

Inter-Regional Coordination Update

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Market Implementation Committee

December 12, 2014



MISO and PJM began hosting a series of Joint Stakeholder Meetings July 16, 2012 to continue discussions on seams issues. The most recent Joint Stakeholder meeting was held on November 10, 2014. The purposes of these meetings are to:

- Identify the most critical seams issues to be addressed
- Establish the priority for addressing the issues identified
- Establish the framework for issue resolution



Improved Day-Ahead Coordination

 Recommendations to implement additional processes to increase alignment of Day-Ahead flowgate use with Real-Time expectations were presented. These recommendations will be implemented in two phases with Phase I implementation prior to the 3rd Quarter 2015 and Phase II implementation taking place in the 3rd Quarter 2015

Report on FTR Coordination Metrics

 Highlighted that through October 2014, 100% of Day-Ahead M2M constraints have been captured in the Monthly FTR process and 95% of Day-Ahead M2M constraints have been captured in the Annual FTR process. These results represent a significant improvement in the modeling of M2M coordinated flowgates between MISO and PJM.



- Use of Commercial Flow in Market-to-Market Processes
 - PJM presented its proposal to use commercial flows in market-to-market processes with the
 primary benefit being better alignment with calculations used in LMP settlements for each RTO.
 MISO noted the concerns they currently have with the PJM proposal and noted MISO's evaluation
 is contingent upon the ongoing interface pricing discussions.
- Modeling of the ITC-Ontario PARs in Market-to-Market Processes
 - MISO and PJM have reached an agreement to move forward with an incremental solution of modeling market flows based on Lake Erie Circulation adjustments for circulation flow amounts outside the 200 MW control band.
 - PJM may make additional recommendations following the evaluation of the incremental solution



Freeze Date Alternatives

- Freeze date alternatives used to establish the Firm Flow Entitlements on market-to-market flowgates continue to be deliberated within the Congestion Management Process Working Group (CMPWG) and the Congestion Management Process Council (CMPC)
- First Rights and the Reciprocity Design Components were highlighted as being the two remaining key differences between proposals being considered by the CMPWG
- A target recommendation is planned for the 1st Quarter 2015

Interchange Optimization

- MISO and PJM hosted the third Joint Stakeholder Workshop at MISO's offices on November 11
- Topics covered
 - Implementation results of CTS between NYISO and PJM
 - MISO's ELMP and Price Forecasting Engine
 - CTS Process Overview, Timeline and Next Steps



Cross Border Planning Projects

- An update presentation on IPSAC planning efforts in response to the NIPSCO request to address the coordination of cross border planning projects was provided
- Stakeholder feedback indicates support to proceed with the implementation of quick hit items
- IPSAC efforts continue to develop a path forward for larger ticket items and will be the focus of the December 8, 2014 meeting

Capacity Deliverability

- MISO and PJM staff continue efforts to finalize the Capacity Deliverability Fact-Finding Report
- MISO to draft a proposal on next steps for review and discussion with PJM and presentation to stakeholders at a future JCM meeting



- Queue Coordination
 - An enhanced coordination process for generator interconnection queues was presented which will align queue timeframes for the study of impacts to MISO related to PJM study requests was presented
- Updates on Market-to-Market Settlement Adjustments were provided
 - An update was provided on the Quad Cities Market Flow and Firm Flow Entitlement Adjustments
 - The net settlement amount is approximately \$11.3 Million in total from PJM to MISO
 - Adjustment payments will be applied in 4 invoices for the months of November 2014 through February 2015



- Updates on Issue Status were provided
- Future Agenda Items were reviewed with stakeholders
- Future Meetings for 2015 are planned as follows:
 - February 19, 2015 (Thursday) PJM Training Center
 - May 27, 2015 (Wednesday) MISO, Carmel, IN
 - August 20, 2015 (Thursday) PJM Training Center
 - November 18, 2015 (Wednesday) MISO, Carmel, IN



The next Joint Stakeholder meeting will be hosted by PJM on February 19, 2015 at PJM's Offices in Valley Forge, PA

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



Planning Issues

- Cross Border Planning Projects
- Capacity Deliverability

Market Issues

- Improved Day-Ahead Coordination
- Freeze Date Alternatives
- Use of Commercial Flow in M2M Process
- Interface Pricing
- Interchange Optimization

Administrative

- Update on M2M Settlement Adjustments
- Issue Status





The objective of Coordinated Transaction Scheduling (CTS) is to improve interchange scheduling efficiency

- Export Credit Check implemented successfully on November 3
- CTS implemented successfully on November 4
- CTS transactions have cleared approximately 70% of the time since implementation through November 30 with a total of 22,010 bids being submitted
- 57% of transactions submitted were imports from NYISO into PJM with cleared imports ranging up to 200 MW for a total of 122,277 MWs of imports into PJM
- 43% of transactions submitted were exports from PJM to NYISO with cleared exports ranging up to 301 MW for a total of 93,899 MWs of exports into NYISO
- Additional metrics will be provided at future updates



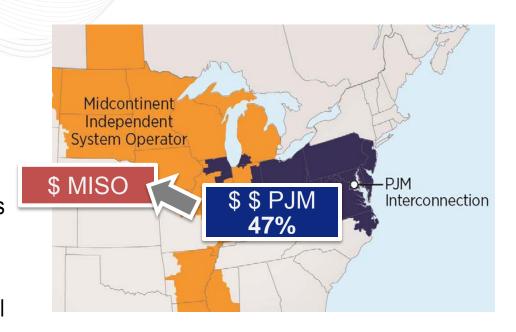
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MISO-PJM Interchange Optimization

The objective of Coordinated Transaction Scheduling (CTS) is to improve interchange scheduling efficiency

- Adds the option for Market Participants to schedule energy transactions across the MISO/PJM interface using an interface bid
- To date three Joint Stakeholder Workshops have been held to develop a CTS proposal for the MISO-PJM interface
- Additional PJM stakeholder discussions will be held in 2015



PJM Interregional Planning Update

Ongoing Studies

- The Joint RTO Planning Committee (JRPC) review of JOA metrics, process and "Quick Hit" congestion projects continue. The most recent meeting was held December 8 via WebEx and focused on plans for Quick Hit scope with discussions continuing on the metric and process issues.
- •The joint reliability and economic study requested by the North Carolina Utility Commission to evaluate impacts of external resources cleared in the PJM Capacity Market is nearing completion. Reliability and Economic analysis is complete pending final reviews. Stakeholders are being updated at this months PJM TEAC and North Carolina TAG meetings. Year-end completion remains on target.
- •PJM SERC study group support has completed 2014 activities and is now focused on the next cycle of planning activities.
- •The EIPC (non-grant work) completed its 2013/14 scenario analysis work plan. A WebEx on the Heat and Drought Study was held on November 21. EIPC met with NERC and others on November 17-18 to discuss transition plans to improve the quality of planning models. A final report of the 2013/14 cycle of activities is being finalized and will be available at www.eipconline.com. The EIPC Technical Committee approved the 2015/16 budget and work plan for presentation to the EC December 9. Future activities will include an analysis of future year summer and winter Eastern Interconnection models and an investigation of potential production cost modeling options for the Eastern Interconnection
- •PJM/NY/NE Northeast Protocol IPSAC year end wrap up WebEx scheduled for December 12