# JCM Initiatives Update



### **March 2007**





#### **Joint and Common Market Initiatives**

3-Year Gross Benefit

Complete Cost 3 Year Gross Benefit

**Evaluation** 

Cost 3 Year Gross Benefit

					Implementation Cost 3 Year Gross	Benefit	Not Recommended	Co 3 Year Gro	ost oss <i>Benefit</i>
		2006			2007		2008		
	1	FTR Market Convergence	Alignment of FTR Timelines and Products	\$600,000			Cross Border FTRs in the allocations		\$4,000,000 Analyzing
			(Note: All MISO cost)	\$3,008,657			Cross border FTRs in auctions		\$8,000,000 \$4,374,524
Ī	2	Price Rationalization and Convergence at the Border			PJM implementation of marginal losses \$600,000  N/A				
					Alternative Border Pricing Point Calculation \$200,000				
	3	Reduce Hurdle Rate	Alignment of PJM Operating Reserves and MISO Revenue Sufficiency Guarantee (Note: All MISO cost)	\$600,000 \$3,764,432	Depancaking of PTP ancillary services (Control Area Services, T.O. Control Center Services, Reactive, Black Start) (\$2,505,757)				
Ì		Broader Price Transparency and Common Reporting	Existing MISO & PJM Websites Linking of sites Data Available at Both	\$500,000	Standard Data Exchange (Web Services) LMPs, Contingencies, Loads, Dispatch Signals, Outages, Emergency Event/Notifications \$2,547,477		Implementation of single Website	MISO & PJM	\$750,000
			Sites (LMPs, Tie Flows, Loads)	\$1,952,165			(Individual Websites go away)		N/A
	4		Common Search Capabilities	\$200,000 \$1,125,000			Standard Data Visualization and Reporting Portal Create a single MISO & PJM Data and Report Portal		\$8,500,000
			Enhanced Joint Website to Host Joint meeting and Events Calendar, Joint	\$600,000					\$4,158,174
Commercial	5	Increased Market Opportunities	Documents and Reports  Moving JOUs between markets	\$1,125,000 \$100,000 \$156,851			Shared Regulation Market		\$8,000,000
Comi	6	Operational Consistency	Common Long Term Transmission Queue	\$200,000	Common Time Zones (Note: All PJM cost)	\$5,000,000 N/A	Single Resource Adequacy Solution		\$8,000,000
			MISO Ramp Viewer	\$1,091,108 \$150,000	Central location to view both ramp viewers	\$100,000 \$1,527,405	Common Ramp Portal		N/A \$750,000
			Alignment of OASIS Business Practices	\$913,703 \$500,000 \$1,365,867	Coordinated OASIS \$1,200,000 - Analyzing		-		\$2,091,108
			Single OASIS	\$8,000,000 \$6,168,760	\$8,000,000 Reserve Sharing N/A				
			Common Treatment of Dynamic Schedules/Pseudo-Ties	\$200,000 \$382.934	Market to Market Relaxation of Constraints	\$80,000 \$1,000,000			
			Investigation of Loop Flow Across the Combined Footprint	N/A Analyzing	Dynamic Dispatchable Transactions and Schedules	Analyzing Analyzing	Netting in the II	ос	Analyzing Analyzing
			Market Flow Threshold Assessment	N/A Reliability	Market Flow Threshold Reported to IDC \$300,000				
			·		Outage Coordination				
	7	Single Market	Year 1 - Rule Alignment & Market Portal Design	\$15,000,000 \$5,000,000	Year 2 - Initial Market Portal Implementation	\$40,000,000 \$27,000,000	Year 3-5 - Implementation o	Single Market	\$50,000,000 \$34,700,000
illity	1	Emergency Energy Agreement	Alignment of Agreements and Practices	\$100,000 Reliability			Super Regional Reserve Sharing		Analyzing Analyzing
Reliability	2	Black Start and Restoration			Alignment of Agreements and Practices \$500,1				
-	1	Joint Expansion Planning and Common Deliverability Studies	Joint Expansion Planning (Coordinated System Plan)	\$20,000 Reliability	Cross Border Cost Sharing of Expansions	Reliability			
Plan	2		Common Deliverability Studies	\$100,000 Reliability					
Total		Costs	2006	\$3,770,000	2007	\$1,580,000	2008		\$750,000





\$2,091,108

# JCM Committed



# *Initiatives*





## FTR Alignment



#### **Milestone Summary**

**Analyze Product** Stakeholder Review

**Submit Filings to FERC** 

G

**Develop Approach Document for Vendor** 

G

**Design and Development** 

**Update Processes and Procedures** 

G

**Build and Test** 

**Cutover to Production** 

**Overall Status** 

#### **JCM Leads**

Midwest ISO: E. Skiba

• PJM: S. Bresler

#### Legend

Completed

On Target - No Issues

Need to watch - Some Issues

In Jeopardy - Significant Issues

#### KEY ACCOMPLISHMENTS

- PJM Compliance filings on Long-Term Transmission Rights (LTTR) submitted on January 22, 2007.
- Midwest ISO Compliance filing on LTTR submitted on January 29, 2007, which included changes to align some aspects of the FTR products. Comment period ended March 22, 2007.
- · Midwest ISO has begun discussions with vendor on software requirement changes.
- Midwest ISO held internal project kick-off March 15, 2007.

