Intelligent Reserve Deployment M-11 & M-28 Revisions

Damon Fereshetian
Sr. Engineer I, Real-Time Market Operations

Rebecca Stadelmeyer
Manager, Market Settlements Development

Market Implementation Committee
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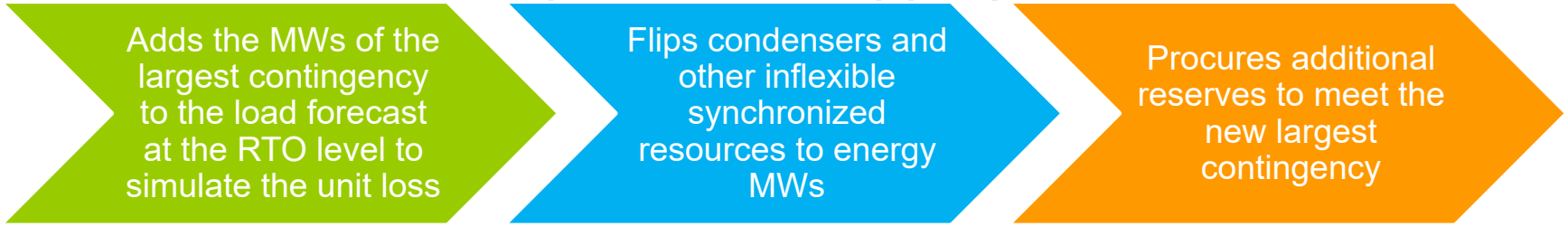
IRD Overview

- Intelligent Reserve Deployment (IRD)
  - IRD is a SCED case that simulates the loss of the largest generation contingency. Approval of the case will trigger a spin event.
    - Economic dispatch based on real-time input including constraints
    - Converts inflexible reserve MWs to energy
    - Readily available for use, no lag time
    - Initiates faster response until appropriate RTSCED case available



