



California ISO

Day-Ahead Market Enhancements


Stakeholder Meeting

May 2, 2023

Reminders

- This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO permission.
- If you need technical assistance during the meeting, please send a chat to the event producer.

Instructions for raising your hand to ask a question

- If you are connected to audio through your computer or used the “call me” option, select the raise hand icon  located on the bottom of your screen.

Note: #2 only works if you dialed into the meeting.

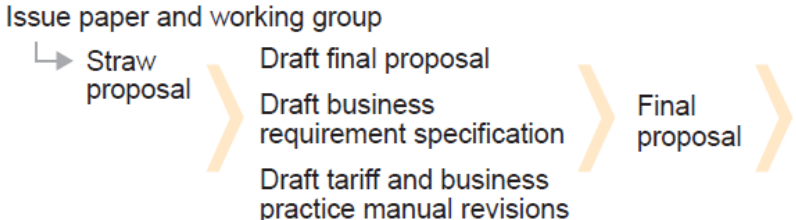
- Please remember to state your name and affiliation before making your comment.
- You may also send your question via chat to either Isabella Nicosia or to all panelists.

Agenda

Time	Topic	Presenters
1:00 – 1:10	Welcome and introductions	Isabella Nicosia
1:10 – 2:50	Revised final proposal and imbalance reserve demand curve addendum Flexible parameters matrix	James Friedrich
2:50 – 3:00	Next steps	Isabella Nicosia

Stakeholder Process

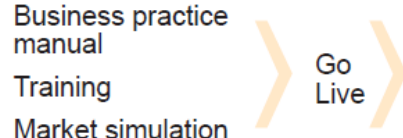
PROPOSAL DEVELOPMENT



DECISION



IMPLEMENTATION



This represents the typical process, and often stages of the process run in parallel.



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ADDENDUM - IMBALANCE RESERVE DEMAND CURVE

Introduction

- Market uses penalty prices to establish scheduling priorities and set administrative prices
- Various penalty price structures in previous DAME proposals
- Draft Revised Final Proposal (April 6, 2023)
 - Demand curve with hybrid design exclusive to CAISO BAA
 - Hybrid approach protected some imbalance reserve demand in CAISO BAA above low-priority export self-schedules (LPT exports)

Stakeholder concerns

- Concerns about unintended market and settlement impacts of having CAISO BAA with much different demand curve values
- Concerns that FRP demand curve approach could result in excessive costs