#### **UPCOMING ACTIVITIES**

- Midwest ISO to respond to comments on its LTTR filing.
- FERC approval of LTTR compliance filings.
- Midwest ISO and vendor to reach agreement on scope of system changes.

#### **ISSUES & CONCERNS**





## **OR & RSG Alignment**



# Milestone Summary C Analyze Product Stakeholder Review Develop System Requirements Modify Applications Conduct Testing Implement Changes R Overall Status

#### **JCM Leads**

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

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

#### **KEY ACCOMPLISHMENTS**

- FERC issued Midwest ISO RSG Order on Rehearing October 26, 2006.
- Midwest ISO submitted Compliance filings to October 26, 2006, Order on November 27, 2006, and December 26, 2006.
- Significant reductions in PJM OR and the Midwest ISO RSG charges have occurred since in November 2005.
- Midwest ISO received two FERC orders related to RSG on March 15, 2007.

#### **UPCOMING ACTIVITIES**

- · Continued PJM Stakeholder meetings.
- Midwest ISO is anticipating a FERC Order with regards to virtual transactions by end of first quarter 2007.
- Midwest ISO will develop project plan based on requirements in the FERC Order.

#### **ISSUES & CONCERNS**

- FERC Order re: Midwest ISO RSG filing may impact timeline for RSG Task Force and subsequent filing of changes to EMT.
- Clearly different camps in terms of causation versus predictability (unclear that we will get to common rules).
- PJM is also considering changes (moving targets for both organizations) making close coordination imperative. PJM stakeholders have not been able to reach consensus on changes considered to date within the PJM process.





## **PJM Marginal Losses**



#### **Milestone Summary**

C

Stakeholder Review

С

Complete FERC Filings

C

**Develop System Requirements** 

G

Modify Applications
Conduct Testing

<del>\_\_\_\_\_</del>

Implement Changes

G

**Overall Status** 

#### **JCM Leads**

• Midwest ISO: E. Skiba

• PJM: S. Bresler

#### Legend



Completed

G o

On Target - No Issues

Υ

Need to watch - Some Issues

R In Jeopardy – Significant Issues

#### **KEY ACCOMPLISHMENTS**

- November 6, 2006, FERC issued an order accepting the August 3, 2006, PJM marginal loss filing.
- PJM has begun stakeholder training sessions on marginal loss implementation.

#### **UPCOMING ACTIVITIES**

 PJM stakeholder training sessions on marginal losses will continue through March 2007.

#### **ISSUES & CONCERNS**





### **Relaxation of Constraints**



#### Milestone Summary

C

Tech. Software Design Document
Obtain Estimates from Vendor

Modify Applications

Y Cond

Conduct Testing Implement Changes

Υ

**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**

- Midwest ISO and PJM agreed to scope of initiative.
- Estimates have been provided by vendor.

#### **UPCOMING ACTIVITIES**

- · Develop detailed project plan.
- Agreement changes will be taken through the RTOs stakeholder processes.

#### **ISSUES & CONCERNS**

• Availability of resources required to make changes to vendor software.





## **Central Location to View Both Ramp Viewers**

# Milestone Summary G Develop Business Requirements Design Central Location & Select Appropriate Technology Build and Test Central Location Provide Training and Implement Changes G Overall Status

#### **JCM Leads**

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

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

#### **KEY ACCOMPLISHMENTS**

• RTO's will exchange 48 hours of Ramp information for display in each RTO's Ramp Viewer applications.

#### **UPCOMING ACTIVITIES**

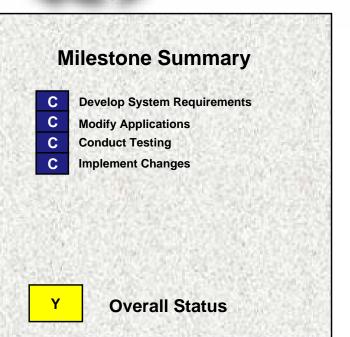
- Specifics of data exchanges will be jointly defined by Midwest ISO and PJM.
- RTO's will develop more detailed estimates to implement this initiative.

#### **ISSUES & CONCERNS**





# **Common Treatment Dynamic Sched./Pseudo-Ties**



#### **KEY ACCOMPLISHMENTS**

- System changes have been moved to production (functionality has initially been disabled pending user training).
- Midwest ISO conducted training in March stakeholder meetings.

