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Convergence bidding

Benefits, disadvantages, issues: A FERC perspective



Disclaimers:

The views expressed are my own and do not necessarily represent those of the Commission, the Chairman, or any individual Commissioner.

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Bottom line

- **My opinion:**

- The Commission looks at things under the lens of the just and reasonable and not unduly discriminatory standard
 - Considering **complexity** through this lens
 - → **Compromises**
 - In my view, the Commission has done a great job **balancing** the costs and benefits of convergence bidding and the best way to implement it, and has acted accordingly
 - Asking for more detail when needed, asking for reports to see how things are going and whether they need modification, and making changes when required

- **Roadmap**

- CAISO: Development of convergence bidding
- Virtual bidding in other organized markets
- Issues, solutions, and tweaks





MRTU and convergence bidding—a bit of history

- In an order issued **December 19, 2001**, the Commission directed CAISO to propose a plan to implement a day-ahead market.
- Between 2001 and 2004, CAISO presented its proposal for its new market design. **On June 17, 2004**, the Commission required CAISO to file within 180 days tariff language addressing the implementation of convergence bidding.
- After several delays, the **MRTU tariff became effective on March 31, 2009, with Day 1 of MRTU operation occurring on April 1, 2009.**
- **In November 2009**, CAISO made a **conceptual filing** regarding convergence bidding; the Commission addressed CAISO's filing and granted an extension to implement convergence bidding in its February 2010 Convergence Bidding Design Order.
- **On June 25, 2010**, CAISO filed its **convergence bidding proposal**. The proposal included a series of charges to convergence bidding scheduling coordinators including a convergence bidding award charge (called a "virtual award charge"), a transaction fee, and a metering and client relations charge.
- **On October 15, 2010, the Commission conditionally accepted CAISO's convergence bidding proposal.**





Notable issues considered

- Under scheduling
- Position Limits at Internal Nodes
- Convergence Bidding at the Interties
- Market Power Mitigation Measures
- Constraints to Ensure an AC Solution
- Certification Requirements
- Credit Policy
- Settlement of Convergence Bidding
- Allocation of Uplift Costs
- Information Release
- Position Limits
- E-Tagging and Implicit Convergence Bidding
- CRRs
- Suspension
- AC Solution
- Credit Requirements
- Settlement
- Bid Floor
- Bid Aggregation
- Local Market Power Mitigation
- Hold Harmless
- Bid Cost Recovery





Virtual bidding in other organized markets

- MISO, NE-ISO, NYISO, PJM, SPP
- **Similar issues** with their own twists
- Some of these markets brought virtual bidding in front of FERC before CAISO did
 - Provided **precedent** for some of CAISO's decisions
 - Provided **data** to form a good understanding of how things could work





Issues and solutions—Other tweaks?

- Divergence vs. convergence
 - Convergence bidding at the interties
- Market power issues
- Effects of long-term contingencies on convergence bidding



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