

# ***JCM Initiatives Update***



**August 2007**



# Joint and Common Market Initiatives

| Complete       | Cost<br>3 Year Gross Benefit |
|----------------|------------------------------|
| Implementation | Cost<br>3 Year Gross Benefit |

| Evaluation      | Cost<br>3 Year Gross Benefit |
|-----------------|------------------------------|
| Not Recommended | Cost<br>3 Year Gross Benefit |

|             |   | 2006   |   | 2007                        |   | 2008   |  |                          |
|-------------|---|--|---|-----------------------------|---|--|--|--------------------------|
|             |   |  |   |                             |   |  |  |                          |
| Commercial  | 1 | FTR Market Convergence                                     | Alignment of FTR Timelines and Products<br>(Note: All MISO cost)  | \$600,000<br>\$3,008,657    |   |  | Cross Border FTRs in the allocations<br>\$4,000,000<br>Analyzing                                 |                          |
|             |   |  |   |                             |   |  | Cross border FTRs in auctions<br>\$8,000,000<br>\$4,374,524                                      |                          |
|             | 2 | Price Rationalization and Convergence at the Border        |   |                             | PJM implementation of marginal losses<br>\$600,000<br>N/A   |  |  |                          |
|             |   |  |   |                             | Alternative Border Pricing Point Calculation<br>\$200,000<br>N/A  |  |  |                          |
|             | 3 | Reduce Hurdle Rate   | Alignment of PJM Operating Reserves and MISO Revenue Sufficiency Guarantee<br>(Note: All MISO cost)       | \$600,000<br>\$3,764,432    | Depancaking of PTP ancillary services<br>(Control Area Services, T.O. Control Center Services, Reactive, Black Start)         | \$400,000<br>(\$2,505,757)                               |  |                          |
|             | 4 | Broader Price Transparency and Common Reporting            | Existing MISO & PJM Websites<br>Linking of sites Data Available at Both Sites<br>(LMPs, Tie Flows, Loads) | \$500,000<br>\$1,952,165    | Standard Data Exchange (Web Services)<br>LMPs, Contingencies, Loads, Dispatch Signals, Outages, Emergency Event/Notifications | \$3,000,000<br>\$2,547,477                               | Implementation of single MISO & PJM Website<br>(Individual Websites go away)<br>\$750,000<br>N/A |                          |
|             |   |  | Common Search Capabilities  | \$200,000<br>\$1,125,000    |   |  | Standard Data Visualization and Reporting Portal<br>\$8,500,000                                  |                          |
|             |   |  | Enhanced Joint Website to Host Joint meeting and Events Calendar, Joint Documents and Reports             | \$600,000<br>\$1,125,000    |   |  | Create a single MISO & PJM Data and Report Portal<br>\$4,158,174                                 |                          |
|             |   |  |   |                             |   |  |  |                          |
|             | 5 | Increased Market Opportunities                             | Moving JOUs between markets   | \$100,000<br>\$156,851      |   |  | Shared Regulation Market<br>\$8,000,000<br>Analyzing   |                          |
|             | 6 | Operational Consistency                                    | Common Long Term Transmission Queue   | \$200,000<br>\$1,091,108    | Common Time Zones<br>(Note: All PJM cost)   | \$5,000,000<br>N/A                                       | Single Resource Adequacy Solution<br>\$8,000,000<br>N/A  |                          |
|             |   |  | MISO Ramp Viewer  | \$150,000<br>\$913,703      | Central location to view both ramp viewers  | \$100,000<br>\$1,527,405                                 | Common Ramp Portal<br>\$750,000<br>\$2,091,108   |                          |
|             |   |  | Alignment of OASIS Business Practices   | \$500,000<br>\$1,365,867    | Coordinated OASIS   | \$1,200,000<br>Analyzing                                 |  |                          |
|             |   |  | Single OASIS  | \$8,000,000<br>\$6,168,760  | Reserve Sharing   | \$8,000,000<br>N/A                                       |  |                          |
|             |   |  | Common Treatment of Dynamic Schedules/Pseudo-Ties   | \$200,000<br>\$382,934      | Market to Market Relaxation of Constraints  | \$80,000<br>\$1,000,000                                  |  |                          |
|             |   |  | Investigation of Loop Flow Across the Combined Footprint  | N/A<br>Analyzing            | Dynamic Dispatchable Transactions and Schedules   | Analyzing<br>Analyzing                                   | Netting in the IDC<br>Analyzing<br>Analyzing   |                          |
|             |   |  | Market Flow Threshold Assessment  | N/A<br>Reliability          | Market Flow Threshold Reported to IDC   | \$300,000<br>Reliability                                 |  |                          |
|             |   |  |   |                             | Outage Coordination   | N/A<br>Reliability                                       |  |                          |
|             |   |  |   |                             |   |  |  |                          |
|             | 7 | Single Market  | Year 1 - Rule Alignment & Market Portal Design  | \$15,000,000<br>\$5,000,000 | Year 2 - Initial Market Portal Implementation   | \$40,000,000<br>\$27,000,000                             | Year 3-5 - Implementation of Single Market<br>\$50,000,000<br>\$34,700,000                       |                          |
| Reliability | 1 | Emergency Energy Agreement                                 | Alignment of Agreements and Practices   | \$100,000<br>Reliability    |   | Super Regional Reserve Sharing<br>Analyzing<br>Analyzing |  |                          |
|             | 2 | Black Start and Restoration                                |   |                             | Alignment of Agreements and Practices   | \$500,000<br>\$936,000                                   |  |                          |
| Plan        | 1 | Joint Expansion Planning and Common Deliverability Studies | Joint Expansion Planning<br>(Coordinated System Plan)   | \$20,000<br>Reliability     | Cross Border Cost Sharing of Expansions   | Reliability  |  |                          |
|             | 2 |  | Common Deliverability Studies   | \$100,000<br>Reliability    |   |  |  |                          |
| Total       |   | Costs<br>3-Year Gross Benefit                              | 2006  | \$3,770,000<br>\$14,885,717 | 2007  | \$1,580,000<br>\$3,463,405                               | 2008   | \$750,000<br>\$2,091,108 |