#### **UPCOMING ACTIVITIES**

• Software is scheduled to be enabled on April 2, 2007.

#### **JCM Leads**

- Midwest ISO: E. Skiba
- PJM: M. Bryson

#### Legend

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

#### **ISSUES & CONCERNS**





### **Black Start and Restoration**



# Milestone Summary

- Midwest ISO Technical Whitepaper
- G Midwest ISO Develop Tariff Changes
- G Compare Midwest ISO & PJM Processes
- G Determine Tariff, Regulatory, Reliability Issues
- G Obtain Stakeholder Approval
- G Submit Regulatory Filings
- 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 reviewed comparison of customer compensation and charges for PJM, NY ISO, ISO NE, and CAISO. Market Subcommittee preference was ISO NE approach.
- Market Subcommittee supports paying for Black Start based on average proxy cost to generators that are Black Start capable.

#### **UPCOMING ACTIVITIES**

 Midwest ISO to develop tariff changes and take through its stakeholder process.

#### **ISSUES & CONCERNS**





# **Cross Border Cost Sharing of Expansion**

#### **Milestone Summary**

- 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
- FERC Issues Order
- R Continue Stakeholder discussions
  - 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.
- Midwest ISO and PJM and their stakeholders were unable to reach agreement on a Cross Border cost Sharing for Expansion on Reliability projects on multiple proposals.
- Midwest ISO and PJM made separate filings to FERC on March 22, 2007, indicating a compromise could not be reached.
  - Midwest ISO urged FERC to accept its original proposal.
  - PJM requested order be held in abeyance pending rate design decision by FERC (Docket – EL05-121-000).

#### **UPCOMING ACTIVITIES**

• FERC decisions on Midwest ISO and PJM latest filings.

#### **ISSUES & CONCERNS**

 After discussion several possible compromise proposals, the RTOs and their transmission owners were unable to agree on a compromise solution.





# JCM Further Analysis



# Initiatives





# Market Flow Threshold Reported to IDC

# Milestone Summary Develop Detail Project Plan Vendor Requirement Specifications System Development Test System Changes Mock Production Run Cutover to Production G Overall Status

#### **JCM Leads**

• Midwest ISO: T. Mallinger

• PJM: J. Burlew

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

#### **KEY ACCOMPLISHMENTS**

- Obtained 12-month field test approval from NERC Standards Committee.
- Midwest ISO and PJM funding has been approved.
- IDC, NNL Impact Calculator, and NNL Allocation Engine modifications to support this initiative have been started.
- Midwest ISO reviewed its seams agreements and Energy Market Tariff (EMT) to determine changes required to support this initiative.

#### **UPCOMING ACTIVITIES**

• Finalize revised implementation plan.

#### **ISSUES & CONCERNS**

 Delays in vendor delivered software and testing could result in May implementation being moved to the fall. The IDC Working Group, ORS, and NERC Standards Committee recommended the changes be made to the IDC before June 1, 2007, or delayed until the fall.





## **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
  - Prepare Final Recommendation to ORS
- G Present Recommendation to ORS
  - 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 is underway.

#### **UPCOMING ACTIVITIES**

#### **ISSUES & CONCERNS**





# Investigate Loop Flow Across Combined Footprint

### Milestone Summary

C

Obtain Tag Data
Obtain Midwest ISO/PJM Market Flow
Data

C

Obtain Non-Market Gen-to Load Data Conduct Analysis – Tag Data

C

**Conduct Analysis Market Flow Data** 

C

**Quantify Contributors – Selected Interfaces** 

G

Generate Final Report – Selected Interfaces

G

Identify Next Steps

G

**Overall Status** 

#### **JCM Leads**

- Midwest ISO: T. Mallinger
- PJM: C. Advena

#### Legend



Completed

G On

On Target – No Issues

Υ

Need to watch - Some Issues

R In Jeopardy – Significant Issues

#### **KEY ACCOMPLISHMENTS**

- Midwest ISO and PJM have concluded preliminary analysis.
- Midwest ISO and PJM have reviewed analysis results with IESO and New York ISO per agreements with them providing tag data for analysis.
- Presented preliminary loop flow study findings to and discussed next steps in March 2007.

#### **UPCOMING ACTIVITIES**

- PJM to submit informational filing to FERC as required by FERC order on the PJM long-term transmission right filing.
- Midwest ISO and PJM to complete Loop Flow Analysis on Selected Interfaces Final Report.
- Additional on-going analysis will continue following issuance of final report with additional reporting being provided on an as needed basis.

#### **ISSUES & CONCERNS**

• Final report issuance is in "yellow" status because it will occur in April, after the originally anticipated March 31st date.





