

## Regulation Redesign Phase 1 – Frequently Asked Questions (FAQ)

Last updated: Oct. 11, 2024

- Q1 When is the Regulation Redesign Phase 1 going live?
- A1 As filed and approved by FERC, Regulation Redesign Phase 1 is scheduled to go live on Oct. 1, 2025.
- Q2 When is the Reg-Up and Reg-Down implementation?
- A2 The Reg-Up and Reg-Down implementation is in the Phase 2 of the Regulation Redesign, and as filed and approved by FERC, it will go-live on Oct. 1, 2026. PJM will post Phase 2 FAQ after Phase 1 goes live.
- Q3 When will the implementation timeline for the Reg-Up and Reg-Down be available?
- A3 The Reg-Up and Reg-Down implementation timeline (Phase 2) will not be available until after the Phase 1 go-live on Oct. 1, 2025.
- Q4 Will the current RegD resources be able to follow the new single bidirectional signal?
- A4 The current RegD resources are expected to be able to follow the new single bidirectional signal.
- **Q5** What does Regulation Redesign Phase 1 entail?
- A5 Regulation Redesign Phase 1 consolidates the current RegA and RegD bidirectional signals into a single bidirectional signal that all resources assigned Regulation will follow. Table A5 below summarizes the changes in Phase 1:

**Table A5**: Phase 1 Summary of Changes

No.	Component	Description		
1	Signal(s)	Change from <i>two</i> signals (RegA and RegD) bidirectional to <i>one</i> signal bidirectional that all resources that are assigned Regulation in a given market interval will follow.		
2	Requirement MW	a) Redefinition of the days classified under various seasons		
"on-ramp") and "low" (formerly c) Redefinition of the hours consi		b) Modification to the magnitude of Regulation procured during "high" (formerly "on-ramp") and "low" (formerly "off-ramp") hours		
		c) Redefinition of the hours considered "high" Regulation and "low" Regulation (formerly labeled as "on-ramp" and "off-ramp" hours)		
3	Performance Scoring	Change from accuracy, delay and precision to precision only.		
4	Offer and Clearing Timing	Eliminate "cost increase in VOM" except for Reg-only resources, change from hour clearing and commitment to 30-minute clearing and commitment.		



No.	Component	Description	
5	Opportunity Cost Calculation Reform	a) Use the schedule the resource is running for energy or else the cheaper of available schedule for offline.	
		b) Use tracking desired MW at LMP ramp rate limited.	
		c) Use the area between LMP and the energy schedule the resource is running on.	
6	Settlement	For the eligible resources, Settlement will calculate the shoulder interval opportunity cost for the two five-minute ramp-in intervals before the resource Regulation operation and the two five-minute ramp-out intervals following the resource Regulation operation (currently, three intervals ramp-in and three intervals ramp-out).	

- Q6 What will the new single bidirectional signal look like?
- A6 On average, the new single bidirectional signal will be faster than the current RegA signal but slower than the current RegD signal.
- Q7 How will the current Regulation resources transition to Phase 1 Regulation resources?
- **A7** Table A7 below describes the Regulation resources transition process:

 Table A7: Summary of Regulation Resources Transition for Phase 1 Only

	No.	Status Quo (Pre Phase 1)	For Phase 1 Transition
ement	1	RegD signal and RegD resources participation in the Regulation Market	Effective Oct. 1, 2025, RegD signal and RegD-only resources participation in the Regulation Market will be terminated.
sting Requi	2	RegD-only certified resources	To avoid disruption during Phase 1 transition on Oct. 1, 2025, RegD-only resources that want to continue to participate in the Regulation Market will need schedule signal conversion testing anytime from June 1, 2025.
Signal Type and Testing Requirement	3	RegA-only certified resources.	No additional testing is required as new signal will use RegA signal path.
	4	RegA/RegD dual-certified resources	Effective Oct. 1, 2025, RegA/RegD dual-certified resources will continue on RegA signal only for continuous participation in the Regulation Market.



	No.	Status Quo (Pre Phase 1)	For Phase 1 Transition
Regulation Certified MW	5	RegD-only certified resources	Effective Oct. 1, 2025, RegD-only resources that completed their signal path conversion test successfully will automatically carry forward their RegD certified MW as Reg Certified MW except if an uprate or derate MW test is requested.
ation C	6	RegA-only certified resources	RegA certified MW will automatically carried forward.
Regula	7	RegA/RegD dual-certified resources	Effective Oct. 1, 2025, RegA/RegD dual-certified resources will automatically carry forward the higher of RegA or RegD certified MW as Reg certified MW.
Historic Performance Score	8	RegD-only certified resources	Effective Oct. 1, 2025, RegD-only resources that completed their signal path conversion test successfully will automatically carry forward their RegD historic performance score as Reg historic performance score.
	9	RegA-only certified resources	RegA historic performance score will automatically carry forward.
	10	RegA/RegD dual-certified resources	Effective Oct. 1, 2025, RegA/RegD dual-certified resources will automatically carry forward the higher of RegA or RegD historic performance score as Reg historic performance score.

- **Q8** Where to send my Regulation redesign related questions?
- A8 Please direct your inquiry to the applicable contacts listed in table A5 below:

**Table A8**: Summary of Regulation–Related Email Contacts

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

- Q9 Will there be updates to the Regulation-related documents posted on the Ancillary Services page under the markets & operations menu on the PJM website, www.pjm.com?
- A9 Yes, PJM will make updates to the related documents listed in table A9 below by June 1, 2025, for Phase 1 implementation.