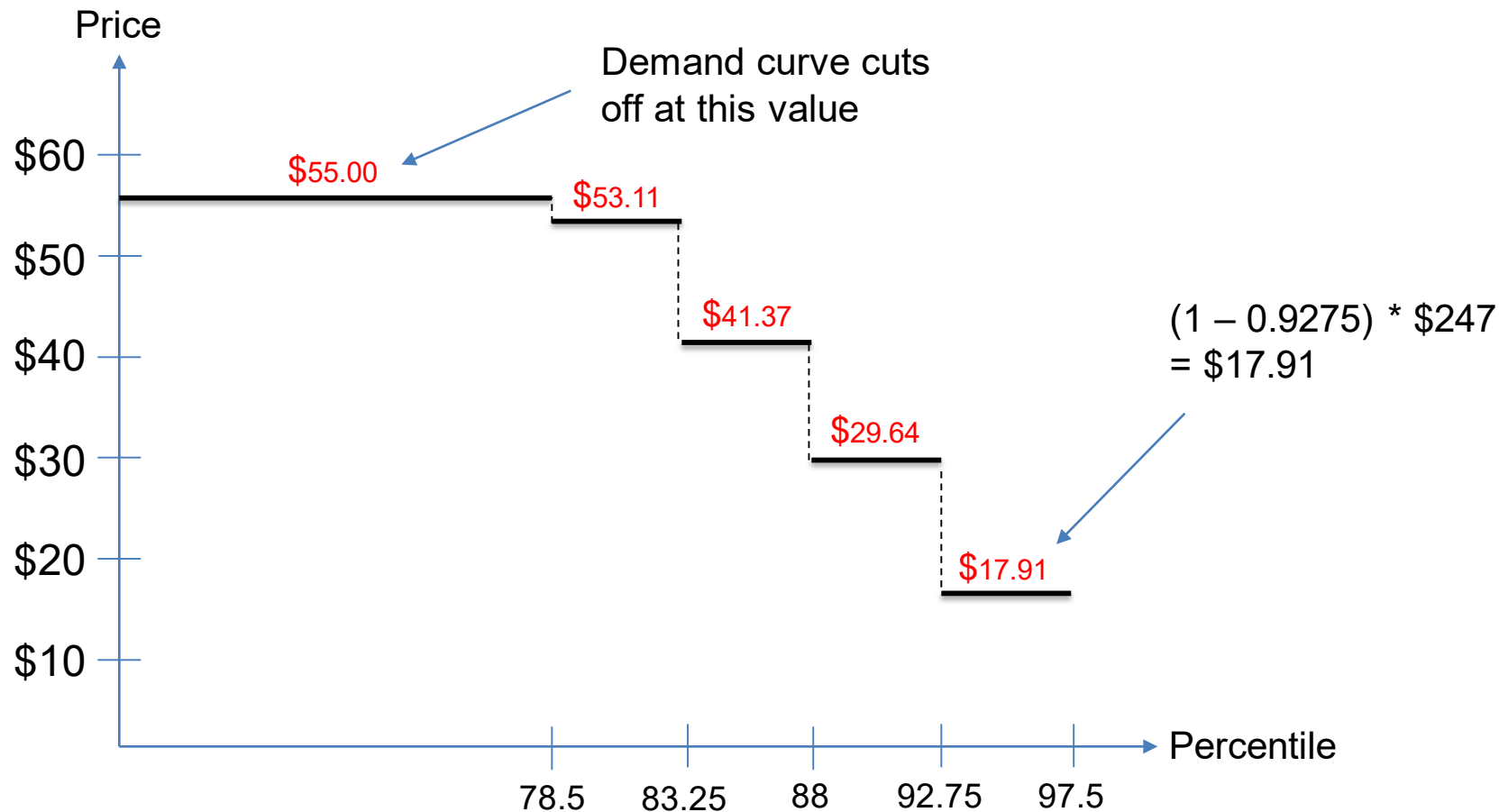
New Proposal

- ISO withdraws hybrid approach for CAISO BAA
- Imbalance reserve demand curve for all EDAM BAAs (including CAISO)
- Demand curve calculation similar to flexible ramping product
- Imbalance reserve demand curve values capped at \$55/MW
 - Represents a high-percentile replacement cost for spinning reserves

Imbalance Reserve Demand Curve

- Represents relationship between price and quantity demanded of imbalance reserves
- Helps establish appropriate price level
- Market assesses tradeoff between cost and value of reserves to meet uncertainty requirements
 - Avoidance cost * Probability of occurrence
 - Avoidance cost for imbalance reserve set to \$247/MWh, which is the penalty price for operating reserve shortage; lower than the FRP avoidance cost of (\$1000/MWh)

Sample imbalance reserve demand curve



Up to 10 segments
in increments of 4.75
 $(97.5 - 50) / 10$

Implementation and Monitoring

- Gradual implementation for smoother transition akin to experience of other ISOs
- Closely monitor DAME/EDAM market
- Periodically review and adjust demand curves with stakeholder collaboration

Other Considerations

- Simplifies initial DAME design by negating effect of IRU local market power mitigation
 - IRU LMPM will still be implemented in case demand curve values or default availability bids change over time
- Imbalance reserve offer cap reduced from \$247/MWh to \$55/MWh
- Additional considerations:
 - Separate demand curves for each hour and EDAM BAA
 - EDAM RSE not using imbalance reserve demand curve

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FLEXIBLE PARAMETERS

Flexible parameters matrix

- The ISO will share and discuss the flexible parameters matrix, which is available on the DAME initiative webpage:
<https://www.caiso.com/InitiativeDocuments/FlexibleParameterMatrix-Day-AheadMarketEnhancements.pdf>.

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NEXT STEPS

Next Steps

Milestone	Date
Revised Final Proposal & Flexible Parameters Matrix Posted	May 1, 2023
→ Stakeholder Call	May 2, 2023
Joint ISO Board of Governors and WEIM Governing Body meeting	May 17, 2023
Implementation	Fall 2024

Initiative webpage:

<https://stakeholdercenter.caiso.com/StakeholderInitiatives/Day-ahead-market-enhancements>

Please contact inicosia@caiso.com or isostakeholderaffairs@caiso.com if you have any questions.