Five Minute Dispatch Long-Term Evaluation

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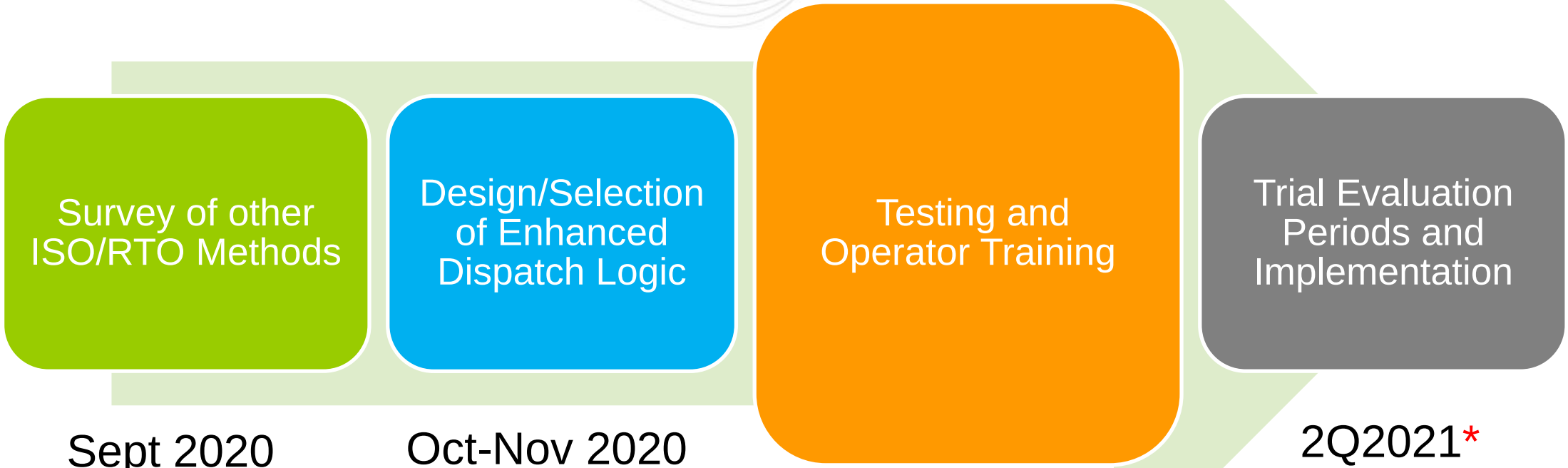
Markets Implementation Committee
January, 2021

