



Fast Start Order and Path Forward

Market Implementation Committee
February 5, 2020

- Review of FERC's January 23, 2020 Order on Fast Start
- Path Forward: FERC Fast Start order and additional items from MIC special sessions on Five Minute Dispatch and Pricing

Review of FERC's January 23, 2020 Order on Fast Start

December 21, 2017

FERC initiates an FPA 206 investigation into PJM's fast-start pricing practices. (EL18-34)

April 18, 2019

FERC finds that PJM's fast-start pricing practices are unjust and unreasonable, and directs PJM to revise its Tariff to implement certain changes that would result in just and reasonable rates. (EL18-34)

August 30, 2019

PJM makes its compliance filing to address the directives of the April 18, 2019 Order. (ER19-2722)

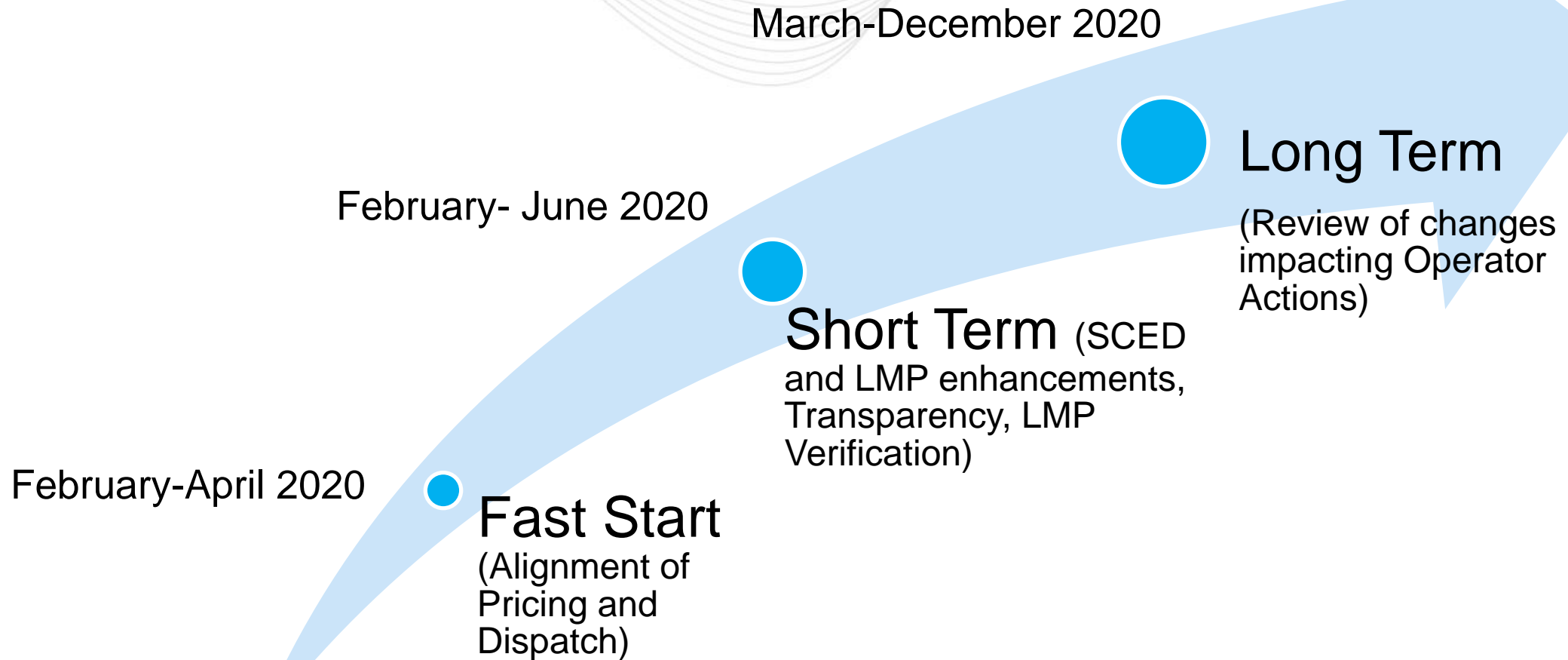
- Held proceeding in abeyance until July 31, 2020.
- “In response to PJM’s compliance filing, commenters identified that PJM currently computes dispatch instructions using a different market interval than it uses to calculate prices. Based on these comments, it appears that resources in PJM may be compensated with prices that do not correspond to their dispatch instructions, a pricing and dispatch misalignment. This pricing and dispatch misalignment may occur because PJM uses different input data for calculating dispatch and pricing in a given interval. PJM appears to dispatch resources for a target interval that is roughly 10 minutes in the future, but immediately assign the prices associated with that future dispatch interval to the *current* interval.” P 30

