## **JCM Initiatives Update**

## February 2007





#### Joint and Common Market Initiatives

Complete	3 Year Gross Benefit	Evaluation	3 Year Gross Benefit

			- I'	mplementation Cost 3 Year Gross	Benefit	Not Recommended	nded Cost 3 Year Gross Benefit	
2006			2007		2	2008		
	FTR Market Convergence	Alignment of FTR Timelines and Products (Note: All MISO cost)	\$600,000			Cross Border FTRs in the allocations		\$4,000,000 Analyzing
1			\$3,008,657			Cross border FTRs in auctions		\$8,000,000 \$4,374,524
2	Price Rationalization and Convergence at the Border			PJM implementation of marginal losses	\$600,000 N/A			
2				Alternative Border Pricing Point Calculation		_		
	Reduce Hurdle Rate	Alignment of PJM Operating Reserves and	\$600,000	Depancaking of PTP ancillary services \$400,000				
3		MISO Revenue Sufficiency Guarantee (Note: All MISO cost)	\$3,764,432	(Control Area Services, 1.0. Control Center Services, Reactive, Black Start)	(\$2,505,757)			
	Broader Price Transparency and Common Reporting	Existing MISO & PJM Websites Linking of sites Data Available at Both	\$500,000	Standard Data Exchange (Web Services)         \$3,000,000           LMPs, Contingencies, Loads, Dispatch         \$3,000,000           Signals, Outages, Emergency         \$2,547,477		Implementation of single MISO & PJM Wobeite		\$750,000
4			\$1,952,165			(Individual Websites go away)		N/A
			\$200,000			Standard Data Visualization and Reporting		\$8,500,000
		Enhanced Joint Website to Host Joint meeting and Events Calendar, Joint	\$600,000		Portal Create a single MISO & PJM Data and Report Portal		\$4,158,174	
		Documents and Reports						
5	Increased Market Opportunities	Moving JOUs between markets				Shared Regulation	Market	\$8,000,000
					¢5,000,000			Analyzing \$8,000,000
	Operational Consistency	Common Long Term Transmission Queue	\$1,091,108	Common Time Zones (Note: All PJM cost)	\$5,000,000 N/A	Single Resource Adequacy		\$8,000,000 N/A
		MISO Ramp Viewer	\$150,000 \$913,703	Central location to view both ramp viewers \$100,000 \$1,527,405		Common Ramp P	ortal	\$750,000 \$2,091,108
		Alignment of OASIS Business Practices	\$500,000 \$1,365,867	Coordinated OASIS		_		
6		Single OASIS	\$8,000,000	Reserve Sharing	\$8,000,000			
		Common Treatment of Dynamic Schedules/Pseudo-Ties	\$200,000	Market to Market Relaxation of Constraints	\$80,000			
		Investigation of Loop Flow Across the	N/A	Dynamic Dispatchable Transactions and Schedules	Analyzing	- Netting in the IDC		Analyzing
		-combined Poolprint		Schedules				Analyzing
		Market Flow Threshold Assessment	Reliability	Market Flow Threshold Reported to IDC	Reliability	-		
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 of	Single Market	\$50,000,000 \$34,700,000
1	Emergency Energy Agreement	Alignment of Agreements and Practices	\$100,000 Reliability			Super Regional Reserv	e Sharing	Analyzing Analyzing
2	Black Start and Restoration			Alignment of Agreements and Practices	\$500,000 \$936,000	_		
1	Joint Expansion Planning and Common Deliverability Studies	Joint Expansion Planning (Coordinated System Plan)	\$20,000 Reliability	Cross Border Cost Sharing of Expansions				
2		Common Deliverability Studies	\$100,000 Reliability					
