

Five Minute Dispatch Long-term Evaluation

Aaron Baizman Sr. Engineer Market Implementation Committee October 7, 2020

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Recap: Long-Term Evaluation and Tentative Implementation Timeline

Survey of other ISO/RTO Methods

Sept 2020

Design/Selection of Enhanced Dispatch Logic

Oct-Nov 2020

Testing and Operator Training

1Q2021

Trial Evaluation
Periods and
Implementation

2Q2021

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RTO/ISO Comparison Matrix

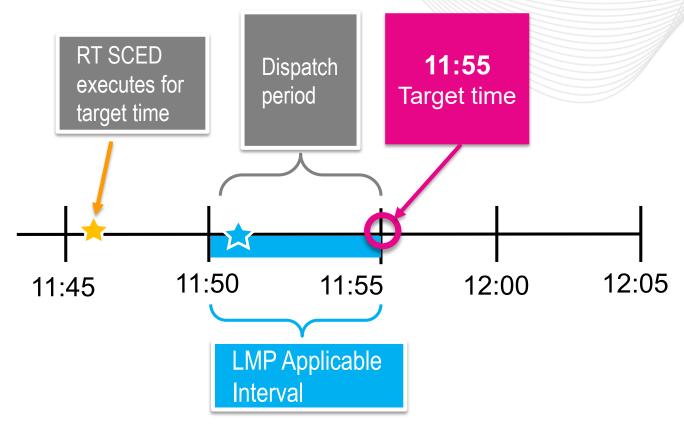
RTO/ISO	Ramp Logic
ISO-NE	SE + 10 Minutes
MISO	Envelope - First 5 minutes assume previous SCED dispatch, next 5 minutes ramp to optimize in SCED
NYISO	Envelope - First 5 minutes assume previous SCED dispatch, next 5 minutes ramp to optimize in SCED
SPP	Envelope - First 5 minutes assume previous SCED dispatch, next 5 minutes ramp to optimize in SCED
PJM	SE + 10 Minutes
ERCOT	5 minute ramp based on current telemetered MW and telemetered ramp rates to determine the dispatch range
CAISO	Envelope

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LPC case execution time

IMM Proposed Long-Term Solution: MISO Method



- Utilizes a five-minute dispatch interval
- Previous dispatch basepoint and SE MWs used to develop an envelope for achievable MWs as input to determine new dispatch basepoint
 - Removes existing challenge where unit receives overlapping dispatch signals

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PJM supports this proposed method

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- PJM plans to move forward with changing to the MISO ramp rate design
 - Additional impacted areas to be reviewed

- Design requirements to be developed
 - Final Implementation Timeline to be determined



SME:

Aaron Baizman, Aaron.Baizman@pjm.com

Presenter:

Aaron Baizman, Aaron.Baizman@pjm.com

5 Minute Dispatch Long-Term Evaluation

Member Hotline

(610) 666 - 8980

(866) 400 - 8980

custsvc@pjm.com



Appendix Ramp Rate Methodology

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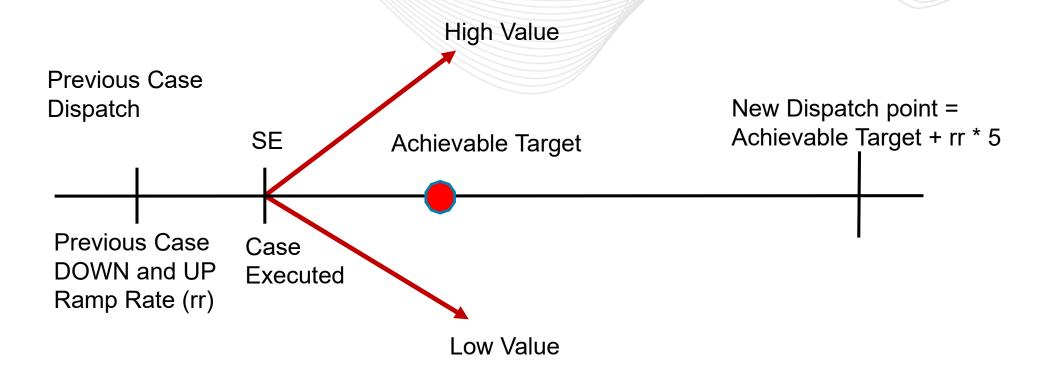


October 2nd 2019 Five Minute Dispatch Special Session

https://www.pjm.com/-/media/committeesgroups/committees/mic/20191002-fmdp/20191002-item-03a1alignment-of-dispatch-and-pricing-issue-education.ashx (IMM slides 13-18)



General Envelope Diagram



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