Table A9: Regulation-Related Web Posting

No.	Document		
1	Regulation Test Signal Sample Pattern		
2	Regulation Self-Test Performance Scoring (Precision-Only) Template		
3	Regulation Effective MW Requirement Definition		
4	Regulation Two-Part Cost-Based Offer Validation Template		
5	Regulation Control Education		
6	Regulation LOC		

## Q10 What about the Regulation Requirement MW annual review process?

A10 The hourly Regulation requirement MW update will happen annually beginning in October 2026. The requirement MW will be modified based on system needs to address the energy transition and integration of renewables based on defined criteria. The update in October 2026 will adjust RegUp and RegDn equally. The update in October 2027 will adjust RegUp and RegDn separately. Table A10 summarizes the review steps:

Table A10: Regulation Requirement MW Annual Update

No	Step	Description
1	Annual review period	Oct. 1 of previous year through Sept. 30
2	Logic	The requirement MW updates will maintain the defined high/low/transition hours
3	Communication	Update will be presented at the October MIC/OC
4	Requirement MW update	Effective from Nov. 1 through Oct. 31

- Q11 Will all Regulation resources be able to continue to include the variable operation and maintenance (VOM) cost in its offer?
- **A11** Effective Oct. 1, 2025, only the non-energy Regulation resource may include VOM in its offer.
- Q12 How will PJM ensure that the existing Regulation offers that might already include the variable operation and maintenance (VOM) cost is not inadvertently carried into the Regulation Redesign Phase 1?
- As a way to mitigate the potential risk of any ineligible resources inadvertently carrying the VOM cost into Phase 1, PJM will terminate the current Regulation offer prices of all resources except Economic Load Resource and non-energy Regulation-only resources, on Oct. 1, 2025. PJM will require that all the affected Regulation resources submit new offer prices in accordance with the new rules effective Oct. 1, 2025.



- Q13 Where, when and how frequently PJM will clear the Regulation Market?
- A13 PJM currently clears the Regulation Market in real time, one hour ahead of the operating time and for a duration of an hour. Effective Oct. 1, 2025, PJM will continue to clear Regulation only in real time. In addition, PJM will start to clear the market twice an hour (hh:00 and hh:30), 30 minutes ahead of the operating time and for a duration of 30 minutes. For example, the Regulation Market clearing engine will kick off at 09:30 to clear resources for Regulation and commit from 10:00 to 10:30. See Regulation Clearing and Commitment.
- Q14 How frequently can a resource change its regulation offer and availability status in Markets Gateway?
- A14 For Market Participants who did not elect to opt out of Intraday, the Regulation Offer MW, Offer Price and other related MW parameters will remain hourly quantities, but effective Oct. 1, 2025, the lockout timing will move from 65 minutes before the operating hour to 35 minutes. For all the Regulation Market Participants, the resource availability status will be updateable every 30 minutes of the Regulation clearing and commitment interval, 35 minutes ahead of time.
- **Q15** How does the Phase 1 implementation affect the Markets Gateway?
- A15 We expect changes on Markets Gateway's Regulation Market and Market Results pages and their corresponding XML. PJM will communicate the additional information on the specific changes timely and as they become available at the Tech Change Forum and other communication outlets.
- **Q16** Is the Regulation Margin Adder of \$12 changing in Phase 1?
- A16 The Regulation Margin Adder of \$12 will not change in Phase 1.
- Q17 Will PJM continue to calculate the Regulation benefits factor?
- **A17** Effective Oct. 1, 2025, with the termination of the RegD signal, PJM will no longer calculate or use the Regulation benefits factor in the Regulation Market
- Q18 Will there be an opportunity for the Market Participant to test the Regulation offer submittal and result extraction in the Markets Gateway Training environment?
- A18 As indicated in the Phase 1 timeline table A20, the Market Participants will have the opportunity to test Regulation data in the Markets Gateway train environment
- Q19 When will the Market Participants be able to submit Regulation offer data in the Markets Gateway for Phase 1 go-live of Oct. 1, 2025?
- **A19** The Regulation Market for the Phase 1 go-live date of Oct. 1, 2025, will open seven days in advance, on Sept. 25, 2025.



- **Q20** What is the implementation timeline for Phase 1?
- **A20** The Phase 1 implementation tentative timeline is described in table A20 below:

Table A20: Phase 1 Milestones and Tentative Timeline

No.	Milestone	Timeline
1	Regulation redesign project – information update at the MIC/OC	November 2024
2	State & Member training	May 2025
3	RegD resources conversion testing begins	June 2025
4	All related manuals first read (Phase 1)	July 2025
5	All related manuals endorsed (Phase 1)	August 2025 (September if needed)
6	Special education session	August/September 2025
7	Regulation redesign Phase 1 market opens	Sept. 25, 2025
8	Regulation redesign Phase 1 go-live (cutover)	Oct. 1, 2025 at 00:00

- **Q21** When will PJM stop the qualification test for new RegD resources?
- **A21** PJM will stop the qualification test for new RegD resources on **Sept. 1, 2025**.
- **Q22** When will PJM stop retesting for existing RegD resources?
- A22 PJM will stop retesting for existing RegD resources on **Sept. 22**, **2025**.
- Q23 Will there be updates to this FAQ document?
- **A23** PJM will update this FAQ document periodically until the Phase 1 go-live date of Oct. 1, 2025.
- Q24 Will RegD-only resources need to get new telemetry to continue participating in the Regulation Market redesign Phase 1?
- A24 PJM will reuse the same RegA Telemetry points for RegA resources, but RegD-only resources must contact PJM Telemetry Support to update their points.