

RTO West Market Operations Team Open Issues & Additional Work

Open Issues

1. Two Iterations in Day-Ahead Market:

- Should a first trial set of prices be posted which allows bidders to submit adjustments before final prices and IOS purchases calculated?
- Will bidders submit accurate information and true price views/preferences if bids and schedules are not binding?
- Raises question of whether limit bids are reasonable and workable.

2. Setting Market Clearing Prices:

- What optimization algorithm will be used for clearing congestion re-dispatch day ahead?
 - State 1 – Balance Schedules with congestion clearing only with minimal transactions.
 - State 2 – Clear congestion allowing beneficial trades among willing buyers and sellers to occur.
- What are the details of capacity markets – i.e, the bid stack, transmission effects, locational requirements, etc.

3. Potential for Separation Between Day-Ahead and Real-Time Markets:

- What is the effect on the spread between Day-Ahead and Real-Time prices due to CTR holders having protection from the cost of making changes during Schedule Adjustment Period?
- Can a transmission product be offered to allow not CTR holders equivalent protection?
- Would a day-ahead energy market with virtual bidding allow hedging for the day-ahead to real-time price spread?
- Is a two-settlement system meaningful if a large portion of the transactions are not really binding?

4. Scheduling/Bidding:

- How is scheduling done for POD/POR which are beyond the RTO West boundary?
- Can a schedule be submitted for less than a full hour?
- What is the bidding interval for the real-time market, i.e, how often and for what duration? 10 minutes? 1 hour?
- How does early scheduling and CTR release fit into Market Design Sequence

5. Market Based Rates:

- For entities that must file tariffs to sell energy/IOS, what happens if a party's prices are capped or tied to a cost of service?
- Can they be paid the market clearing price?
- Is there a precedent elsewhere?

6. Must-Run Contracts:

- How do they fit into the market design?

7. Behind-the-Meter Generation Issues:

- Parity/equity between behind the meter generation of wholesale and retail entities.
- Scale of the generation
- Who is responsible for the reserves for such generation? Who provides standby service?
- Application of grid management fee?
- Requirements for such generators to sell to A/S market?
- Direct access retail versus traditional retail relationships?
- Is total load and generation reported, even if billing is net?

8. Self-Tracking Issues:

- Control Signal Synchronization for Self-Trackers
- Signal priority between RTO West and Self-Tracker to avoid simultaneous "boost-buck" problems.
- Pseudo-schedule for self tracking?
- Basis for settlement of self-tracker imbalances?
- Is there any RTO West AGC adjustment to take self-trackers out of the signal? Or is the error of self-trackers simply part of RTO West error and corrected by RTO West's AGC?

9. Permissive Dispatch:

- Response quantity specified by RTO West?
- Possible adaptation of directed dispatch?

10. Use of Trading Hubs:

- In a schedule from gen→hub and hub→load, do each of the schedules pay losses, ancillary services, etc.
- What is the relationship between schedules to hubs and unconverted contracts?

11. Contract Rights to Non-Firm Service

- How are non-firm rights captured for purposes of access charge?
- What does a non-firm as available right mean for scheduling purposes?

12. Transmission Rights

- Is there any form of “tradeability” other than to assign OATT rights (point-to-point)?
- What is the effect of line outages on transmission rights? Are rights derated during outage? Are fewer rights issued to account our outage risk?

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13. Limited Self-Supply

- Definitional paper review needed

14. Non-Dispatchable Resources:

- Imbalance provisions for wind generation, etc.?
- Can bids from Blocked Resource set clearing prices?

15. Settlements:

- What are the billing determinants for Ancillary Services?

Additional Work

1. Process for Pass 2:

- Prioritize key issues for resolution based on:
 - What stakeholders “care” most about
 - Practical necessity to describe market design – this include the issues raised in FERC’s latest RTO West order
 1. What needs to be done now?
 2. What can be done later?
- Develop a set of examples
 - Cataloguing – use pseudo-contracts to describe process
 - Market Operations – follow from scheduling through settlement
- Rework Market Operations Template for recommendations and suggested form of operations portion of tariff.

2. Items To Be Detailed in Report

- Units may be bid as segments with different quantity and price for each block
- Balances schedules means a balanced submission. Redispatch is a separate transaction balanced between the supplier and RTO West.
- Definitions of terms
- Losses are supplied concurrent with schedules
- Clearing prices are paid to suppliers not pay-as-bid prices