Constraints in the Day-Ahead and Real-Time Markets

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Day-Ahead and Real-Time

• The match between day-ahead and real-time markets will matter under PJM’s proposed ORDC approach.
• PJM proposes to pay uplift on a five-minute standalone basis without any offsets during the day, during the hour or during the minimum run time.
• The day-ahead and real-time models differ in significant ways.
Day Ahead Model

- PJM states that 96 percent of constraints were monitored.
- In 2018, on average, line limits were specified for 29.5 percent of the transmission elements in the network model used for day ahead market clearing.
- The line limits for the remaining transmission elements were set at such high levels that they could not bind in the day ahead market.
Real Time Constraints

• In 2018, 56 percent of real-time constraint hours did not have a corresponding day-ahead constraint hour.
  • Accounting for matching hours and constraints, 56 percent of real-time constraints did not bind in the day-ahead market.

• Congestion is different in the real-time market than in the day-ahead market.

• The result of different binding constraints and congestion will be that different units are dispatched for energy and reserves in day-ahead and real-time markets with corresponding deviations.