tal	Costs 3-Year Gross Benefit	2006	\$3,770,000 \$14,885,717	2007	\$1,580,000 \$3,463,405	2008		\$750,000 \$2,091,108
	7 1 2 1	2       Price Rationalization and Convergence at the Border         3       Reduce Hurdle Rate         4       Broader Price Transparency and Common Reporting         5       Increased Market Opportunities         6       Operational Consistency         7       Single Market         1       Emergency Energy Agreement         2       Black Start and Restoration         1       Common Deliverability Studies         2       Information Planning and Common Deliverability Studies	1       FTR Market Convergence       Alignment of FTR Timelines and Products (Note: All MISO cost)         2       Price Rationalization and Convergence at the Border       Alignment of PJM Operating Reserves and MISO Revenue Sufficiency Guarantee (Note: All MISO cost)         3       Reduce Hurdle Rate       Alignment of PJM Operating Reserves and MISO Revenue Sufficiency Guarantee (Note: All MISO cost)         4       Broader Price Transparency and Common Reporting       Existing MISO Revenue Sufficiency Guarantee (LMPs, Tie Flows, Loads)         5       Increased Market Opportunities       Common Search Capabilities         5       Increased Market Opportunities       Moving JOUs between markets         6       Operational Consistency       Single OASIS         6       Operational Consistency       Single OASIS         7       Single Market       Year 1 - Rule Alignment & Market Portal Design         1       Emergency Energy Agreement       Alignment of Agreements and Practices         2       Black Start and Restoration       Joint Expansion Planning and (Coordinated System Plann)         1       Joint Expansion Planning and Coordinated System Planning (Coordinated System Plann)       Common Deliverability Studies	Image: state in the s	Implementation         3 Year Gross           1         FTR Market Convergence         Alignment of FTR Transings and Products (Note All MISD cost)         560,000         2007           2         Price Rationalization and Convergence at the Barder	Implementation         3 year Cross penefit           1         FTR Market Convergence         Alignment of FTR Timelines and Produce (Note: All MSO cong)         \$600,000 \$3,000,657         2007           2         Price Rationalization and Convergence at the Border         Alignment of FTR Timelines and Produce (Note: All MSO cong)         \$600,000 \$3,000,657         PriM Implementation of marginal bases \$600,000 \$3,000,657           3         Price Rationalization and Convergence at the Border         Alignment of FLM Operating Pescores and MSO forwarde Sublemity Constructed \$10,000,000         \$500,000 \$3,764,422         Depanceking of PTP and Ilary services (Permit Alexe Swirzes, T.O. Contol Center (Permit Alexe Swirzes, T.S. (Permit Alexes) (Permit Alexe Swirzes, T.S. (Permit Alexes) (Permit Alexe Swirz	Implementation         Start Conception         Start Conception         Start Conception         Start Conception           1         FTR Nate Convergence         Alignment of FTR Transmission of Conception         5000         2007         Conception         Conception	





