


Introduction

The purpose of this report is to provide stakeholders with detailed information as well as progress made till date for each issue/topic that is being covered at the MISO-PJM JCM meetings.



Market Operations



1) Day-Ahead and Real Time Coordination

On Target

Drill Down Report

Milestone Summary

| | Target Date | Actual Date |
|---|--------------------|--------------------|
| Automate screening of associated constraints | Short-term | |
| DA/JOA language revisions | Short-term | |
| Develop link of outage data to active constraints | Short-term | |
| Data exchange to include outage & constraint data | Short-term | |
| Model: PJM/MISO device mapping models | Mid-term | |
| Auto Exchange: MISO/PJM DAM outage data sets | Mid-term | |
| Review/align RTO Outage Submission rules | Mid-term | |
| Assumption/DA data Exchange | Long-term | |
| - FG Utilization Coordination | Long-term | |

Key Accomplishments

- Initiated and conducted periodic site visits
- Enhanced daily DA operator interactions
- Expanded and automated data exchange
- Implemented enhanced Market Flow Calculator
- Implemented exchange of DA and RT binding FGs and wind forecast info
- Improved constraint modeling and alignment between MISO and PJM
- Linking of upcoming/active outages with associated M2M progressing
- Improved manual FG/outage information exchange
- Improved verbal communication discussing new/difficult to model outages

Upcoming Activities

- Finalize any necessary JOA language changes
- Continue data exchange enhancements

Issues & Concerns

Reference

- [Problem Statement](#)
- [DA-RT Market Coordination](#)

2) RTO to RTO Data Exchange & Transparency

Complete

Driver

MISO, PJM and our stakeholders identified symptoms resulting from insufficient transparency or the differences between MISO and PJM controlling documents, operating practices and market practices associated with MISO-PJM day-ahead and real-time coordination.

Milestone Summary

| | Target Date | Actual Date |
|--|--------------------|--------------------|
| Posted the active Market-to-Market flowgate list | | 10/22/2012 |
| Began posting MISO and PJM Firm Flow Entitlement (FFE) values | | 10/22/2012 |
| Began posting hourly, flowgate-by-flowgate Market-to-Market settlement results | | 10/22/2012 |
| Automation of data posting | Mid-term | Completed |

Key Accomplishments

- Forward looking coordination, address Firm Flow Entitlement (FFE) inconsistencies, Review Freeze Data used for FFE, provide additional transparency between RTOs and to stakeholders.

Upcoming Activities

Issues & Concerns

Reference

- [Problem Statement](#)
- [Data Transparency](#)

Drill Down Report

3) Stakeholder Education

Complete

Final draft posted ([link](#)) and final discussion took place at October 2012 JCM meeting.

Driver

Stakeholder questions related to dynamic schedules, pseudo-ties, and curtailments.

Milestone Summary

| | Target Date | Actual Date |
|--|-------------|-------------|
| Interchange Transactions Paper (pdf) | | |

Key Accomplishments

- PJM and MISO took action item to provide more transparency and collaborated on an education document to be posted on the JCM website.
- Produced detailed document ([pdf](#)) defining and describing types of interchange transactions, joint owned generation, and curtailment of capacity resources. References to manuals, procedures, NERC and NAESB requirements.

Upcoming Activities

Issues & Concerns

Reference

- [Supplemental MISO-PJM Scheduling Options](#)
- [MISO PJM Interchange Transactions](#)



4) Scheduling Rules Alignment

Short/Medium Term: *Referred to individual RTO stakeholder processes*

Long Term: Not Started. Further JCM discussions required pending outcome of short-term initiatives.

Driver

Stakeholder desire to see common business rules associated with scheduling of MISO-PJM interchange transactions.

Drill Down Report

Milestone Summary

| | Target Date | Actual Date |
|---|-------------|-------------|
| Evaluate opportunities for alignment (pdf) | Short Term | 1/29/2013 |
| MISO to implement aligned practices | Medium Term | |
| PJM to implement aligned practices | Medium Term | |
| Investigate additional opportunities | Long-term | |

Key Accomplishments

- PJM and MISO presented energy scheduling rules at the September 2012 JCM meeting ([pdf](#))
- MISO completed evaluation and received stakeholder support to proceed with reduction of notification deadline from 30 minutes to 20 minutes which will align with PJM’s rule.
- PJM presented to stakeholders on 5/8/13.

Upcoming Activities

- MISO to file revised notification deadline under Order 764 compliance.
- PJM will engage stakeholders in discussions regarding the MISO approach to intra-hour scheduling rules following FERC response to MISO’s Order 764 compliance filing
- MISO and PJM are evaluating efficiency and alignment opportunity for interface definition and pricing

Issues & Concerns

- FERC decision on MISO’s compliance filing will indicate whether MISO’s current rules are compliant with the Order 764 15-minute scheduling requirements.

Reference

- [Problem Statement](#)
- [Scheduling Rules Alignment](#)

Drill Down Report

5) Network External Designated Must Offer Requirement

Complete. *Referred to PJM RTO stakeholder process.*

Driver

Stakeholder concerns related to use of transmission service. See the Problem Statement for more information.