Recap: Long-Term Evaluation and Tentative Implementation Timeline

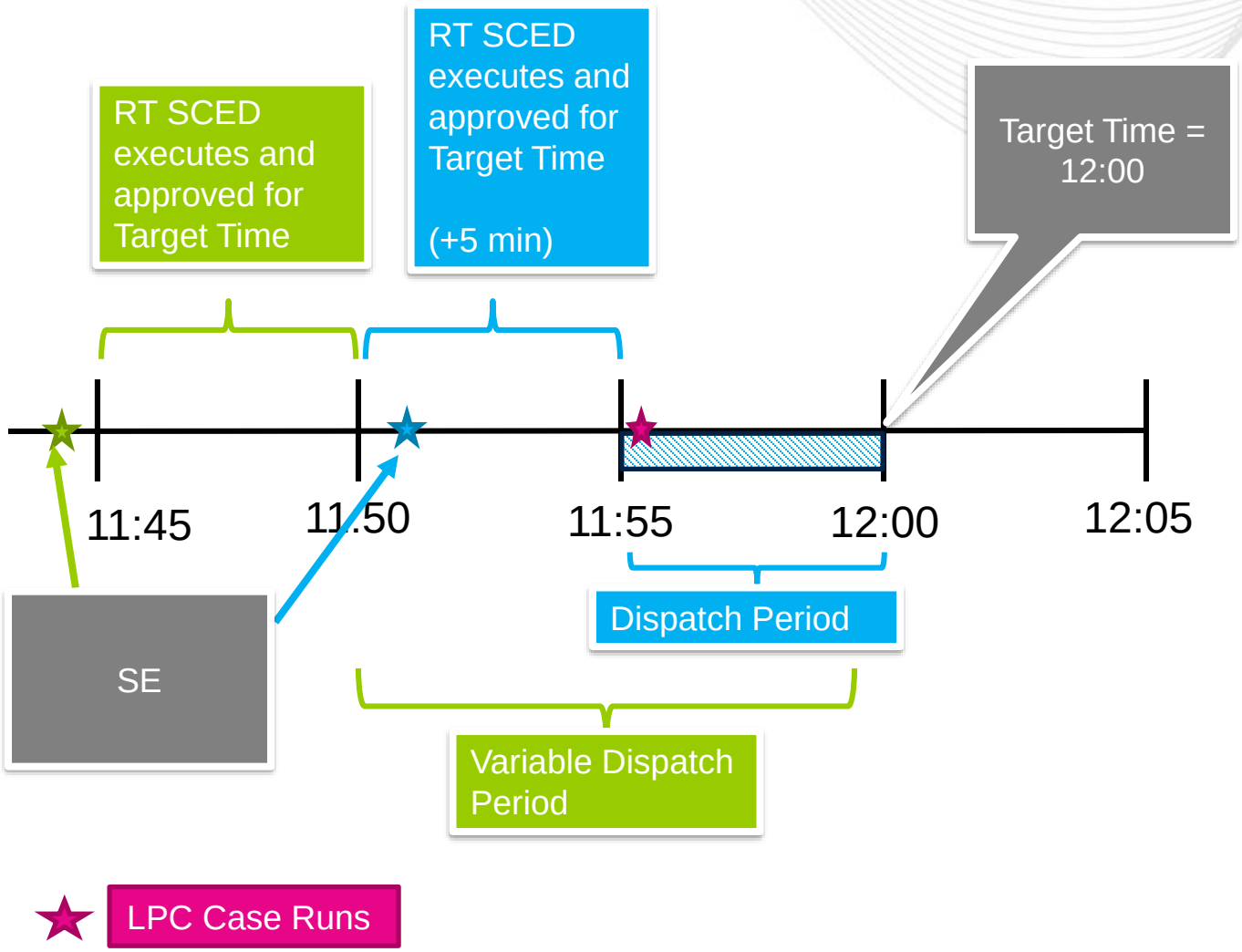


* At Risk

Updates January 2021

- First read of the PJM/IMM common package Long-Term Design
- Completed Long-Term design with vendor
- February MIC
  - Will provide an updated timeline
  - Vote on long-term design package
  - Expected first read on Tariff language

Timeline Current SCED vs. Proposed Long-Term SCED Implementation



Current SCED Execution

- RTSCED cases auto-execute every 5 minutes, 10 to 14 minutes prior to target time or manually executed
  - RTSCED cases are manually approved at dispatcher discretion
- The most recent SE MW is used for initial MW and adjusted by unit's ramp rate to determine 10 min dispatch value

Long-Term SCED Execution Under Investigation

- RTSCED cases will auto-execute every 5 minutes, 8 to 10 minutes prior to target time
  - Dispatch Signal sent out at 11:55
  - If a RTSCED case is not manually approved for a target dispatch interval, one will be automatically approved at a specified time or deadline prior to the start of the dispatch interval
- The initial MW for the 11:55 case will be adjusted for feasibility using the previous dispatch MW, 11:50 approved case, as an input

