Data Miner 2 Changes
Regulation Redesign Phase 1

Tech Change Forum

July 2025

FERC Approval on June 14, 2024

Clean order accepting Regulation Market Reform 205 filing

Phase 1 Go-Live
Oct. 1, 2025

Phase 2 Go-Live
Oct. 1, 2026

2024

2025

2026
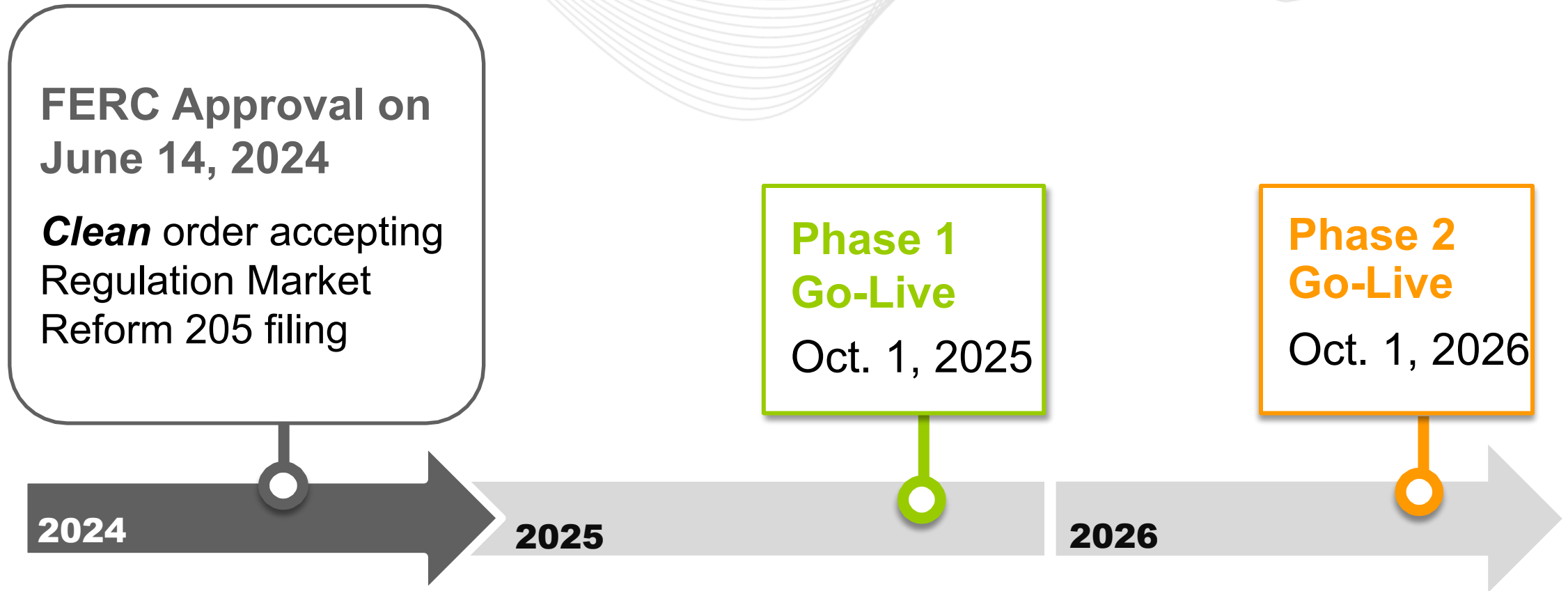
#	Design Components	Summary Description
1	**Signals and Products**	Change from *two* signals (RegA and RegD) bidirectional to *one* signal bidirectional that all resources that are assigned Regulation in a given market interval will follow.
2	**Requirement MW**	Changes to better reflect operational needs, with consideration both to historic and future system conditions
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.
5	**Opportunity Cost Calculation Reform**	1. Use the schedule the resource is running for energy or else the cheaper of available schedule for offline. 2. Use tracking desired MW at LMP ramp rate limited. 3. 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 two five-minute ramp-in intervals before the resource Regulation operation and two five-minute ramp-out intervals following the resource Regulation operation (currently, three intervals ramp-in and three intervals ramp-out). Also, Settlement will update the calculation for the Regulation Mileage Credit (currently Performance Credit) such that the mileage ratio is equal to [Real-Time Regulation Mileage/Historic Regulation Mileage]