Milestone Summary

| | Target Date | Actual Date |
|--|--------------------|--------------------|
| Stakeholder discussion | | 10/26/12 |
| Presented data to stakeholders | | Nov 2012 |
| Referred to PJM stakeholder process | | |

Key Accomplishments

PJM reviewed use of Network External Designated service and relationship to RPM.

PJM analysis showed that approximately 85% of the NED service is offered into the PJM capacity market.

- Total MW of NEDS service reserved in PJM effective for the 15/15 Delivery Year: 5,465 MW
- MW of external resources committed in 15/16 RPM Base Residual Auction (cleared plus FRR): 4,649 MW
- Resulting utilization of NEDS service for Capacity Resources: 85%

Upcoming Activities

Issues & Concerns

Reference

- [NEDS Must Offer Discussion](#)

Drill Down Report

6) Outage Coordination

Short Term: Complete. Reviewed with stakeholders in January 2013.

Long Term: On Target. MISO discussions with TOs is ongoing.

Driver

Stakeholder concerns related to revenue adequacy issues and link to transmission outages. See the Problem Statement for more information. Milestone Summary.

Milestone Summary

| | Target Date | Actual Date |
|---|--------------------|--------------------------------------|
| Review processes and timelines with stakeholders. | | January 2013 JCM stakeholder meeting |
| Review MISO Forward processes and FTR funding | | Mar. 2013 JCM |
| Review of Revenue Adequacy Trends | | May 2013 JCM |
| MISO discussion with TOs is ongoing. | | |

Key Accomplishments

- PJM and MISO shared outage scheduling timelines with stakeholders at the January 2013 JCM meeting.
- Both RTOs have presented subsequent presentations about FTR funding adequacy and trends observed in respective markets.
- MISO continues discussions with their Transmission Owners to review current 14-day and 7-day transmission outage submittal timelines.

Upcoming Activities

- Joint discussions between MISO and PJM to identify process improvements to better coordinate outages on the seam.

Issues & Concerns

Reference

- [MISO Outage Coordination](#)
- [PJM Outage Coordination](#)



Drill Down Report



7) Interchange Optimization

On Hold

Driver

Both MISO and PJM Independent Market Monitors identified opportunity to improve efficiency of real time interchange across the interface.

Milestone Summary

| | Target Date | Actual Date |
|---|-------------|-------------|
| Evaluate opportunities and develop solution | Short Term | 9/24/2012 |
| Implement solution | Medium Term | |
| Investigate additional opportunities | Long-term | |

Key Accomplishments

- MISO and PJM collaborated and completed issue analysis, benefit studies and proposal development.
- Presented at the September 2012 JCM meeting ([pdf](#))

Upcoming Activities

- Conducting price formation analysis of July 2012 peak load days.
- Investigate if optimizing interchange could lead to adverse impacts.
- Identify any joint enhancement efforts that may need to be prioritized ahead of interchange optimization.

Issues & Concerns

- PJM, MISO, IMM and stakeholders have not mutually agreed on priority.

Reference

- [Problem Statement](#).

Resource Adequacy

Issues identified till date:

- Issue 1 - External Resource Reliability - Cost Shift
- Issue 2 - BA Need Dispatch Control Over External Resources
- Issue 3 - Not all generators are deliverable; Identify transmission limitations
- Issue 5 - Joint deliverability requires a common Day Ahead Market
- Issue 6 - Define physical transfer capability of existing transmission
- Issue 7 - MISO proposal may violate FERC Order 888 and 889
- Issue 8 - ER energy offers must reflect operational characteristics (MISO Issue)
- Issue 9 - External Resource cannot set energy prices (MISO Issue)
- Issue 10 - ER that clear in only one RTO's DA market creates a mismatch
- Issue 11 - Congestion costs may exceed revenue received (MISO and PJM Issue)

1) Coordination of Capacity Deliverability Modeling and Assumptions

On Target

Driver

Concern expressed about whether resources are able to efficiently offer into either capacity auction.

Milestone Summary

| | Target Date | Actual Date |
|---|--------------------|--------------------|
| Education: generation & load models, assumptions and processes | Short-term | 9/24/12 |
| Education: capacity market constructs and market timelines | Medium-term | |
| Identify opportunities for further aligning models, assumptions and analyses | | |
| Identify method to align capacity auction timelines | | |

Key Accomplishments

- Coordinated, exchanged & expanded modeling data
- Coordinated studies for new projects near the border
- 2013 RTEP to include expanded MISO contingencies
- Identified and implemented opportunities for aligning planning models, assumptions and analyses

Upcoming Activities

- Identify options for aligning capacity market timelines

Issues & Concerns

Reference

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2) Coordination of Capacity Product Definition

Monitor

Driver

Ensure the RTOs are using consistent methodologies and assumptions when evaluating resource deliverability.