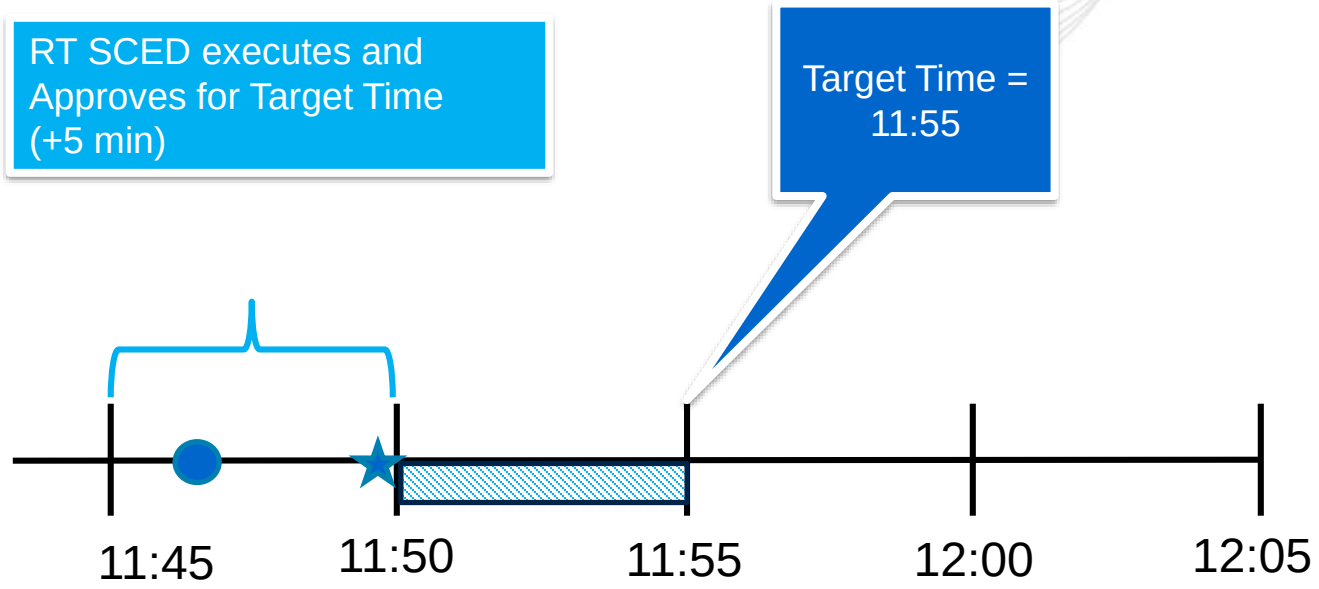
Highlights of Package

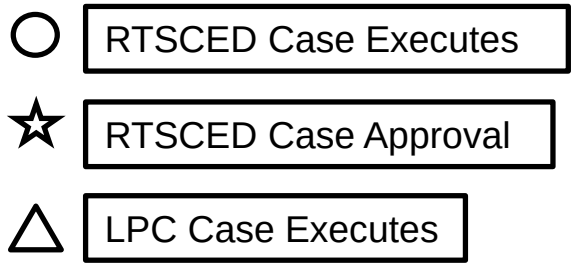
- RTSCED will utilize previous generator dispatch instructions to create new dispatch instructions
- Cases approved and priced in more structured design
- PJM Dispatchers provided flexibility for exceptions for case approval
- Removal of DGP
- Adjust auto execution of LPC case to be closer to the start of the 5 minute interval

Package Item 6 Minor Language Revision

- Original
  - Previous approved SCED dispatch MW, adjusted for feasibility based on unit's SE MW and ability to meet previous dispatch target. No DGP adjustments
- Updated
  - The initial mw or starting point of the achievable target mw calculation is based the previous approved SCED dispatch MW that is adjusted for feasibility based on SE MW, bid in parameters and ability to meet the previous dispatch target. This achievable target mw (ATM) calculation and subsequent ramp from the ATM excludes the use of DGP.

Dispatch and Pricing
Example Matrix Reference Slides (Summary)
Tentative Timing Design





