



Item III. MISO and PJM Improved Day-Ahead coordination

November 18, 2015
MISO-PJM JCM

- **Provide a progress update on MISO-PJM Day Ahead (DA) Firm Flow Entitlement Exchange (FFE)**

- **Takeaways**
 - Systems are in place to perform DA FFE exchange (since 9/30/15)
 - RTOs filed JOA DA FFE language enhancements with FERC
 - RTOs received a deficiency notice from FERC with respect to notification of the FFE exchange process
 - Upon receiving FERC's approval, RTOs will implement the DA FFE exchange

- **MISO and PJM have been coordinating on an initiative to exchange FFEs in DA**
 - This protocol will establish a DA M2M settlement process
- **This initiative will enhance RTOs' DA M2M coordination**
 - Minimize Joint Bid Production Cost - Overall savings to Market Participants
 - Minimize Real-time M2M payments – Improve FTR funding

Task Status Update

Task	Status
Applications and System Updates	Complete
End-to-End Testing	Complete
Process and Procedure Documentation	Complete
JOA language changes	Complete
Deficiency Notice reply	To be completed by 11/17/2015
DA settlement reports	Complete
Metrics development	In progress

- **RTOs filed JOA changes on September 3rd, with the expectation to go-live on September 30th**
- **A Protest was subsequently filed on September 13th**
- **RTOs responded to the Protest conceding a go-live date of October 30th**
- **FERC issued a deficiency letter on November 2nd (60 Days after initial filing) with response due by 11/17/2015**

- **MISO and PJM are considering the following metrics to measure performance of DA Market-to-Market Exchanges:**
 - Price convergence of MISO / PJM Day Ahead markets
 - Price convergence of Day Ahead / Real Time markets
 - Flow convergence of Real Time Market Flow with Adjusted FFE

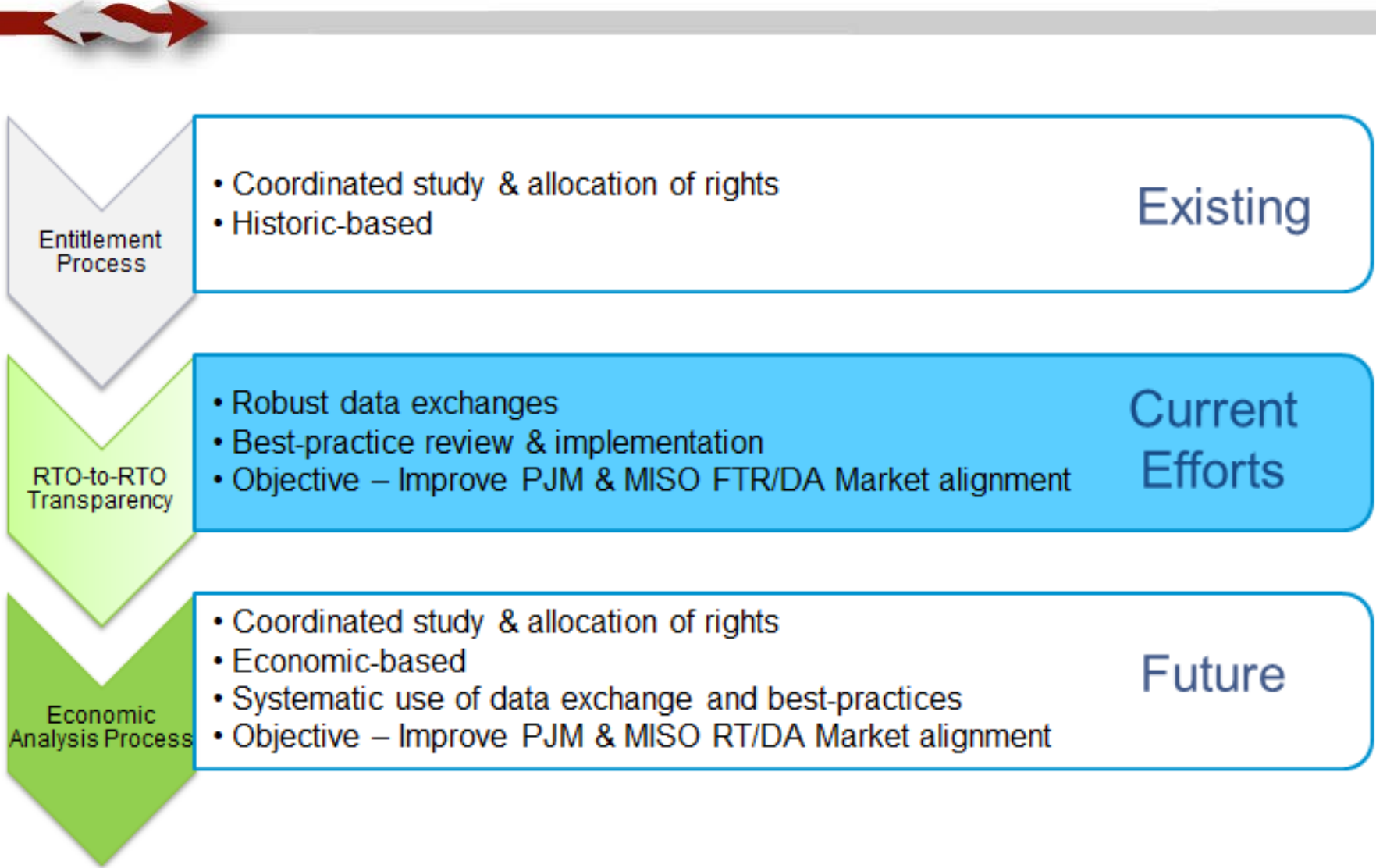
- **RTOs have developed a DA M2M Settlement Report**
 - Includes Flowgate, shadow price, FFE exchanged amount, and DA settlement value for each hourly FFE exchanged in the DA market
 - Published to MISO & PJM's public websites
 - Timeframe:
 - Completed October 30, 2015 for MISO
 - November for PJM