# ***JCM Committed Initiatives***



# FTR Alignment

## Milestone Summary

|   |                                  |
|---|----------------------------------|
| C | Analyze Product                  |
| C | Stakeholder Review               |
| C | Submit Filings to FERC           |
| C | Develop Business Rules           |
| C | Finalize Functional Requirements |
| G | Design and Development           |
| G | Build and Test                   |
| G | Update Process and Procedures    |
| G | Customer Training                |
| G | Cutover to Production Phase 1    |
| G | Cutover to Production Phase 2    |

**G** Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: S. Bresler

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

- Midwest ISO filed answers to protests of its July 16, 2007, 60-day compliance filing.
- Midwest ISO final design has been approved.
- Draft Midwest ISO Business Practice Manual revisions reflecting ARR/LTTR changes prepared for stakeholder review.
- FERC has approved a PJM intra-planning year transmission rights allocation similar to the current Midwest ISO process.

## UPCOMING ACTIVITIES

- PJM to submit status report regarding continued stakeholder discussion on potential uplift mechanisms to FERC by November 30, 2007.
- PJM stakeholders are actively discussing the possibility of implementing a seasonal ARR/FTR process similar to the Midwest ISO process.
- PJM Markets and Reliability Committee will vote to endorse a 3-year, Long-Term FTR Auction proposal at its October meeting.
- Midwest ISO capital project final approval.
- Midwest ISO software construction expected to start September 4, 2007.
- Midwest ISO to begin working with stakeholders to discuss 6 month compliance filing required by May 17, 2007, FERC Order.

## ISSUES & CONCERNS

- None at this time.