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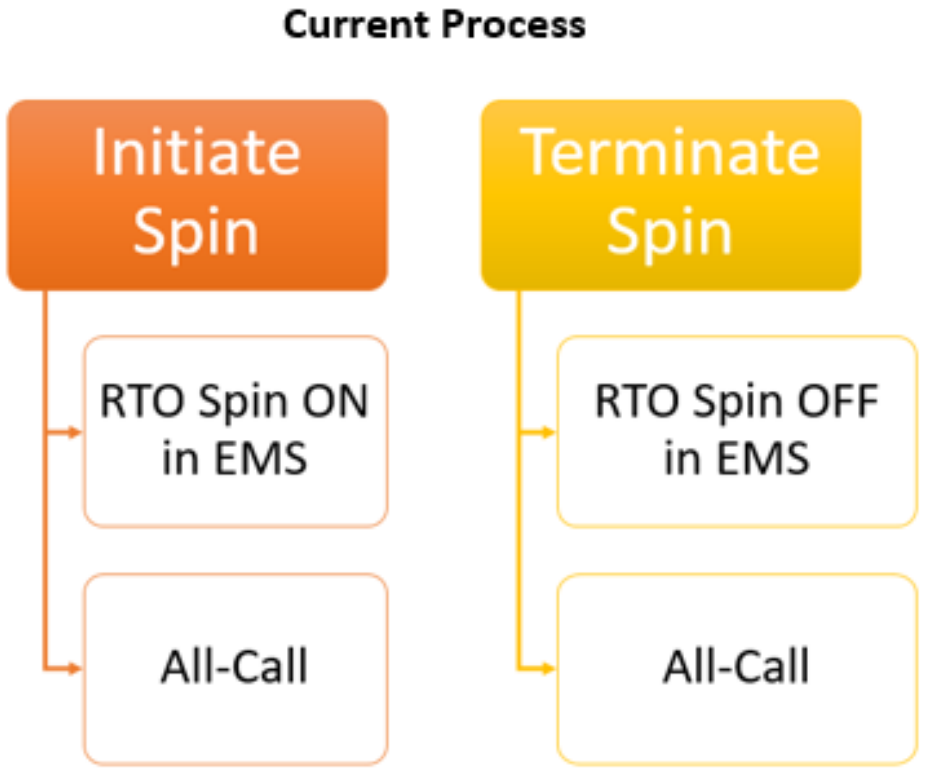
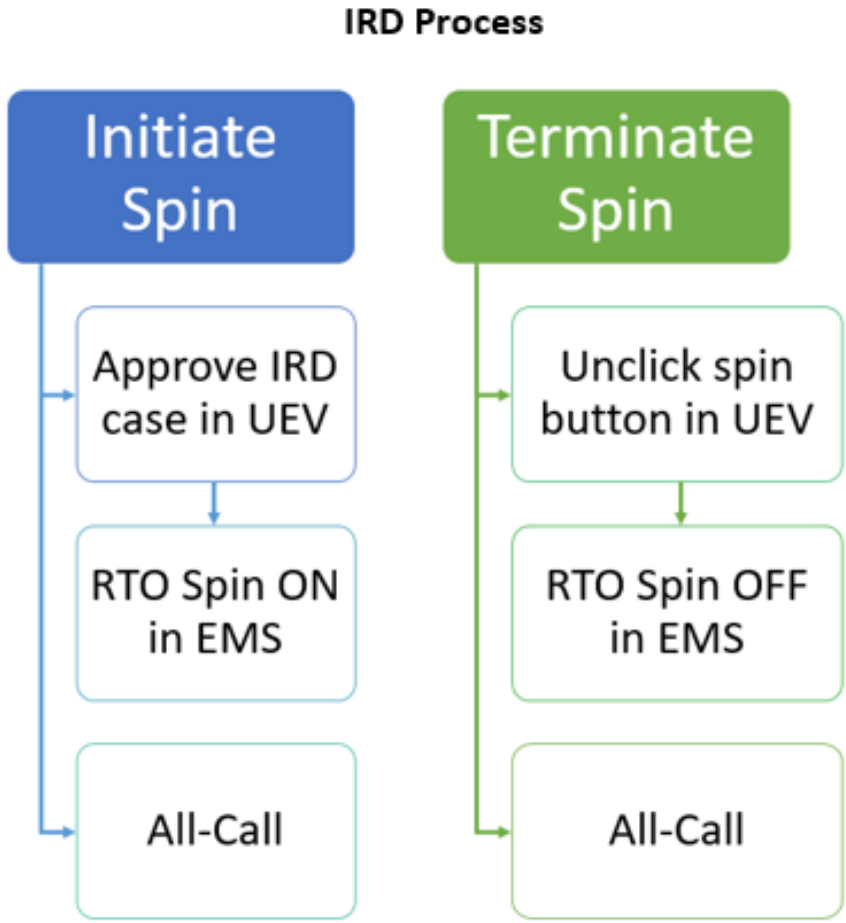
IRD Process





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IRD Effects

- Updated economic basepoints to replace all-call instructions.
  - All-call will still go out for communication purposes
- Active constraints will be controlled by IRD.
  - Target resources that do not adversely impact constraints
- IRD instructions will be priced in the subsequent interval.
  - Supersedes approved RTSCED cases for the same interval
- Dynamic performance evaluations based on event dispatch.
  - Status quo for Demand Response
- Smooth transition in and out of events with continued SCED usage
  - Updated basepoints to reduce manual actions required

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Revisions to Manual 11 and Manual 28

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- 2.7 – Locational Pricing Calculator (LPC)
  - Added new language that an approved IRD case supersedes any other approved RT SCED cases for the same target time to be used as the reference case for LPC.
- 4.2.6 – Synchronized Reserve Commitment
  - Added clarifying language that resources committed for Tier 2 MWs are obligated to follow dispatch instructions in response to a Synchronized Reserve Event.

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- 4.2.10 – Settlements
  - Removed language to credit Tier 1 resources for overresponse to a Synchronized Reserve Event.
- 4.2.11 – Verification
  - Added clarifying language that the response to a Synchronized Reserve Event is based on the resource following dispatch instructions and is capped at the expected response.
- 4.2.12 – Non-Performance
  - Added clarifying language that Tier 2 non-performance penalties apply to resources that do not respond with the lesser of their assigned amount or PJM calculated expected response.