Matrix Reference Slides (Summary)
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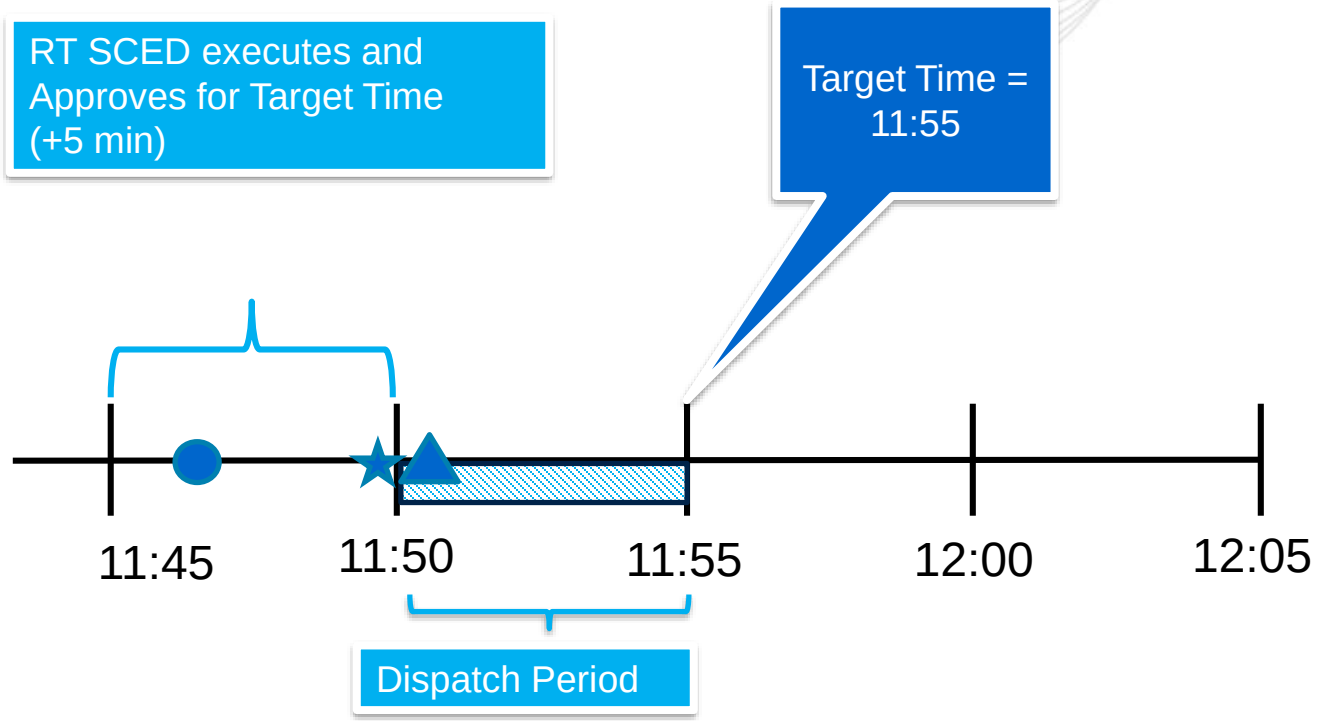

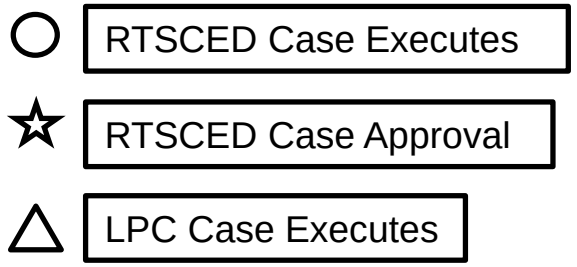

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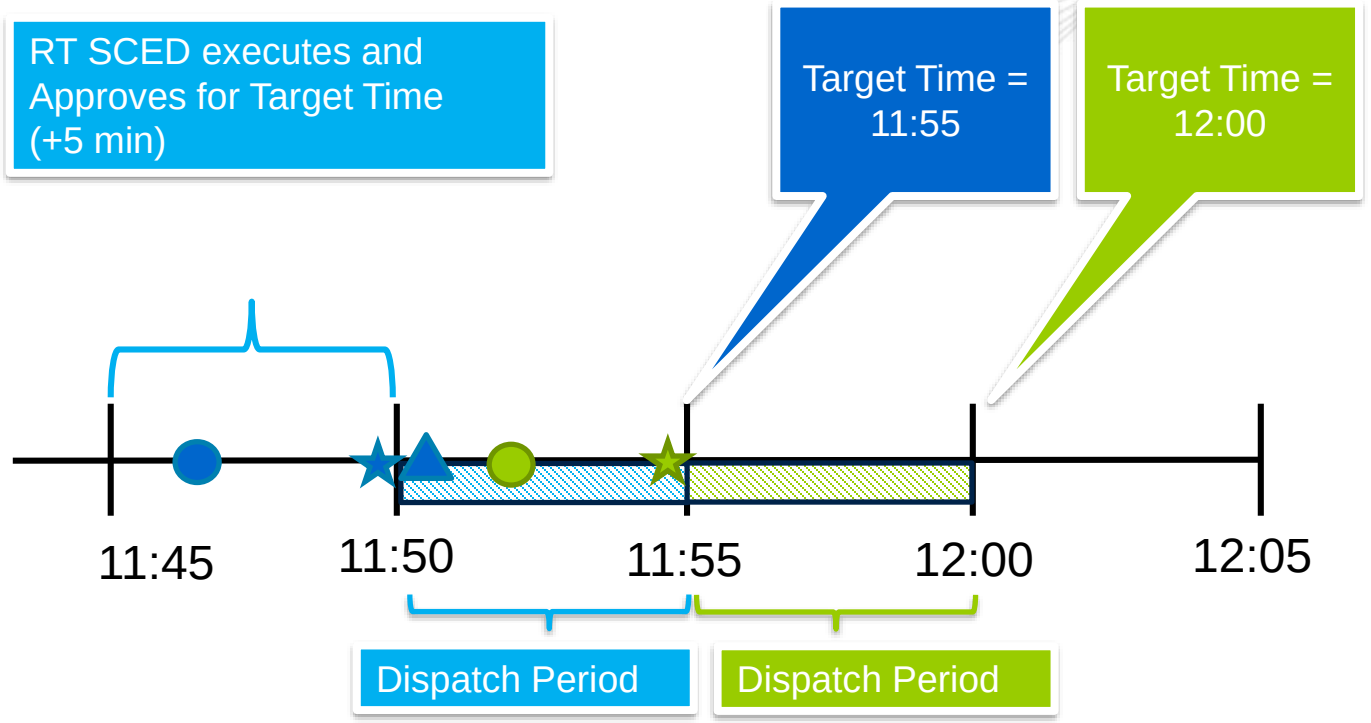