# OR & RSG Alignment

## Milestone Summary

|   |                             |
|---|-----------------------------|
| C | Analyze Product             |
| R | Stakeholder Review          |
| R | Develop System Requirements |
| R | Modify Applications         |
| R | Conduct Testing             |
| R | Implement Changes           |

**R** Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: S. Bresler

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

- On July 25, 2007, PJM Market Implementation Committee approved a package of Balancing Operating Reserve credit and allocation changes, which will be forwarded to the Markets and Reliability Committee.
- Midwest ISO has developed strawman Revenue Sufficiency Guarantee (RSG) Redesign Whitepaper

## UPCOMING ACTIVITIES

- Continued PJM Stakeholder meetings.
- PJM Markets and Reliability Committee vote on package of Balancing Operating Reserves credit and allocation changes to be voted on in October.
- Midwest ISO ongoing review of RSG Redesign Whitepaper with Stakeholders.
- Midwest ISO to file comments to complaints filed at FERC on Midwest ISO current RSG approach.

## ISSUES & CONCERNS

- Clearly different camps in terms of causation versus predictability (unclear that we will get to common rules).

# Relaxation of Constraints

## Milestone Summary

|   |                                |
|---|--------------------------------|
| C | Tech. Software Design Document |
| C | Obtain Estimates from Vendor   |
| Y | Modify Applications            |
| Y | Conduct Testing                |
| Y | Implement Changes              |

**Y** Overall Status

## JCM Leads

- Midwest ISO: T. Mallinger
- PJM: S. Bresler

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

- Functional specification has been updated and is under review.
- Initial test plan has been developed by the Midwest ISO.
- Requirements have been turned over for vendor to complete the detail design.

## UPCOMING ACTIVITIES

- Agreement changes will be taken through the RTOs stakeholder processes.
- RTOs to explore potential of partial implementation of initiative before Spring 2008.
- Finalize functional specifications and detail design.
- Finalize vendor software delivery schedule.
- PJM Markets and Reliability Committee will vote on the necessary PJM agreement changes at September 26, 2007, meeting.

## ISSUES & CONCERNS

- Based on Midwest ISO's software priority and to avoid duplicative effort required to implement this initiative in the current production environment and the new ASM software, the project has been scheduled for Spring 2008.

# Central Location to View Both Ramp Viewers

## Milestone Summary

|   |   |
|---|---|
| C | Develop Business Requirements                           |
| C | Design Central Location & Select Appropriate Technology |
| G | Build and Test Central Location                         |
| G | Provide Training and Implement Changes                  |

**G** Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: C. Advena

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

- RTO's will exchange 48 hours of Ramp information for display in each RTO's Ramp Viewer applications.
- Midwest ISO and PJM will exchange data for display in their internal applications.
- Midwest ISO has approved funding release for this initiative.
- PJM has submitted Project Funding Request to release funds for project.

## UPCOMING ACTIVITIES

- Revise timeline based on priorities of technical resources.

## ISSUES & CONCERNS

- No issues at this time.

# Black Start and Restoration

## Milestone Summary

|   |  |
|---|--|
| C | Midwest ISO Technical Whitepaper                   |
| C | Determine Tariff, Regulatory, Reliability Issues   |
| Y | Obtain Midwest ISO Stakeholder Approval            |
| Y | Compare Midwest ISO & PJM Processes                |
| Y | Midwest ISO Develop Tariff Changes                 |
| G | Submit Regulatory Filings                          |
| G | Modify Policies, Procedures, Applications, Systems |
| G | Provide Training and Implement Changes             |

**G** Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: C. Advena

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

- Midwest ISO Market Subcommittee approved motion on tariff framework for Black Start and Restoration on July 10, 2007.
- Draft versions of Black Start tariff language have been developed and are under review: a) the individual Transmission Operators are responsible for arranging for Black Start Service and complying with NERC System Restoration and Black Start reliability standards. b) the Transmission Provider (Midwest ISO) will independently determine the need for Black Start to comply with NERC standards.