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Manual 28 Section 6

- 6.1
  - Fixed a reference typo from M11, 4.2.11 to M11, 4.2.10
- 6.2.1
  - Added clarification language to acknowledge that Manual 11 determines the response MW value used in settlements
- 6.3.3
  - Distinguished how the Shortfall MW are calculated for Demand Resources (aggregation allowed) and Generators (aggregation not allowed)

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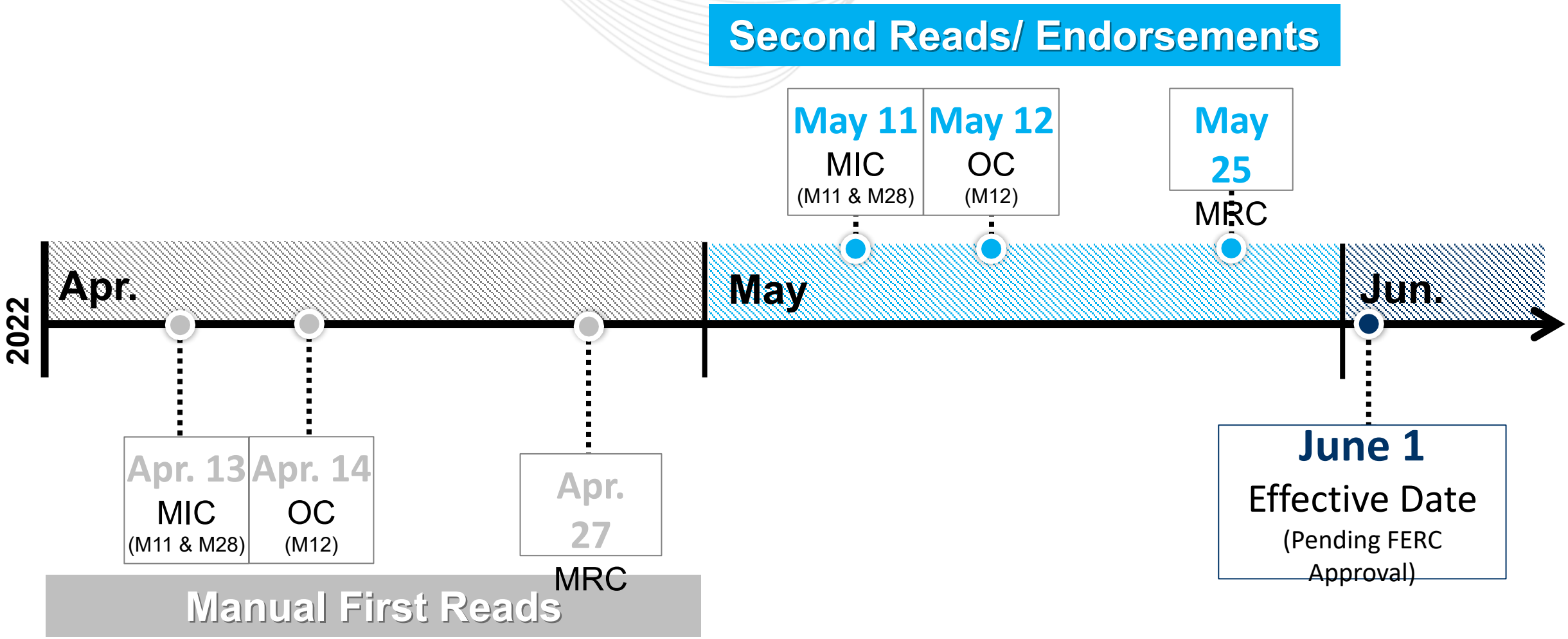
Timeline



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Contact

SMEs/Presenters:

Damon Fereshetian,
Damon.Fereshetian@pjm.com

Rebecca Stadelmeyer,
Rebecca.Stadelmeyer@pjm.com

Facilitator:

Lisa Morelli,
Lisa.Morelli@pjm.com

Secretary:

Nick DiSciullo,
Nicholas.DiSciullo@pjm.com

Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

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