- **PJM and MISO to respond to the deficiency notice by 11/17/2015**
- **Delay FFE exchange in Day Ahead Markets until FERC approval of proposed language changes**
- **Publish DA M2M settlement reports**
- **Discuss metrics during future stakeholder meetings**
 - **MISO's SMWG, PJM's MIC and JCM**

Appendix

- 1) The flowgate should be currently or expected to be constrained in Real-time (RT) and/or DA.
- 2) The Requesting RTO's RT market flows should be significantly larger than its RT FFEs.
- 3) The RTOs combined bid production cost should decrease.
- 4) The FFE exchange should not negatively affect RTO's FTR revenue adequacies.
- 5) Responding RTO should be capable of exchanging FFEs with ReqRTO based on ReqRTO's projected and historical DA and RT shadow prices.
- 6) ResRTO will provide their DA shadow price, to ReqRTO, within an hour of ResRTO's DA case execution factoring expected DA conditions. As a result, this will impact the DA M2M settlements.

DA Market Coordination Roadmap



DA M2M MISO settlement report

HOUR_ENDING	FLOWGATE_ID	RESPONDING_PARTY	CP_RTO	FLOWGATE_NAME	DA_MISO_SHADOW_PRICE	DA_CP_SHADOW_PRICE	DA_MISO_APPROVED_MW	DA_CP_APPROVED_MW	DA_MISO_CREDIT	DA_CP_CREDIT
5/27/2015 21:00	3429	PJM	PJM	Oak_Grove_Mercer161_flo_Nelson_ElectricJct	50	40	20	20		800
8/27/2015 7:00	514	PJM	PJM	Cordova_Nelson345_flo_H471_Nelson345	0	123	30	30		3690
8/27/2015 8:00	514	PJM	PJM	Cordova_Nelson345_flo_H471_Nelson345	0	123	30	30		3690
8/27/2015 9:00	514	PJM	PJM	Cordova_Nelson345_flo_H471_Nelson345	0	123	30	30		3690
8/27/2015 10:00	514	PJM	PJM	Cordova_Nelson345_flo_H471_Nelson345	0	123	30	30		3690
8/27/2015 11:00	514	PJM	PJM	Cordova_Nelson345_flo_H471_Nelson345	0	123	30	30		3690
9/3/2015 0:00	3429	MISO	PJM	Oak_Grove_Mercer161_flo_Nelson_ElectricJct	20	10	-25	-25	500	