## UPCOMING ACTIVITIES

- Review of proposed tariff language with Midwest ISO Market Subcommittee.

## ISSUES & CONCERNS

- None at this time.



# Cross Border Cost Sharing of Expansion

## Milestone Summary

|   |   |
|---|---|
| C | File Policy Baseline Reliability Projects                   |
| C | Order on Reliability Filing                                 |
| C | Compliance Filing on Reliability Filing                     |
| C | File Extensions with FERC                                   |
| C | FERC issues Order for Technical Conference                  |
| C | Conduct Technical Conference                                |
| C | File 2 <sup>nd</sup> Extension for Econ X Border Allocation |
| R | FERC Staff submit findings to Commission                    |
| R | FERC Issues Order   |
| R | Continue Stakeholder discussions                            |
| R | File Policy Cross Border Alloc. Econ. Project Costs         |

R

## Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: S. Pincus

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

- FERC granted indefinite extension for economic cross border cost allocation sharing compliance filing.
- FERC issued order on PJM rate design on April 19<sup>th</sup> (Docket EL05-121-000).

## UPCOMING ACTIVITIES

- FERC decisions on Midwest ISO and PJM latest filings, on the methodology for reliability project cross-border cost allocation methodology.
- FERC Order establishing a schedule for completing stakeholder processes and filing proposed economic project cross-border cost allocation methodology.

## ISSUES & CONCERNS

- None at this time.

# ***JCM Further Analysis Initiatives***



# Market Flow Threshold Reported to IDC

## Milestone Summary

|   |                                   |
|---|-----------------------------------|
| C | Develop Detail Project Plan       |
| C | Vendor Requirement Specifications |
| Y | System Development                |
| Y | Test System Changes               |
| C | Mock Production Run               |
| G | Cutover to Production             |

**G** Overall Status

## JCM Leads

- Midwest ISO: T. Mallinger
- PJM: J. Burlew

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

- PJM began 12-month field test starting on May 30, 2007.
- Midwest ISO and PJM submitted 30-day compliance filing on changes to CMP.

## UPCOMING ACTIVITIES

- Midwest ISO to begin Field Test in Fall 2007.
- Midwest ISO will submit compliance filing 20 days prior to its participation in the 12-month field test.
- Initial results of Market Flow Threshold Test to be reviewed at the NERC Operating Reliability Subcommittee Meeting, September 19-20, 2007.

## ISSUES & CONCERNS

- None at this time.

# Dynamic Dispatch. Sched./Dispatch. Trans.

## Milestone Summary



Review Analysis with Stakeholders

Determine Next Steps



Overall Status

## JCM Leads

- Midwest ISO: T. Mallinger
- PJM: S. Bresler

## Legend



Completed

On Target – No Issues

Need to watch – Some Issues

In Jeopardy – Significant Issues

## KEY ACCOMPLISHMENTS

- Midwest ISO and PJM have completed initial analysis on proxy bus prices. When differences occur in proxy bus prices the differences generally converged within relatively short time frames.
- Results of analysis on proxy bus prices was presented at the June 1, 2007, Joint Stakeholder Meeting.

## UPCOMING ACTIVITIES

- RTOs are continuing analysis of border price differentials since the PJM Marginal Losses initiative was implemented.
- RTOs are conducting preliminary analysis to determine if initiative should be taken off “hold” status.

## ISSUES & CONCERNS

- None at this time.

# ***JCM Hold Initiatives***



# Coordinated OASIS

## Milestone Summary

|   |  |
|---|--|
| C | Perform Analysis                             |
| C | Stakeholder Review                           |
| G | Develop Cost Benefits/Estimate               |
| G | Conduct Internal Stakeholder Reviews         |
| G | Review Results at Joint Stakeholder Meetings |

**G** Overall Status

## JCM Leads

- Midwest ISO: E. Skiba
- PJM: C. Advena

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

- At the June 1, 2007, JCM Joint Stakeholder meeting it was agreed to place this initiative on hold pending definition of NAESB OASIS changes resulting from FERC Order Number 890.

