

Manual 11 Regulation Redesign Summary of Changes

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Market Implementation Committee

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2024

Regulation Redesign – Phase Implementation and Timeline

FERC Approval on June 14, 2024 Clean order accepting

Clean order accepting our Regulation Market Reform 205 filing

Phase 1 Go-Live

Oct. 1, 2025

2025

Phase 2 Go-Live

Oct. 1, 2026

2026

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M-11 Reg. Redesign Phase 1 Impacts

Action Required	Deadline	Who May Be Affected
Review changes prior to endorsement.	8/20	Market Buyers, Market Sellers, CSPs
Communicate to staff about changes to Manual 11 prior to go-live.	10/1	Market Buyers, Market Sellers, CSPs
	10	







Adding Phase 1 Business Rules while preserving still relevant existing language





New organizational and section structure for Section 3 for better flow, order and joining of topics.



Added contextual information to address the most common questions encountered from the existing market and the redesign.

*Note: Similar reorganization effort to M11, Section 4 for Reserve Price Formation project



The changes and additions to Manual 11, Section 3 are expansive, moving from 2 to 10 subsections and essentially creating a new section.

Our final product will be a more robust and organized description of the Regulation Market.

There is no traditional redline posted for Section 3 because with all the changes to the text and structure, the document would be unreadable compared to the existing version.

Changes to other sections are marked up compared to the existing version.

Please allow adequate time for review and bring forth any questions/comments as early as possible, preferably before the next stakeholder meeting via email.



Phase 1 of the Regulation Redesign results in major changes to the following areas affecting Manual 11:

ASO Engine Logic / One Signal Offer, Clearing and Posting Timing

Regulation Qualification, Disqualification and Requalification

Performance Scoring

Regulation Requirement MW

Regulation Offer Structure

Regulation Lost Opportunity Cost
New Tracking Ramp-Limited Desired
Megawatt Concept



		Subsection #
Cootion 0	New Study Mode depiction graphic	2.5
Section 2	Language moving from 60- to 30-minute ASO run times	2.5.1
	Section reference update	4.4
Section 4	Language moving from 60- to 30-minute ASO run times with two cases per hour and with results typically posted 10 minutes prior	4.4.3
	Minor grammatical and clarification additions	4.4.3
Section 9	Non regulation-specific Hydro operation language moved out to new Scheduling section with minor grammatical updates	9.3



Section 3	Refreshed	New
3.1 Introduction to Regulation	X	
3.2 PJM Regulation Market Business Rules:	X	
3.2.1 Regulation Market Eligibility	X	
3.2.2 Regulation Qualification, Disqualification and Requalification		X
3.2.2.1 Performance Scoring		X
3.2.3 Regulation Market Data Timeline	X	
3.2.4 Regulation Offer Structure		X
3.2.5 Regulation Market Offer Period Timing	X	
3.2.6 Regulation Range Limits		X
3.2.7 Economic Load Response Participation		X
3.2.8 Ancillary Services Optimizer		X



Section 3	Refreshed	New
3.3 Regulation Requirements	X	
3.4 Regulation Market Power Mitigation	X	
3.5 Regulation Mileage		X
3.6 Regulation Lost Opportunity Cost	X	
3.6.1 General LOC Calculation	X	
3.6.2 Tracking Ramp-Limited Desired MW Concept		X
3.6.3 Hydro Opportunity Cost Calculation	X	
3.7 Regulation Market Clearing & Pricing	X	
3.7.1 Regulation Offer Price Conversion and Validation		X
3.7.2 Regulation Offer MW Conversion and Validation		X
3.7.3 Regulation Self-Scheduling		X
3.7.4 Regulation Clearing of Offline Resources		X
3.7.5 Regulation Clearing and Posting Timing	X	
3.7.6 Regulation Pricing		X