## **JCM Committed**

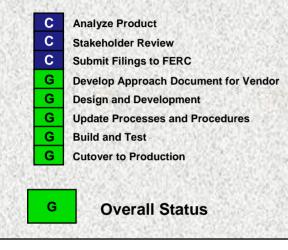
## Initiatives





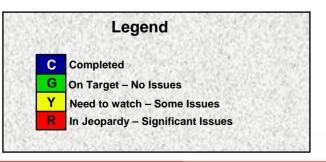
## **FTR Alignment**

#### **Milestone Summary**



#### JCM Leads

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



#### 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.
- Midwest ISO has begun discussions with vendor on software requirement changes.
- Reset milestones based on January FERC filings.

#### **UPCOMING ACTIVITIES**

- FERC approval of LTTR compliance filings.
- Midwest ISO and vendor to reach agreement on scope of system changes.
- Reset implementation timeline with the assumption that FERC will approve LTTR compliance filings.

#### **ISSUES & CONCERNS**





## **OR & RSG Alignment**

## Milestone Summary C Analyze Product Stakeholder Review Develop System Requirements Modify Applications

Conduct Testing

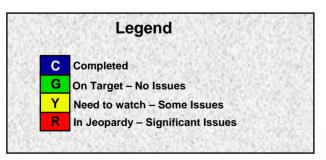
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**Implement Changes** 

Overall Status

#### JCM Leads

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



#### 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.

#### **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.

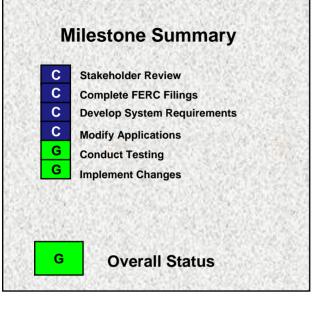
#### **ISSUES & CONCERNS**

- 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**



#### JCM Leads

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



#### **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**

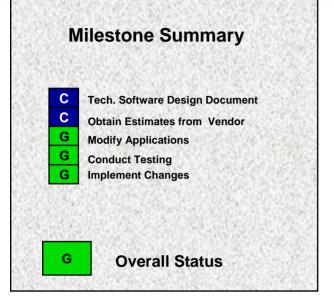
• PJM stakeholder training sessions on marginal losses will continue through March 2007.

#### **ISSUES & CONCERNS**



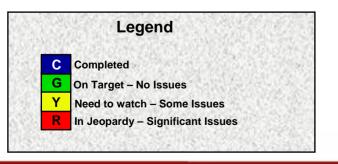


## **Relaxation of Constraints**



#### JCM Leads

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



#### **KEY ACCOMPLISHMENTS**

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

#### **UPCOMING ACTIVITIES**

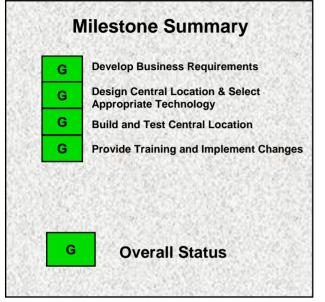
- Develop detailed project plan.
- Determine if initiative requires JOA and/or tariff changes, if so changes will be taken through the RTOs stakeholder processes.

#### **ISSUES & CONCERNS**





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



#### JCM Leads

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



#### **KEY ACCOMPLISHMENTS**

- RTO's will exchange 48 hours of Ramp information for display in each RTO's Ramp Viewer applications.
- Midwest ISO and PJM agreed to technical approach for exchanging Ramp information.

#### **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**

# CDevelop System RequirementsCDevelop System RequirementsModify ApplicationsConduct TestingCImplement Changes

#### JCM Leads

**Overall Status** 

- 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

#### **KEY ACCOMPLISHMENTS**

• System changes have been moved to production (functionality has initially been disabled pending user training).

#### **UPCOMING ACTIVITIES**

- Midwest ISO to conduct training in March stakeholder meetings.
- Software is scheduled to be enabled on April 2, 2007.

#### **ISSUES & CONCERNS**



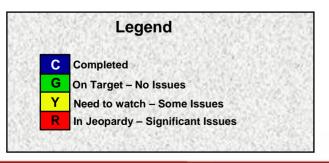


## **Black Start and Restoration**



#### JCM Leads

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



#### **KEY ACCOMPLISHMENTS**

- Midwest ISO Power Restoration Subcommittee has developed black start and restoration whitepaper.
- Midwest ISO Reliability Subcommittee approved whitepaper.
- Technical Whitepaper reviewed with Market Subcommittee.

#### **UPCOMING ACTIVITIES**

- Midwest ISO Market Subcommittee to approve pricing mechanism.
- Midwest ISO to develop tariff changes and take through its stakeholder process.

#### **ISSUES & CONCERNS**





## **Cross Border Cost Sharing of Expansion**

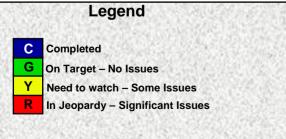
#### **Milestone Summary**

- C File Policy Baseline Reliability Projects 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
- File Policy Cross Border Alloc. Econ. Project Costs

#### **Overall Status**

#### JCM Leads

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



#### **KEY ACCOMPLISHMENTS**

- FERC granted indefinite extension for economic cross border cost allocation sharing compliance filing.
- January 22, 2007, the Midwest ISO and PJM filed separate Post-Technical Conference Comments.
- February 6, 2007, FERC Issued Notice of Extension of Time for the Midwest ISO and PJM to file additional comments to address cross border cost allocations for reliability projects.

