



MSRS Report Format Documentation

Regulation Summary

Version 11

Revision History

Date	REVISION	DESCRIPTION
10/19/2007	1	Initial Distribution
01/10/2011	2	Corrected Regulation Obligation calculation in Supporting Calculations section
8/20/2012	3	Updated report to include the following columns: RMCCP (\$/MWh) RMPCP (\$/MWh) RMCCP Charge (\$) RMPCP Charge (\$) RMCCP Credit (\$) RMPCP Credit (\$)
10/16/2013	4	Updated report to include the following columns: Total Mileage Reg Adder (MWh) Total PJM Adjusted Reg Obligation (MWh) Mileage Ratio Adder (MWh)
10/28/2014	5	Updated RMCCP Credit and RMPCP Credit supporting calculations, and added details for PJM-Assigned Reg (MWh) under the Report Content Summary section.
4/1/2018	6	Removed RMCCP (\$/MWh) and RMPCP (\$/MWh) columns. Added Total PJM RMCCP Credits (\$) and Total PJM RMPCP Credits (\$) columns. Added section for 5 Minute settlements calculations to Supporting Calculations
12/10/2019	7	Removed Total Mileage Reg Adder (MWh) and Mileage Ratio Adder (MWh) columns.
2/21/2020	8	Removed all references to eSchedule(s) and/or eSchedule(s) reports
2/13/2024	9	Additional details added to Supported Billing Line Items section regarding counterparty data visibility
9/23/2025	10	Renamed Total PJM RMPCP Credits (\$) to Total PJM RMMCP Credits (\$) Renamed RMPCP Charge (\$) to RMMCP Charge (\$) Renamed RMPCP Credit (\$) to RMMCP Credit (\$) XML column names updated for Total PJM RMMCP Credits (\$), RMMCP Charge (\$), RMMCP Credit (\$) Added section for Regulation Market Redesign Phase 1 calculations to Supporting Calculations

12/1/2026	11	Updated for Regulation Phase 2 implementation <ul style="list-style-type: none"> • Additional details by product type (RegUp and RegDn) Supporting calculations for previous versions of report documentation archived and available on pjm.com .
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1 Report

MSRS Report Name: Regulation Summary

Report short name for User Interface: Regulation Summary

Download File Name Abbreviation: RegChCr

Data Granularity: Hourly

Frequency: Updated daily

Range Displayed on Report: Start Date through End Date

2 Supported Billing Line Items

- Regulation and Frequency Response Service Charge (1340)
- Regulation and Frequency Response Service Credit (2340)

3 Report Content Summary

This report displays the customer account's hourly Regulation Market Capability Clearing Price Charges by product type, Regulation Market Capability Clearing Price Credits, Regulation Market Mileage Clearing Price Charges by product type, Regulation Market Mileage Clearing Price Credits, and Regulation Lost Opportunity Cost Charges and Credits where the account's Regulation Obligation, RMCCP Credit, RMMCP Credit or Regulation Lost Opportunity Cost Credit is not equal to 0.

The credits summarized on this report are reflective of credits received by the customer account's generation units and Economic Load Response Resources that participate in the regulation market.

The Regulation Market Credits report supplies the customer with the supporting details for both the RMCCP Credit (\$) and RMMCP Credit (\$) values displayed on this report. The Regulation Market Lost Opportunity Cost Credits report supplies the customer with the supporting details



for Reg Lost Opportunity Cost Credit (\$) value displayed on this report. The Regulation Credits report supplies both of these values for trade dates prior to 10/1/2025.