- The April 18, 2019 Order (EL18-34) required PJM to first execute a cost-minimizing dispatch run, followed by a pricing run where integer relaxation for fast-start resources allows them to set price.
- The “pricing and dispatch misalignment problem” may prevent PJM from being able to implement the separate dispatch and pricing runs in a way that is J&R because:
 1. if fast-start resources dispatched in a given market interval could be compensated with a price from a different market interval, prices may not accurately reflect the marginal cost of serving load.
 2. implementing fast-start pricing as directed in the April 18, 2019 Order could exacerbate the pricing and dispatch misalignment issue because the lost opportunity cost payments directed in the April 18, 2019 Order may be calculated based on inaccurate prices and therefore, may not correctly compensate opportunity costs.
 3. implementing fast-start pricing could cause lost opportunity cost payments to be ineffective because they may not provide correct incentives to follow dispatch.

- The January 23, 2020 Order is not a ruling on the substance of PJM’s August 30, 2019 Fast-Start Compliance Filing (ER19-2722).
- The January 23, 2020 Order only specifies that the “pricing and dispatch misalignment problem” needs to be resolved.

Path Forward

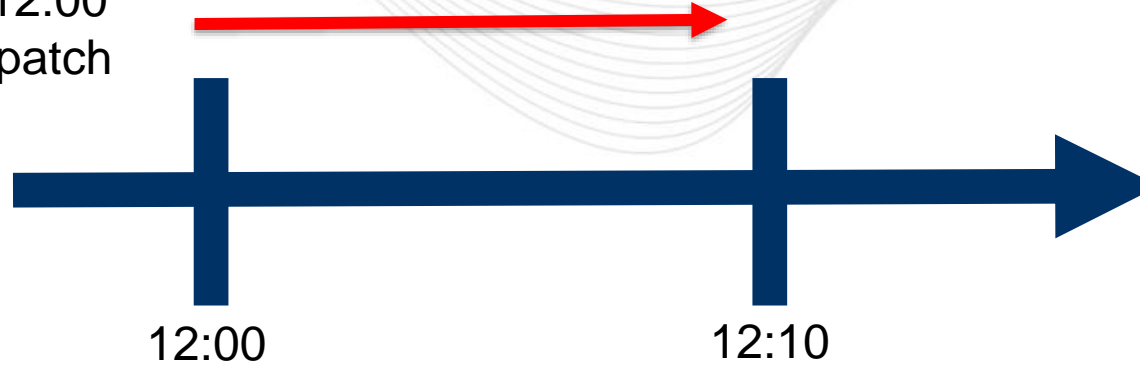
FERC Fast Start order and MIC special sessions on
Five Minute Dispatch and Pricing





Alignment of Pricing and Dispatch: Existing and Proposed

SCED case
approved by 12:00
for Target Dispatch
Time 12:10



Existing:
Pricing uses SCED
case for 12:00 and
not 12:10

Proposed:
Pricing uses
SCED case for
12:10

Existing:

- LMPs are calculated instantaneously based on the 10 minute look ahead dispatch instruction
- Disconnect between the timeframe to which LMPs/settlements are applied
- Intent to lead generation

Proposed (Design Component part of matrix for Five Minute Dispatch and Pricing special sessions):

- LMPs are calculated instantaneously based on the actual dispatch
- Addresses Fast Start Order

- March MIC: First Read PJM proposed language changes
- April MIC: Vote on language changes
- MRC/MC: April-May 2020 first Read and Vote

Short Term: February-June 2020

SCED Enhancements

Additional Transparency

LMP Verification Enhancements

Long Term: March-December 2020 - Operational Behavior impacts

SCED Execution and Approval frequency:

- Existing execution every 3 minutes and approval a minimum of every 5 minutes. Multiple cases may be approved in a 5 minute interval.
- Further Review necessary to determine impacts of changing execution from 3 to 5 minutes
 - Includes visits with other RTOs
 - Concerns: Changes from 3 min to 5 min provides less options to reliably control system
 - Change involves operator behavior changes

*Design component matrix provided with MIC materials