#### **UPCOMING ACTIVITIES**

 Midwest ISO and PJM to file analyze potential compromise solution for allocation cost sharing for reliability projects and submit comments to FERC by March 22, 2007.

#### **ISSUES & CONCERNS**

• Cross cost allocation for reliability projects needs to be address before cross border cost allocation for economic expansions can be addressed.





## **JCM Further Analysis**

## Initiatives





## Market Flow Threshold Reported to IDC

#### **Milestone Summary**

- Develop Detail Project Plan Vendor Requirement Specifications
  - System Development

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- Test System Changes
  - Mock Production Run
  - **Cutover to Production**

**Overall Status** 

#### JCM Leads

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



#### **KEY ACCOMPLISHMENTS**

- Obtained 12-month field test approval from NERC Standards Committee.
- Midwest ISO funding has been approved.
- IDC modifications to support this initiative have been started.
- Midwest ISO has developed implementation plan targeting late May implementation.

#### **UPCOMING ACTIVITIES**

• Develop JOA and/or tariff changes, if necessary and take through the stakeholder process.

#### **ISSUES & CONCERNS**

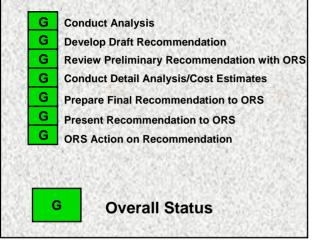
• Delays in vendor delivered software and testing could result in May implementation being moved to September. The IDC Working Group, ORS, and NERC Standards Committee recommended that changes not be made to the IDC between June 1, 2007, and August 31, 2007.





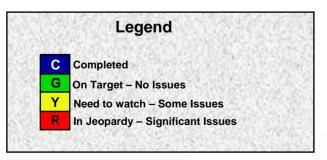
## Netting in the IDC

#### **Milestone Summary**



#### **JCM Leads**

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



#### **KEY ACCOMPLISHMENTS**

- ORS was notified the analysis will not be done in conjunction with the CMPWG.
- This initiative has been split from the Market Flow Threshold since it is on a separate path.
- Decision was made to place this initiative on hold until the market flow threshold field test is underway.

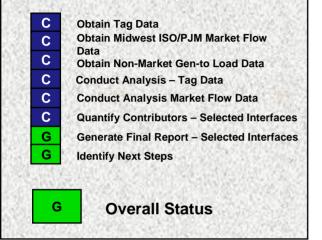
#### **UPCOMING ACTIVITIES**

#### **ISSUES & CONCERNS**



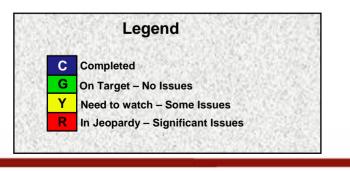
## **Investigate Loop Flow Across Combined Footprint**

#### **Milestone Summary**



#### **JCM Leads**

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



#### 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.

#### **UPCOMING ACTIVITIES**

- Present loop flow study findings and discuss next steps in March 2007.
- Additional on-going analysis will continue following issuance of final report with additional reporting being provided on an as needed basis.

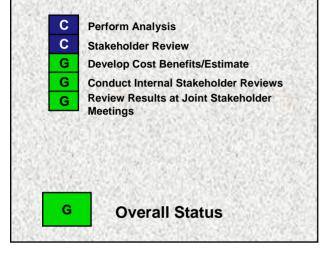
#### **ISSUES & CONCERNS**





## **Coordinated OASIS**

#### **Milestone Summary**



#### JCM Leads

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



#### 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.
- Begun working on gathering benefit information for initiative.