Move to a 30-Minute Clearing Time and Commitment Duration
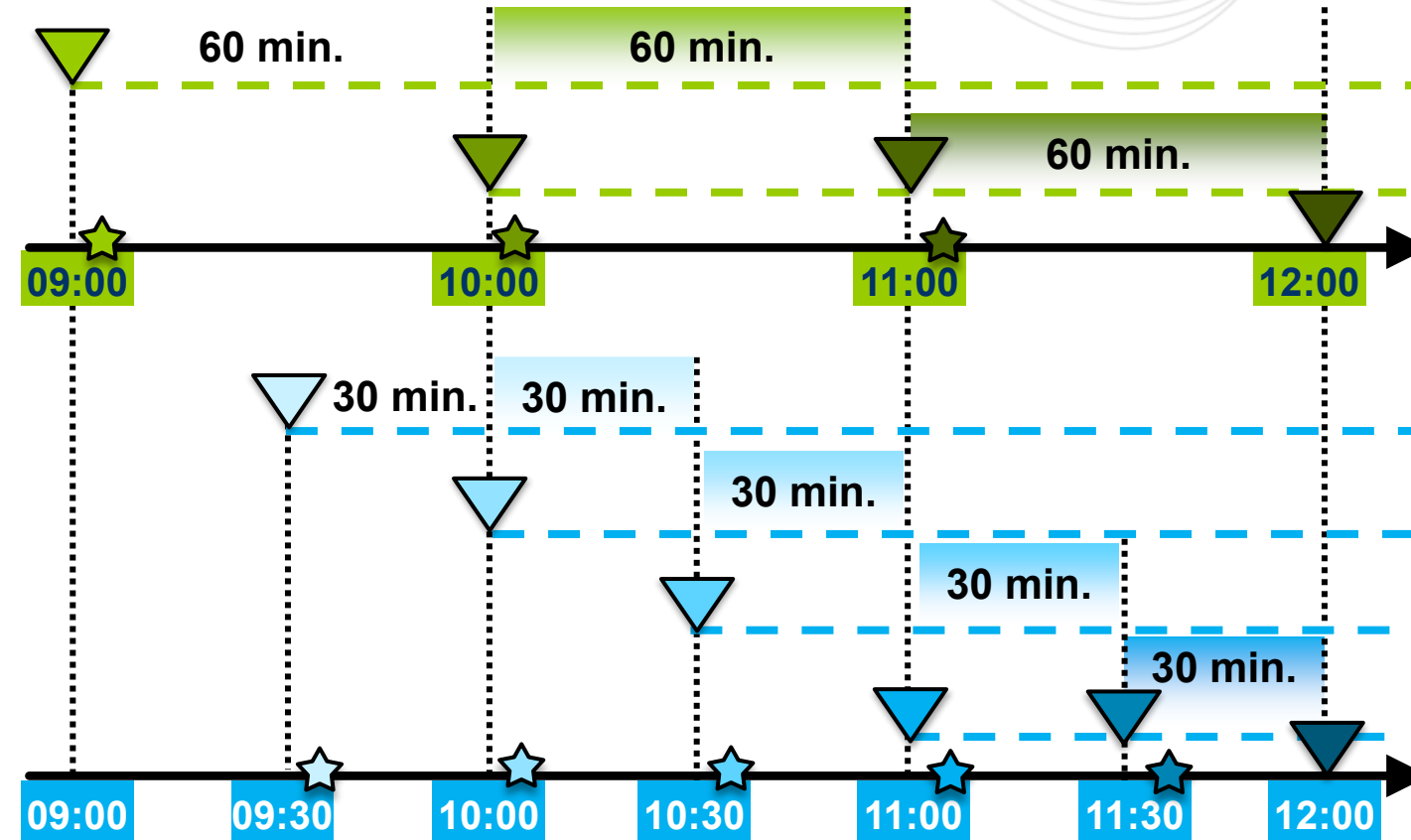
STATUS QUO

- **60 minutes** prior to target time
- Looks ahead 60 minutes beyond target time

PHASE 1 & 2

- **30 minutes** prior to target time
- Looks ahead 30 minutes beyond target time

