

PJM and MISO Joint and Common Market Enhancements

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The logo for DP&L, consisting of the letters "DP&L" in a white, serif font, centered within a dark blue oval shape.

DP&L

Panel Question Overview

- Enhancements - The goal of the Joint and Common Market initiative is to achieve the benefits of a combined market across the PJM and MISO footprint in a cost-effective manner and meet the needs of customers and stakeholders using the electric power grid in the two RTO's regions.
- Impact of Market Design differences - Generation and load customers on the seam are likely to be uniquely impacted by the differences in rules in markets across the seam. Each market provides rules to hedge against potential negative impacts.

Enhancements

What key factors should be considered in developing enhancements to MISO and PJM operations affected by the seam?

- DP&L believes that there should be a commonality of energy market scheduling and transacting rules, equitable opportunities and requirements for both MISO and PJM participants and a compatible operational planning and scheduling process.

Enhancements

Are there specific recommendations for enhancements to MISO and/or PJM rules that would address concerns that impact your company's day-to-day business across the RTO border?

- Real-Time Energy Market
 - Ramp Limit – Ramp limits should be the same for PJM/MISO interface.
 - Minimum Schedule duration - Recommend either the lesser of 45 minutes or until hour ends
 - Schedule Submission - Both markets should have the same time limit. PJM is currently 20 min and MISO is 30 min for transactions that are less than 24 hours.
 - Transfer Capability – Needs to be increased in parallel.

Enhancements

- Capacity Portability Concerns
 - MISO needs capacity price convergence with PJM West to prevent gaming and allow for reciprocal sales from PJM.
 - If MISO participants want to increase sales into PJM capacity market, they should follow the same set of rules as existing PJM market participants.
 - Any capacity sales to PJM must have firm transmission and meet must offer and non-recall requirements. Capacity delivered to the border does not assure deliverability throughout PJM.

Enhancements

Does your company have any recommendations for additional information transparency that would enhance your ability to conduct business across the seam?

- Transmission Planning and Operations Planning information is not readily available to participants. MISO and PJM need to provide info and education to participants. Developing a side by side list for operation and planning issues is a requirement for understanding differences.

Impact of Market Design differences

Do the existing rules in the two markets successfully mitigate potential negative impacts?

- No. Scheduling and Ramp rules for Energy transactions are not efficient. Operational modeling and process differences may be creating unnecessary congestion with adverse consequences. Impact of lack of coordination on PJM FTR underfunding is a large area of concern.

Impact of Market Design differences

What additional areas should be considered for providing market participant flexibility?

- Energy Transaction rule alignment
- PJM and MISO operational modeling alignment.
- MISO moving their forward capacity market rules to achieve price convergence with prices in PJM West.

Impact of Market Design differences

To what extent should RTOs attempt to harmonize market designs to eliminate seams issues?

- Question really is how much effort should be expended to get the efficiencies? DP&L recommends quick implementation of the energy scheduling rules alignment and following past JCM efforts to go after the 'low hanging fruit'.
- Operations and Planning efforts need to avoid adverse outcomes on neighbors. PJM and MISO need to open their ongoing efforts to stakeholders to ensure improvement in coordination.

Summary

- Quickly align energy market transaction and scheduling rules and transfer limits.
- Respect RPM market requirements and deliverability rules. Continue to evolve MISO's capacity market achieve price convergence with PJM.
- Compatibly coordinate operations planning and outage management to eliminate unintended market impacts.

Day-Ahead Market Comparison

Day-Ahead Market		
	PJM	MISO
<i>Ramp Limit</i>	No ramp reservation needed	Energy profile must pass checks against MISO's posted ramp limit
<i>Scheduling Deadline</i>	12:00 EPT one day prior to start	11:00 EST one day prior to start
<i>Minimum Schedule duration</i>	15 minutes, no maximum	15 minutes, no maximum
<i>Financial/Physical</i>	Purely financial transactions, no physical flows will result	Physical schedules/flows will result
Day Ahead Price Taker		
	Confirmed Transmission Service required.	Confirmed Transmission Service or Spot Product required.
	Result is a DA LMP position	Result is a DA LMP position
Day Ahead Dispatchable		
	Confirmed Transmission Service required.	Confirmed Transmission Service or Spot Product required.
	Participant must specify a ceiling/floor price greater than \$0	Participant must specify a price greater than \$0 ; less than \$1,000 for Imports Participant must specify a price greater than \$0 ; less than \$10,000 for Exports
	Result is a DA LMP position	Result is a DA LMP position
Day Ahead Up-To-Congestion		
	Does not require PJM Transmission Service	Confirmed Transmission Service or Spot Product required.
	Participant must specify a congestion limit ranging from -\$50 to \$50	Participant must specify a price greater than \$0 ; less than \$25
	Result is a DA Congestion position	Result is a DA Congestion position



Real Time Market Comparison

Real-Time Market		
	PJM	MISO
<i>Ramp Limit</i>	Energy profile must pass checks against PJM's 1000 MW ramp limit	Energy profile must pass checks against MISO's posted ramp limit
<i>Transmission Service</i>	Energy profile must be completely covered by Confirmed Transmission service, reserved prior to tag submission.	Energy profile must be completely covered by Confirmed Transmission service, reserved prior to tag submission.
<i>Energy profile changes</i>	All energy profile changes must conform to 10-minute straddle ramp, other ramp timings ignored.	All energy profile changes conform to 10-minute straddle ramp, unless otherwise posted and approved
<i>Minimum Schedule duration</i>	45 minutes	N/A
<i>Real Time Price Taker</i>		
	Approved NERC Tag is the schedule	Approved NERC Tag is the schedule
	Preliminary reservation of ramping profile is optional	Preliminary reservation of ramping profile is optional
	Schedules less than 24 hours in duration can be submitted 20 minutes prior to start of the schedule	Schedules can be submitted 30 minutes prior to start of the schedule
	Schedules 24 or more hours in duration can be submitted 4 hours prior to the start of the schedule	N/A
<i>Real Time with Price</i>		
	Approved NERC Tag is the schedule	N/A
	Preliminary reservation of ramping profile is required to capture pricing information	N/A
	Minimum Schedule duration is 45 minutes, no maximum	N/A
	Schedules must be submitted by 12:00 EPT, one day prior to start	N/A
	Schedules are evaluated once per hour by dispatch	N/A

