet with each pseudo-tie applicant to discuss specific modeling assumptions and the results of the Electrical Distance requirement for that individual pseudo-tie applicant.
 - <u>https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=15575794</u>





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 premarket 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) rem 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



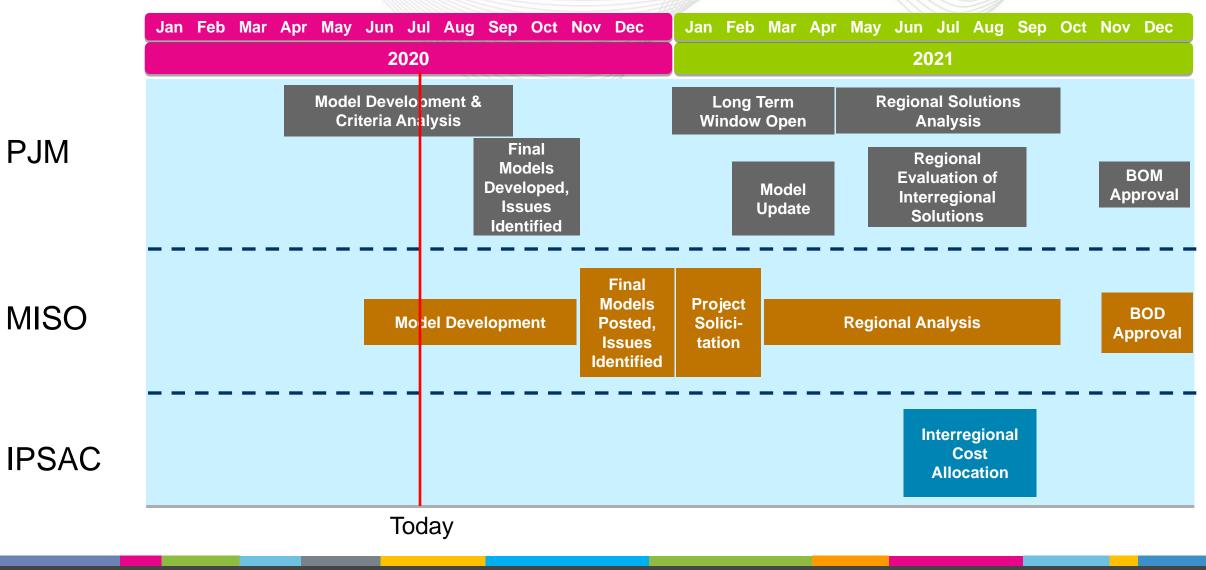
- PJM and MISO are conducting a two-year Interregional Market Efficiency Project (IMEP) study in 2020/2021
- Issues identification and benefit determination conducted in each regional process consistent with current effective JOA
- Interregional proposals must:
 - Address at least one identified issue 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





MISO-PJM JOA Changes Constraint Relaxation

- 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

18



Pseudo-tie Congestion Overlap Final Settlement

Final settlement filed with FERC on March 18, 2020

- Approval requested in sixty days
- If approved by the Commission, the Settlement will resolve issues set for hearing and settlement as well as those pending on appeal in petitions for review
- Settlement funded from source of excess congestion for relevant period

Final Settlement

Agreement (\$millions)



PJM portion of settlement based on analysis of duplicative congestion and benefits of settlement. PJM Source of Collection to Fund Settlement

Planning Period	Percentage	Source
2016/2017	42.94%	FTR Holders
2017/2018	59.36%	FTR Holders
2018/2019	-2.3%	ARR Holders