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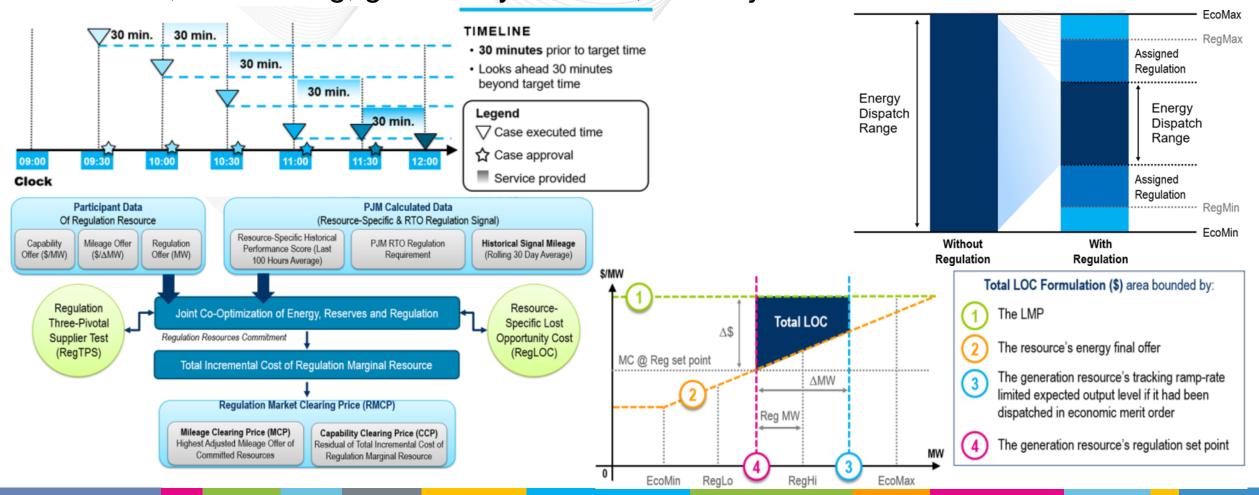


Section 3	Refreshed	New
3.8 Regulation Market Operations	X	
3.8.1 Regulation Dispatch and Reduced Energy Ramp Rate	X	
3.8.2 Self and PJM Deassignments		X
3.8.3 Intra-Interval Manual Assignments	X	
3.8.4 Unapproved or Missing Intervals		X
3.9 Regulation Obligation Fulfillment	X	
3.9.1 Regulation Bilateral Transactions	X	
3.10 Regulation Settlements	X	



Summary of Updates – New Graphics

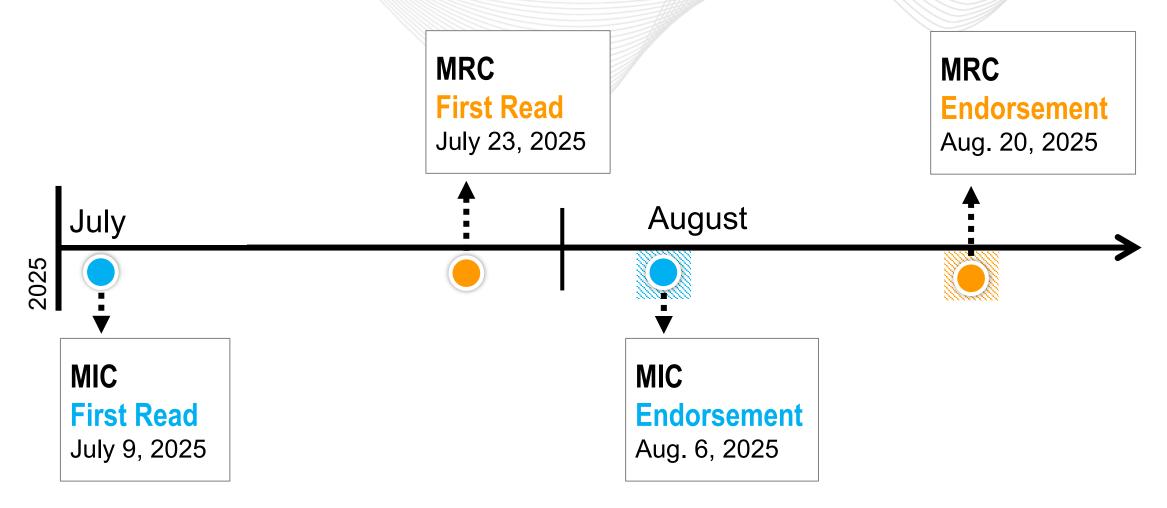
➤ New graphics to depict clearing engine interaction, data timeline/flow, range limits, ASO timing, general/hydro LOC, and adjusted offer formulas.



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Next Steps







No.	Inquiry	Email Contact
1	To request a Regulation test	RegulationTesting@pjm.com
2	Regulation telemetry – signal setup or conversion	PJMTelemetrySupport@pjm.com
3	Regulation Redesign questions	RegulationDesign@pjm.com
4	Communication to PJM Member Relations	custsvc@pjm.com



Posted Documents for Phase 1 Changes

The following documents have been posted on the Ancillary Services page under a new section called **Regulation Redesign**:

PJM.com > Markets & Operations > Ancillary Services >

- 1. Regulation Effective MW Requirement Definition (2025-2026) PDF
- 2. Regulation Cost-Based Offer Validation Phase I XLS
- 3. Self-Administered Regulation Test XLS
- 4. 40-Minute Performance Score Template XLSM
- 5. XML Schema XSD
- 6. PJM External Interface Specification Guide PDF
- 7. Regulation Redesign Phase 1 FAQ PDF
- 8. Markets Gateway: Regulation Redesign Phase 1 Sandbox Virtual Session PDF





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Manual 11 Regulation Redesign Phase 1



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