RTSCED Case Executes

RTSCED Case Approval

LPC Case Executes

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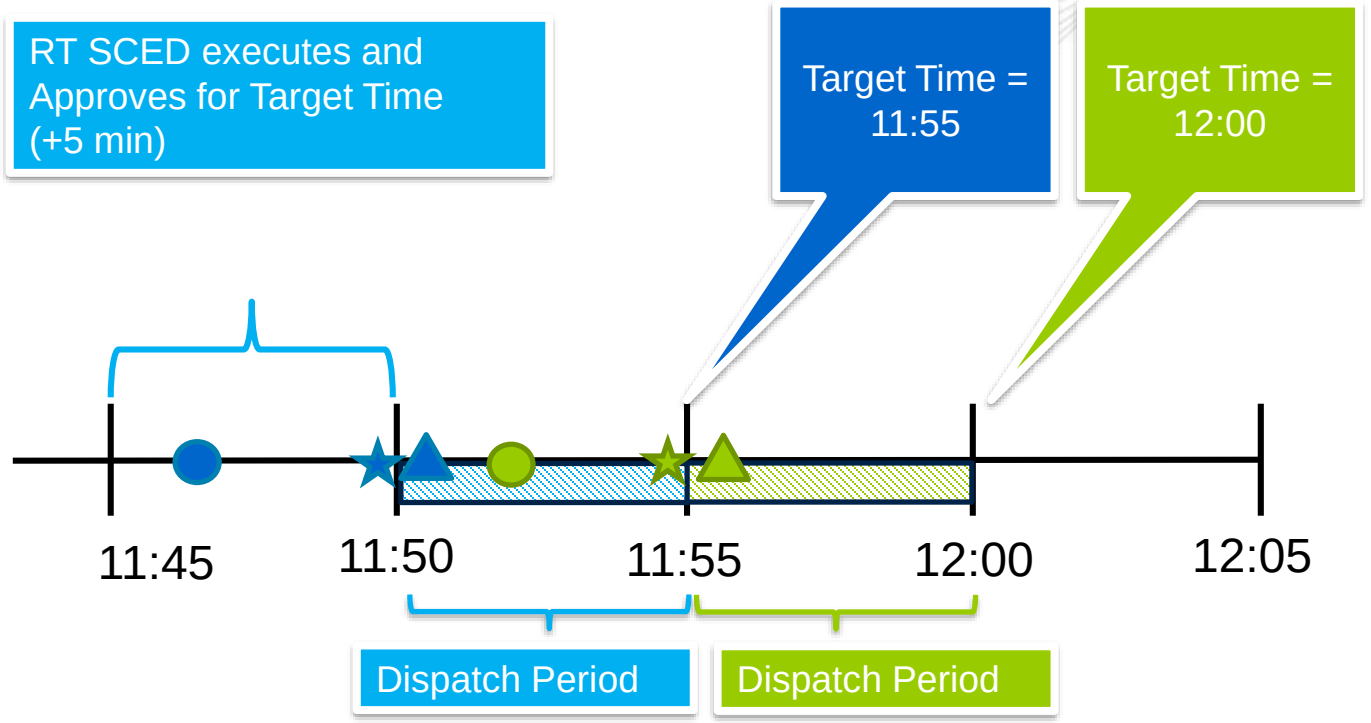

RTSCED Case Executes

RTSCED Case Approval

LPC Case Executes

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