



Joint and Common Market

MISO-PJM INTERFACE PRICING UPDATE

NOVEMBER 15, 2016



Overview

1. Implementation Plan
2. Post Implementation Metrics and Criteria Development Update

Implementation Plan

Implement the Collaborative Approach for the next FTR planning year (6/1/2017)

Collaborative Approach

1. Common interface definition (Existing PJM 10 bus definition)
 - Target Feb 2017 for FTR model update
 - Target April 2017 for DA and RT model update
 - Implementation on 6/1/2017
2. Modify FTR and DA limits, if needed, to reflect transaction's impact.
 - M2M does not include transaction impacts
 - DA and RT does include Transaction impacts



Monitoring Process and Mitigation Options for Post Implementation

Key Concerns	Monitored Parameters	Mitigation Options / Enhancement Opportunities (Regular joint performance)
Price Signal	<ul style="list-style-type: none">• Congestion transaction incentive for M2M constraints• Price signal for Non M2M constraints• Shadow price convergence for M2M constraints• Interface price volatility	<ul style="list-style-type: none">• More granular common interface definition• Address volatile constraint control due to shadow price swings• Improve shadow price convergence for M2M constraints in general• Potential to capture non M2M constraint interface price impacts jointly• Continue to improve price signal for all constraints• Additional M2M FG coordination effort
Revenue Imbalance	<ul style="list-style-type: none">• Uplift or FTR imbalance	<ul style="list-style-type: none">• Day Ahead M2M coordination• Monitor the impact of commercial flow

Post Implementation Metrics and Criteria

MISO & PJM Staff have been conducting regular conferences since the last JCM to develop post implementation metrics and criteria.

Refine the scope of the post implementation metrics and criteria

- Objectives
- Post Implementation and ideal price incentive calculation
- Metrics definition
- Data source for shift factors and shadow price

Enhancing joint-market analysis capability to process 5-min Real-time data

- Capability to produce interface shift factor data at 5 min interval

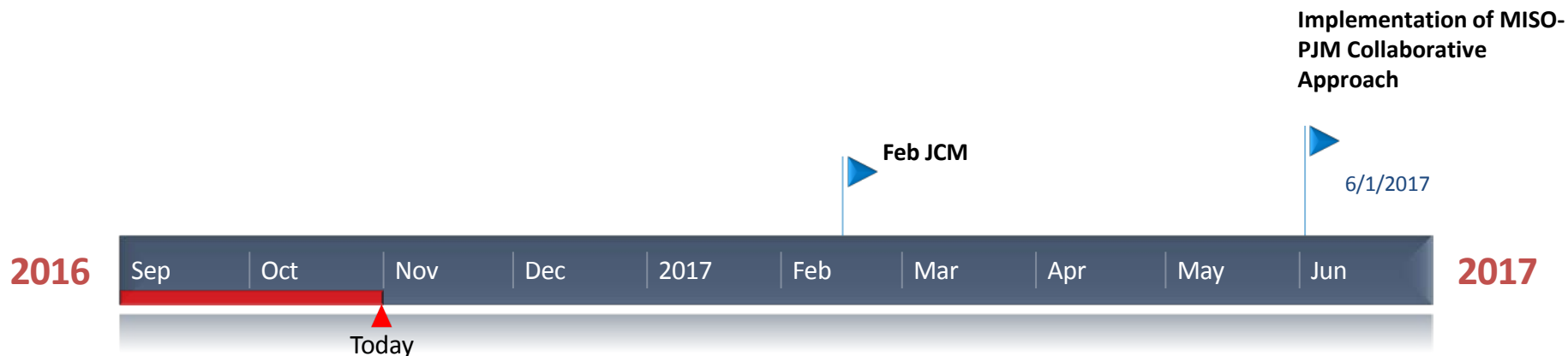
Joint-market “post implementation” testing with historical data exchange

- Validate post implementation scope
- Establish post implementation data exchange protocol

Post Implementation Documentation

1. Introduction
2. Real-Time Market Interchange Price Signal Effectiveness Metrics
 1. M2M Constraint Congestion Interchange Price Incentives
 1. Post Implementation Price Incentive Calculation
 2. Ideal Price Incentive Calculation
 3. Post Implementation Metrics
 4. Data Source
 2. Non-M2M Constraint Congestion Interchange Price Incentives
 1. Post Implementation Price Incentive Calculation
 2. Ideal Price Incentive Calculation
 3. Post Implementation Metrics
 4. Data Source
 3. Constraint Shadow Price Convergence and Volatility
3. Market Congestion Revenue Metrics'

Post Implementation Metrics and Criteria



Enhance Joint-market Analysis Capability



Refinement of the Post Implementation Metrics and Criteria



MISO & PJM Data Exchange Testing



Prepare Report for Feb JCM Meeting



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