### **Coordinated OASIS**



#### **Milestone Summary**

C Perform Analysis

Stakeholder Review

Develop Cost Benefits/Estimate

G Conduct Internal Stakeholder Reviews

Review Results at Joint Stakeholder Meetings

G

**Overall Status** 

#### **JCM Leads**

• Midwest ISO: E. Skiba

• PJM: C. Advena

#### Legend

C Completed

On Target – No Issues

Y Need to watch – Some Issues

R In Jeopardy – Significant Issues

#### **KEY ACCOMPLISHMENTS**

- Midwest ISO an PJM have begun conceptual design for Coordinated OASIS that links reservations in both OASIS systems so that cost estimates can be developed by vendors and internal staff.
- Approach document has been created and submitted to Midwest ISO OASIS vendor for revised estimate.

#### **UPCOMING ACTIVITIES**

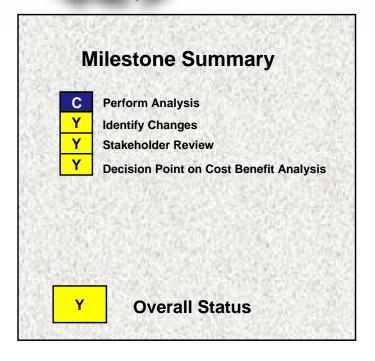
 Cost/benefits will be presented to Joint Stakeholders and reviewed by each RTO's stakeholders before a final decision is made to commit to this initiative.

#### **ISSUES & CONCERNS**





# Alt. Border Pricing Point Calculation



#### **JCM Leads**

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

# C Completed G On Target – No Issues Y 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.

#### **UPCOMING ACTIVITIES**

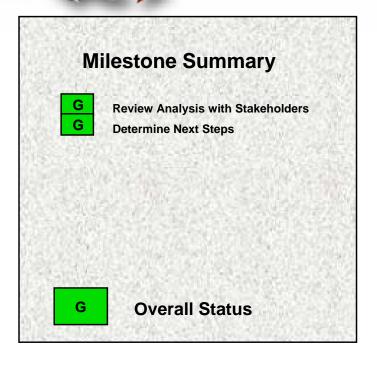
 Results of analysis on proxy bus prices will be presented at the June 1, 2007, Joint Stakeholder Meeting.

#### **ISSUES & CONCERNS**





# Dynamic Dispatch. Sched./Dispatch. Trans.



#### **JCM Leads**

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

# C Completed G On Target – No Issues Y 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.

#### **UPCOMING ACTIVITIES**

- Results of analysis on proxy bus prices will be presented at the June 1, 2007, Joint Stakeholder Meeting.
- RTOs to continue analysis of border price differentials as upcoming implementations of other JCM initiatives occur.

#### **ISSUES & CONCERNS**





# **Super-Regional Reserve Sharing**



# Milestone Summary G TBD Overall Status

#### **JCM Lead**

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

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

#### **KEY ACCOMPLISHMENTS**

- Reviewed approach with Joint Stakeholder on January 22, 2007.
- Presented concept to the Midwest ISO Contingency Reserve Committee (CRC), who assigned task team to develop the concept with the Midwest Contingency Reserve Sharing Group (CRSG).
- PJM feedback on proposed initiative has been provided to the task force.

#### **UPCOMING ACTIVITIES**

 Meet with the Midwest ISO CRC Task Team to determine attributes of participating in the Super Regional Reserve Sharing agreement.

#### **ISSUES & CONCERNS**





## **Outage Coordination (New)**



# Milestone Summary Develop Inter-regional Outage Coordination White Paper Conduct Internal RTO Reviews Stakeholder Review Implement Inter-regional Outage Coordination White Paper GOVERALL Status

#### **JCM Lead**

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

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

#### **KEY ACCOMPLISHMENTS**

 Midwest ISO, PJM, TVA, and SPP have developed draft Inter-Regional Outage Coordination White Paper.

#### **UPCOMING ACTIVITIES**

- Conduct reviews of White Paper
- Finalize Inter-Regional Outage Coordination White Paper

#### **ISSUES & CONCERNS**





## **Shared Regulation Market**



#### **Milestone Summary**

G Resolve CA Consolidation Issues
G Analyze Options Shared Reg. Mkt.
Perform Detail Study
Identify Changes Policies, Procedures,

applications, etc.
Review Results with Stakeholders

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 late 2007.

#### **ISSUES & CONCERNS**





### **Cross Border FTRs in the Allocations**

# Milestone Summary Determine allocation process changes to create alignment Define business rules for resolving differences Perform Detail Cost/Benefit Analysis Review Results with Stakeholders Go/No Go Decision Overall Status

#### **KEY ACCOMPLISHMENTS**

#### **UPCOMING ACTIVITIES**

• Analysis on this initiative will begin in late 2007.

#### **JCM Lead**

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

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

#### **ISSUES & CONCERNS**





# 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

#### **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)