Legend

▽ Case execution time

☆ Case approval

▨ Service provided

Sample ASO Case Execution, Posting and Target Intervals

Cases	Execution Time	Products Types	Markets Gateway Posting Deadline	Target Time (Begin)
ASO 00	12:30	Regulation & Reserves	12:50	13:00
ASO 30	13:00	Regulation Only	13:20	13:30
ASO 00	13:30	Regulation & Reserves	13:50	14:00
ASO 30	14:00	Regulation Only	14:20	14:30

- Regulation and Reserves results notification of at least 10 minutes before the operating time

- If ASO 30 is missed, All-Call must go out by **hh:20** to extend the last **Regulation assignment**;
- If **ASO 00** is missed, All-Call must go out by **hh:50** to extend the last **Regulation and Inflexible Reserve assignment**

#	Key Update Highlight	Description of Change
1	**Amount of records increasing**	Since ASO is moving from 60 mins to 30 mins duration, there will be 48 records per day instead of 24 records (except for DST)
2	**Records to return 'null'**	The following will return null: REGD_SSMW, REGD_PROCURE, REGD_MILEAGE, REGA_HOURLY, REGD_HOURLY
3	**'RegA' column naming update to 'Reg'**	Update 'RegA Self-scheduled eff. MW' to 'Reg Self-scheduled eff. MW', 'RegA pool procured eff. MW' to 'Reg pool procured eff. MW', 'RegA 30 day mileage' to 'Reg 30 day mileage'
4	**Field description changes, noting retirements**	RegD Self-scheduled eff. MW, RegD pool procured eff. MW, RegD 30 day mileage, RegA hourly mileage, RegD hourly mileage will be updated to reflect – "This column is retired as of 10/1/2025."
5	**Field description changes, noting updates**	Reg Self-scheduled eff. MW – "Self-Scheduled Regulation Effective MW" Reg pool procured eff. MW – "Pool Procured Regulation Effective MW" Reg 30 day mileage – "30 day average of ΔMW/MW for an ideal resource following the Regulation signal."
6	**CSV column name changes**	Update 'rega_ssmw' to 'reg_ssmw', 'rega_procure' to 'reg_procure', 'rega_mileage' to 'reg_mileage'

#	Key Update Highlight	Description of Change
1	**Marginal benefits factor to be removed**	Marginal benefits factor no longer used in new regulation logic, column will be removed
2	**Update to 'Performance Clearing Price'**	'Mileage Clearing Price' field name will update to 'Performance Clearing Price'
3	**CSV column name changes**	Update 'reserve_quantity' to 'regulation_quantity', 'reserve_requirement' to 'regulation_requirement', 'performance_clearing_price' to 'mileage_clearing_price', Remove 'marginal_benefits_factor' column

Data Miner 2 Feed Location:
Ancillary Services > Real-Time Ancillary Service Market Results

#	Key Update Highlight	Description of Change
1	**Columns to return 'null'**	REGD MW and TIER1 MW to return 'null'
2	**Field name changes**	Update 'Regulation Performance Clearing Price' to 'Regulation Mileage Clearing Price'
3	**Field description changes**	Updates: Assigned MW – "Assigned Raw MW towards satisfying the requirement for the selected service and locale. Self-scheduled MW is included. This value is from the Dispatch Run." Self-scheduled MW – "Self-scheduled Raw MW. This is also included in the Assigned MW. This value is from the Dispatch Run." Tier 1 MW – "Incidental Reserve MW from qualified partially loaded online units. This value is from the Dispatch Run. This column is retired as of 10/1/2022." REGD MW – "Assigned Dynamic Regulation Raw MW towards satisfying the Regulation requirement. This value is from the Dispatch Run. This column is retired as of 10/1/2025."
4	**CSV column name changes**	Update 'reg_pcp' to 'reg_mil_cp'

Data Miner 2 Feed Location:
Ancillary Services > Real-Time Ancillary Service Five-Minute LMPs
Ancillary Services > Real-Time Ancillary Service Hourly LMPs

#	Key Update Highlight	Description of Change
1	**Data update**	'RTO Regulation Performance' with type 'Price' renamed to 'RTO Regulation Mileage' 'RTO Mileage Ratio' with type 'Ratio' redefined to equal 5-Min Actual Mileage / Historical (Daily) Mileage

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

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Regulation Redesign Phase 1 – Markets Gateway and Data Miner 2 Changes

Member Hotline

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