#### **UPCOMING ACTIVITIES**

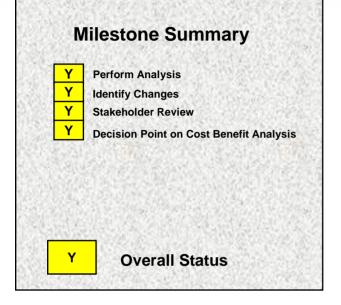
- Cost/benefits will be presented to Joint Stakeholders and reviewed by each RTO's stakeholders before a final decision is made to commit to this initiative.
- Midwest ISO and PJM have meeting scheduled for March 7, 2007, to define data exchange requirements for this initiative.

#### **ISSUES & CONCERNS**





## **Alt. Border Pricing Point Calculation**



#### JCM Leads

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



#### **KEY ACCOMPLISHMENTS**

- PJM and the Midwest ISO are conducting internal review of options with the intent of producing a white paper.
- PJM provided data to Midwest ISO to conduct proxy bus analysis.
- Midwest ISO is conducting analysis.

#### **UPCOMING ACTIVITIES**

• Continuing analysis of Alternative Border Pricing Point Calculation Options.

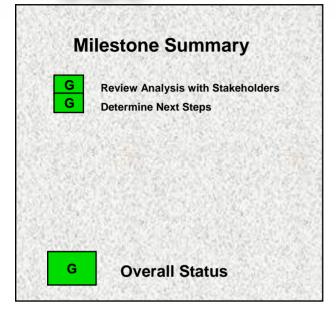
#### **ISSUES & CONCERNS**

• Initiative is on hold pending PJM Marginal Loss implementation and Relaxation of Constraints initiative.





## Dynamic Dispatch. Sched./Dispatch. Trans.



#### **JCM Leads**

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



#### **KEY ACCOMPLISHMENTS**

• Midwest ISO completed initial analysis of PJM and Midwest ISO proxy bus prices.

#### **UPCOMING ACTIVITIES**

• RTOs to review analysis by end of March.

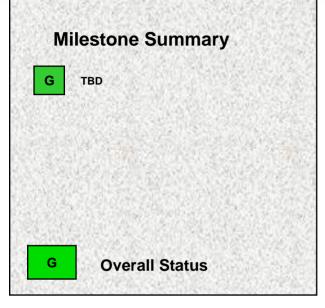
#### **ISSUES & CONCERNS**

• Initiative is on hold pending completion of analysis on proxy bus prices.



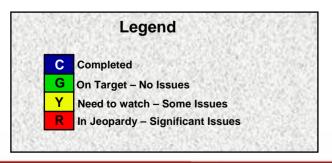


## **Super-Regional Reserve Sharing**



#### JCM Lead

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



#### 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).

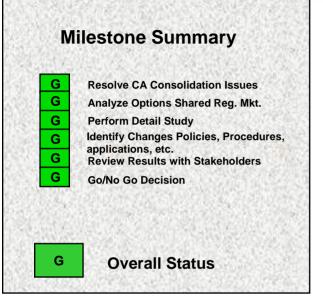
#### **UPCOMING ACTIVITIES**

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

#### **ISSUES & CONCERNS**

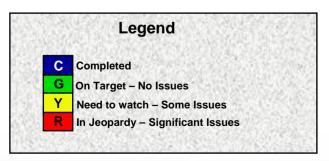


## **Shared Regulation Market**



#### JCM Lead

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



#### KEY ACCOMPLISHMENTS

#### **UPCOMING ACTIVITIES**

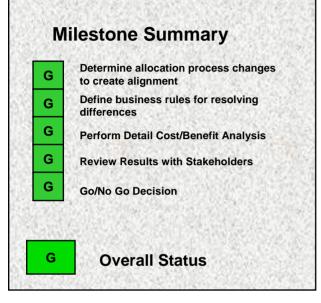
• Analysis on this initiative will begin in late 2007.

#### **ISSUES & CONCERNS**





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



#### JCM Lead

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



#### KEY ACCOMPLISHMENTS

#### **UPCOMING ACTIVITIES**

• Analysis on this initiative will begin in late 2007.

#### **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)



