Fast Start, Dispatch and Pricing

MIC February 5, 2020

IMM



Key Points Raised by FERC

- Resources are currently compensated with prices that do not correspond to their dispatch instructions. (P30)
- PJM generally dispatches 10 minutes in the future, but assigns prices to the current interval. (P30)
- A dispatch run should be followed by a pricing run.(P31)
- Dispatch must be cost minimizing. (P31)
- Prices should reflect marginal cost of serving load. (P31)
- Lost opportunity cost payments should provide correct incentives to follow dispatch. (P31)

FERC's Objectives

- PJM needs to ensure the dispatch is cost minimizing.
- All dispatch instructions and prices need to be linked.
- Settlements need to rely on the dispatch instructions and prices corresponding to the dispatch interval.
- Correct lost opportunity cost payments require using a single dispatch instruction to calculate prices and dispatch MW.

To Meet FERC's Objectives

- Dispatch resources, calculate prices, and settle energy on an integrated schedule and at the same frequency.
- The target load time, resource dispatch interval, pricing period, and energy settlement interval should all match.
- The calculation parameters and data used in SCED should be the most accurate available to PJM to ensure cost minimizing dispatch.

Specific Changes Required for Dispatch

Status Quo Dispatch

- Instructions sent irregularly
- Intervals with stale dispatch instructions
- Load look ahead does not equal resource look ahead
- Overlapping, independent dispatch instructions

Requirement

- Instructions scheduled
- Use the solution for current upcoming interval
- Achieve a match by using a scheduled process
- No dispatch interval overlap; link to prior dispatch*

^{*} This is a software change. Otherwise the changes focus on process.



Specific Changes Required for Settlements

Status Quo Settlements

 For a single market solution, prices and dispatch apply to different settlement intervals.

 Some dispatch instructions and cleared reserves are never settled.

Requirement

- Price and dispatch an interval from the same market solution, solved for the interval being dispatched.
- Settle all dispatch instructions and cleared reserves.



Specific Changes Required for Settlements

This is the only change PJM proposes for fast start.

Status Quo Settlements

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Requirement

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- Settle all dispatch instructions and cleared reserves.



Stakeholder Process

- FERC is holding fast start in abeyance until July 31 "to allow PJM and its stakeholders the opportunity to fully consider necessary changes..." (P32)
- Selecting design components to implement ASAP without fully considering the issues is not consistent with FERC's order.
- The fact that ISO New England follows similar dispatch practices does not justify failure to fully consider the issues.

Stakeholder Process

- The design elements in the matrix should not be separated for voting.
- The MIC special sessions should proceed to complete packages and voting.
- Defined implementation timelines should be included with each package proposal.

References

- Fast Start Abeyance Order
- IMM presentation referenced in order
- IMM Fast Start compliance filing comments
- Five minute dispatch and pricing problem statement

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