Milestone Summary

| | Target Date | Actual Date |
|--|--------------------|--------------------|
| Stakeholder education on use of CBM | Short-term | 11/28/12 |
| Stakeholder education on capacity product definitions and market rules in each RTO | Medium-term | |
| Harmonize definition and use of CBM | Medium-term | |
| Harmonize definition of capacity products | Medium-term | |

Key Accomplishments

- Conducted stakeholder education and posted additional documentation regarding each RTOs development and use of Capacity Benefit Margin (CBM)

Upcoming Activities

- Identify potential areas where establishment and use of CBM could be further harmonized between the RTOs. It is understood that any governing document and manual changes will necessarily require endorsement through each RTO's stakeholder processes.
- Perform education on the capacity product definition and market rules in each RTO
- Develop work plan to resolve issues covered/identified in the previous JCM meetings

Issues & Concerns

Reference

- [Capacity Benefit Margin](#)
- [Item 06 - CBM - MISO Methodology](#)

3) Capacity Deliverability: Joint Deliverability Analysis, Economic Clearing of External Resources in Capacity Market

Monitor

Driver

Milestone Summary

| | Target Date | Actual Date |
|--|---------------------|--------------------|
| Identify potential methods for conducting joint deliverability analysis | Medium to Long-term | |
| Conduct deliverability analyses and resource adequacy procurements on a joint basis | Long-term | |

Key Accomplishments

- Performed education for all stakeholders on the generation and load deliverability evaluation models, assumptions and processes in each RTO (short term)
- Perform education for all stakeholders on the Day-Ahead and Real-Time Energy Markets in each RTO (short term)

Upcoming Activities

- Explore methods for joint deliverability analysis
- Explore methods for common capacity resource commitment across the RTOs (long term)
- Explore methods to harmonize or combine Day-Ahead Market structures between the RTOs (long term)
- Develop work plan to resolve issues covered/identified in the previous JCM meetings.

Issues & Concerns

Reference

- [PJM-MISO Planning Accomplishments](#)
- [PJM Capacity Deliverability Studies and Market Timelines](#)



Transmission Planning



1) Regional Planning Coordination (MTEP/RTEP)

Driver

Both PJM and MISO perform system planning studies for the planning horizon. Aligning and coordinating the models and assumptions used in these respective analyses would ensure greater consistency of the analysis results and greater transparency regarding the expansion plans that are developed in each of the RTO footprints and facilitate joint system planning studies that are intended to address common operational, reliability and market efficiency problems.

Drill Down Report

Milestone Summary

| | Target Date | Actual Date |
|--------------------------------------|--------------------|--------------------|
| Stakeholder Education | Near Term | 11/28/12 |
| Proposals for alignment | Near Term | 11/28/12 |
| Update applicable Agreements and BPM | Medium Term | Q2 2013 |

Key Accomplishments

- Hosted several stakeholder meetings to solicit and identify opportunities for enhanced alignment and coordination.
- Solicited stakeholder feedback
- Drafted enhancements to the Joint Operating Agreement to memorialize areas for enhanced coordination including model and data exchange, stakeholder participation, interconnection planning, and interregional planning processes
- Drafted changes to regional BPM and reviewed with stakeholders

Upcoming Activities

- Finalize draft changes to the JOA based on stakeholder feedback
- Stakeholder meeting: 3/13/13
- Finalize updates to BPMs as required
- File revised JOA with FERC: Q2 2013

Issues & Concerns

Reference

- [IPSAC meeting pages](#)

2) Generation Interconnection and TSR Analysis Timing

On Target

Driver

Milestone Summary

| | Target Date | Actual Date |
|---|--------------------|--------------------|
| Review current practices | Short-term | 9/28/2012 |
| Identify process enhancements | | |
| Harmonize model, assumption analysis techniques and timelines for evaluations | Short-term | 2/22/2013 |
| Evaluate TTC across the seam | Short-term | |

Key Accomplishments

- Proposal to enhance coordination of Long-Term Firm (LTF) transmission service requests
- reduce the total study time
- provide info to customers earlier
- Developed process to align & enhance assessment of new generation interconnection requests that may have cross-border impacts
- Presented the differences and similarities in GI study assumptions and criteria
- Presented the proposed BPM language to PJM & MISO stakeholder bodies to document the revised coordination process

Upcoming Activities

- Update the JCM stakeholders when the proposed changes get incorporated in the respective BPMs and the JOA

Issues & Concerns

Reference

- [Problem Statement](#)
- [TSR Proposal](#)
- [TSR and Queue Coordination](#)
- [GI Coordination Update](#)

3) Market Participant Funded Upgrades / IARR Requests

Short/Medium Term: *Referred to MISO RTO stakeholder processes*

Driver

Stakeholders requested to clarify and coordinate the process for Market Participant Funded upgrades

Milestone Summary

| | Target Date | Actual Date |
|--|-------------|-------------|
| | | |

Key Accomplishments

- MISO worked with its stakeholders to revise the BPM language

Upcoming Activities

- Implement changes in MISO Business Process as per the revised language in the MISO BPM.

Issues & Concerns

Reference

- [Problem Statement](#)