



# CAISO CRR Meeting

April 1, 2025

# Topics



- Transmission Congestion and FTR Markets
- Market Design
- Frequently Asked Questions

# Transmission Congestion and FTR Markets

# Value of Congestion

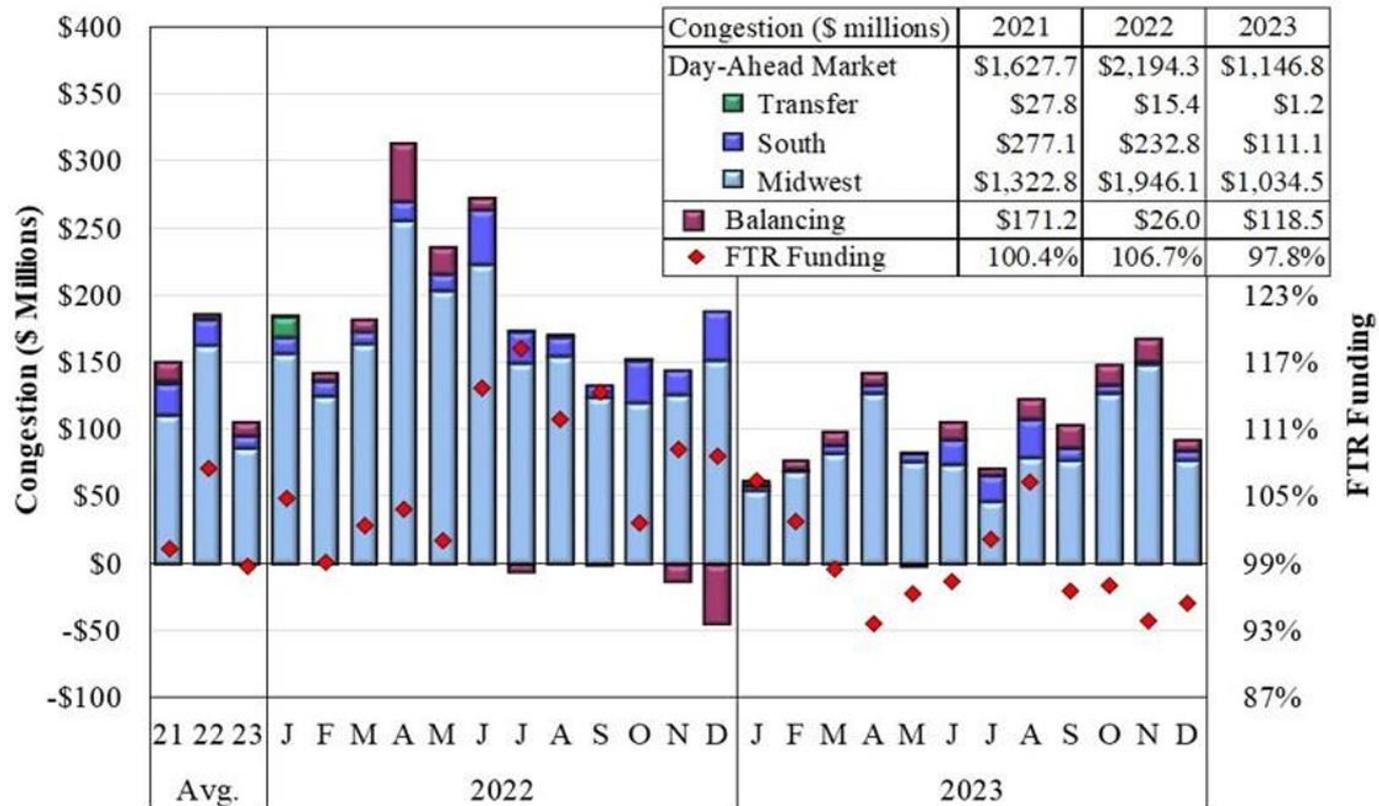
- DA Congestion
  - Marginal Value \* Power Flow on a constraint
  - A measure of the magnitude of binding
- FTR Funding
  - A measure of (mis)alignment between the DA and FTR Markets
- Loop Flows
  - A measure of external flows impacting market

# Putting It All Together

- Build a risk profile
  - Identify, assess, and prioritize risks
- Create a plan
  - Minimize risks by clearly defining what needs to be updated or changed
- Implement changes
  - Administer the FTR Auction
- Review and report out on results

# Day-Ahead and Balancing Congestion and FTR Funding

2021–2023



Note: Funding surplus may be greater than the difference between day-ahead congestion and obligations to FTR holders because it includes residual revenue collections from the FTR auctions.

# Market Design

# Market Design Improvements

✓ Agree

✗ Disagree due to benefits, problem, or feasibility

▲ Requires further evaluation

LEI Recommendations	MISO Position	Perceived Impact	Resource Requirements		
			Design / Evaluation	Implementation	Ongoing Administration
<b>Category: ARR Entitlements</b>					
ARR entitlements based on current use	✓	High	High	High	Medium
Expanded set of nomination paths	✓	Medium	Medium	Medium	Low
Monthly allocation process	✗	Low	Low	Medium	High
<b>Category: FTR Auction</b>					
Additional FTR products / periods	▲	Medium	Medium	High	High
More timely outage submissions	✓	Medium	N/A	N/A	Low
Grant entitlements for expanded net capacity	▲	Low	Low	Medium	High
<b>Category: Transmission Customer Metric</b>					
Additional TCM (all ARR SS v. no ARR SS)	✗	Low	Low	Low	Low
FTR market participation trends	✓	Low	Low	Low	Low
FTR market's DA predictive capability	✗	Low	Medium	Low	Low

# Balance of Planning Period Auction Schedule

Season	Auction In	Auction For					No. of Periods
Spring	May	June					1
Summer	June	July	August	Fall (SON)	Winter (DJF)	Spring (MAM)	5
	July	August	September	October	November		4
	August	September	October	November			3
Fall	September	October	November	Winter (DJF)	Spring (MAM)		4
	October	November	December	January	February		4
	November	December	January	February			3
Winter	December	January	February	Spring (MAM)			3
	January	February	March	April	May		4
	February	March	April	May			3
Spring	March	April	May				2
	April	May					1

**Notes:**

Fall (SON) = September, October, November

Winter (DJF) = December, January, February

Spring (MAM) = March, April, May

# Frequently Asked Questions

# MISO Definition of Peak / Off-peak

- Peak Definition
  - Period of time between Hour-ending 0700 EST through and including Hour-ending 2200 Hours EST Monday through Friday excepting New Year's, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day or if the holiday occurs on a Sunday, the Monday immediately following the holiday
- Off-peak Definition
  - All periods of time not classified as Peak

# Lower GSF Cutoff for Constraints in Day-Ahead

- Current value is 0.75% in Day-Ahead and Real-Time
  - At the July 2024 Market Subcommittee Meeting, MISO provided an update on lower generation shift factor cutoff for constraints with Limited Relief
  - FTR Market does not implement a sensitivity cutoff

# References

# References

- MISO Modeling Practices
  - Section 5.8 - Nomograms
    - [MISO ARR/FTR Modeling Practices MO-OP-019](#)
- London Economics International Report
  - [Independent Evaluation of MISO's ARR and FTRs](#)
- IMM State of the Market Report
  - Section V. Transmission Congestion and FTR Markets – Day-Ahead Congestion and FTR Funding
    - [Potomac Economics 2023 State of the Market Report for MISO](#)