



***MISO* Assessment of
Overstatement of External
Congestion Value in
Interface Price**

MISO-PJM Joint and Common Market

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MISO is in agreement with the IMM regarding description of the issue

- **When transactions are scheduled with both RTOs, including congestion value of external constraints can be considered overcharge or overpayment and causes revenue inadequacy for the Non-monitoring RTO**
 - Monitoring RTO's compensation of the transaction based on its calculated congestion value may provide adequate incentive
- **When transactions are scheduled with one RTO only and impacts constraints in another RTO, such transactions do not have overpayment or overcharge**
 - One such example would be a transaction scheduled between PJM and TVA and impacting a MISO constraint
 - In such situation, inclusion of congestion value associated with the external constraint provides the correct pricing signal

Challenges for Solution Alternatives

- **Exclusion of external constraint from interface pricing may cause more challenges in constraint management (see examples in Appendix)**
 - For transactions scheduled with both RTOs, additional congestion at the seam will increase re-dispatch cost and may lead to unmanageable constraints
 - For transactions scheduled with Non-monitoring RTO only, insufficient price signal may lead to reliability concerns for Monitoring RTO

Challenges for Solution Alternatives

- **Adjusting market flow to incorporate impact of transaction does not solve the issue in case of transactions scheduled with both RTOs**
 - The transaction continues to be overcharged or overpaid
 - The revenue inadequacy issue is simply transferred from the Non-monitoring RTO to the Monitoring RTO

Next Steps

- Evaluate solution alternatives
- Develop implementation strategy

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Illustration of new congestion management challenges – Example #1

- **Increased challenges arise for MISO and PJM to manage the constraint when excluding congestion component associated with external constraint for PJM’s interface**
 - Assume MISO is the monitoring RTO and the M2M constraint binding direction is from PJM to MISO

	Under Current Design	Under IMM Proposition
MISO MEC	\$40/MWh	\$40/MWh
MISO Calculated Shadow Price	-\$5/MWh	-\$5/MWh
MISO Calculated PJM Interface Price	\$35/MWh	\$35/MWh
PJM MEC	\$31/MWh	\$31/MWh
MISO Calculated Shadow Price	-\$5/MWh	\$0/MWh
PJM Calculated MISO Interface Price	\$36/MWh	\$31/MWh
Transactions Scheduled	From MISO to PJM	From PJM to MISO
Help or Hurt Binding Constraint	Help	Hurt

Illustration of new congestion management challenges – Example #2

- **When a non-market entity such as TVA is involved for the transaction, challenges also brought for MISO and PJM to manage the constraint by excluding congestion component associated with external constraint for PJM’s interface**
 - Assume MISO is the monitoring RTO and the M2M constraint binding direction is from PJM to MISO
 - Assume transactions scheduled between TVA and PJM by market participants will affect congestion on a MISO M2M constraint

	Under Current Design	Under IMM Proposition
TVA Generation Cost *	\$32/MWh	\$32/MWh
PJM MEC	\$31/MWh	\$31/MWh
PJM Calculated Shadow Price	\$5/MWh	\$0/MWh
PJM Calculated TVA Interface Price	\$36/MWh	\$31/MWh
Transactions Scheduled	From TVA to PJM	From PJM to TVA
Help or Hurt Binding Constraint	Help	Hurt



* TVA is non market entity, so generation cost is used to represent their prices