## UPCOMING ACTIVITIES

- In the August 22, 2007, NAESB work plan the Group 1 changes to OASIS are scheduled to be posted for formal comments by the end of third quarter 2007. Group 1 changes include posting of ETC, annotation for ATC, load forecast and actual load, re-bid of partial service and pre-confirmation priority.

## ISSUES & CONCERNS

- None at this time.

# Netting in the IDC

## Milestone Summary

|   |  |
|---|--|
| G | Conduct Analysis                           |
| G | Develop Draft Recommendation               |
| G | Review Preliminary Recommendation with ORS |
| G | Conduct Detail Analysis/Cost Estimates     |
| G | Prepare Final Recommendation to ORS        |
| G | Present Recommendation to ORS              |
| G | ORS Action on Recommendation               |

**G** Overall Status

## JCM Leads

- Midwest ISO: T. Mallinger
- PJM: J. Burlew

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

- Decision was made to place this initiative on hold until the market flow threshold field test has started for Midwest ISO, PJM, and SPP.

## UPCOMING ACTIVITIES

## ISSUES & CONCERNS

- No issues at this time.

# Shared Regulation Market

## Milestone Summary

|   |   |
|---|---|
| G | Resolve CA Consolidation Issues                           |
| G | Analyze Options Shared Reg. Mkt.                          |
| G | Perform Detail Study                                      |
| G | Identify Changes Policies, Procedures, applications, etc. |
| G | Review Results with Stakeholders                          |
| G | Go/No Go Decision   |

**G** Overall Status

## JCM Lead

- Midwest ISO: T. Mallinger
- PJM: S. Bresler

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

## UPCOMING ACTIVITIES

- Analysis on this initiative will begin in 2008 after Midwest ISO opens its Ancillary Services Market.

## ISSUES & CONCERNS

- None at this time.



# Cross Border FTRs in the Allocations

## Milestone Summary

|   |  |
|---|--|
| G | Determine allocation process changes to create alignment |
| G | Define business rules for resolving differences          |
| G | Perform Detail Cost/Benefit Analysis                     |
| G | Review Results with Stakeholders                         |
| G | Go/No Go Decision  |

**G** Overall Status

## JCM Lead

- Midwest ISO: R. Doying
- PJM: S. Bresler

## Legend

|   |                                  |
|---|----------------------------------|
| C | Completed                        |
| G | On Target – No Issues            |
| Y | Need to watch – Some Issues      |
| R | In Jeopardy – Significant Issues |

## KEY ACCOMPLISHMENTS

## UPCOMING ACTIVITIES

- Analysis on this initiative will begin in late 2007.

## ISSUES & CONCERNS

- None at this time.

# ***Completed Initiatives***



# Completed Initiatives

## **Committed Initiatives**

- Midwest ISO Ramp Viewer
- Moving JOUs Between Markets
- Broader Price Transparency – Common Search Engine
- Broader Price Transparency – Enhanced Joint Website
- Broader Price Transparency – Link Midwest ISO PTP and PJM eData sites
- Common Long-Term Transmission Queue
- Alignment of OASIS Business Practices
- Emergency Energy Agreements – Alignment of Agreements and Practices (Decision not to proceed with initiative)
- Joint Expansion Planning (Coordinated System Plan)
- Common Deliverability Studies
- Common Treatment of Dynamic Schedules and Pseudo Ties
- PJM Marginal Losses

## **Require Further Analysis**

- Production Cost Study
- Common Time Zones – PJM Move to EST (Decision not to proceed with initiative)
- Market Flow Threshold Assessment (Decision to move forward with 12-month field test)
- Super Regional Reserve Sharing (Decision not to proceed with this initiative)
- Investigation of Loop Flow Across the Combined Footprint
- Outage Coordination
- Alternative Border Pricing Point Calculation (Decision not to proceed based on Midwest ISO and PJM analysis of proxy bus prices)