4 Summary of Changes and Special Logic

5 Report Columns

The following columns will appear in the body of the report:

Online and CSV Column Name	XML Column Name	Column Number	Data Type
Customer ID	CUSTOMER_ID	4000.01	INTEGER
Customer Code	CUSTOMER_CODE	4000.02	VARCHAR2(6)
EPT Hour Ending	EPT_HOUR_ENDING	4000.05	VARCHAR2(40) mm/dd/yyyy HH24 format (Displays first hour of the day as hour 1 and last hour of the day as hour 24)
GMT Hour Ending	GMT_HOUR_ENDING	4000.06	VARCHAR2(40) mm/dd/yyyy HH24 format (Displays first hour of the day as hour 1 and last hour of the day as hour 00 of the following day)
Total Effective RegUp (MWh)	TOTAL_EFFECTIVE_REGUP	1340.26	NUMBER
Total Effective RegDn (MWh)	TOTAL_EFFECTIVE_REGDN	1340.27	NUMBER
RT Load (MWh)	RT_LOAD	1340.19	NUMBER
Total PJM RT Load (MWh)	TOTAL_REG_PJM_RT_LOAD	1340.20	NUMBER
RegUp Obligation (MWh)	REGUP_OBLIGATION	1340.28	NUMBER
RegDn Obligation (MWh)	REGDN_OBLIGATION	1340.29	NUMBER
Bilateral RegUp Sales (MWh)	BILATERAL_REGUP_SALES	1340.30	NUMBER
Bilateral RegDn Sales (MWh)	BILATERAL_REGDN_SALES	1340.31	NUMBER
Bilateral RegUp Purchases (MWh)	BILATERAL_REGUP_PURCHASES	1340.32	NUMBER
Bilateral RegDn Purchases (MWh)	BILATERAL_REGDN_PURCHASES	1340.33	NUMBER
Adjusted RegUp Obligation (MWh)	ADJUSTED_REGUP_OBLIGATION	1340.34	NUMBER
Adjusted RegDn Obligation (MWh)	ADJUSTED_REGDN_OBLIGATION	1340.35	NUMBER
Total PJM Adjusted RegUp Obligation (MWh)	TOTAL_ADJ_REGUP_OBLIGATION	1340.36	NUMBER



Total PJM Adjusted RegDn Obligation (MWh)	TOTAL_ADJ_REGDN_OBLIGATION	1340.37	NUMBER
Total PJM RegUp RMCCP Credits (\$)	TOT_PJM_UP_RMCCP_CR	1340.38	NUMBER
Total PJM RegDn RMCCP Credits (\$)	TOT_PJM_DN_RMCCP_CR	1340.39	NUMBER
Total PJM RegUp RMMCP Credits (\$)	TOT_PJM_UP_RMMCP_CR	1340.40	NUMBER
Total PJM RegDn RMMCP Credits (\$)	TOT_PJM_DN_RMMCP_CR	1340.41	NUMBER
RegUp RMCCP Charge (\$)	REGUP_RMCCP_CH	1340.05	NUMBER
RegDn RMCCP Charge (\$)	REGDN_RMCCP_CH	1340.06	NUMBER
RegUp RMMCP Charge (\$)	REGUP_RMMCP_CH	1340.07	NUMBER
RegDn RMMCP Charge (\$)	REGDN_RMMCP_CH	1340.08	NUMBER
PJM-Assigned RegUp (MWh)	PJM_ASSIGNED_REGUP	2340.68	NUMBER
PJM-Assigned RegDn (MWh)	PJM_ASSIGNED_REGDN	2340.69	NUMBER
Self-Scheduled RegUp (MWh)	SELF_SCHEDULED_REGUP	2340.70	NUMBER
Self-Scheduled RegDn (MWh)	SELF_SCHEDULED_REGDN	2340.71	NUMBER
RegUp Purchase (MWh)	REGUP_PURCHASE	1340.42	NUMBER
RegDn Purchase (MWh)	REGDN_PURCHASE	1340.43	NUMBER
Total PJM RegUp Purchase (MWh)	TOTAL_PJM_REGUP_PURCHASE	1340.44	NUMBER
Total PJM RegDn Purchase (MWh)	TOTAL_PJM_REGDN_PURCHASE	1340.45	NUMBER
Total PJM Reg Lost Opportunity Credit (\$)	TOTAL_PJM_REG_LOC_CREDIT	1340.17	NUMBER
Reg Lost Opportunity Cost Charge (\$)	REG_LOC_CHARGE	1340.02	NUMBER
RMCCP Credit (\$)	RMCCP_CREDIT	2340.32	NUMBER
RMMCP Credit (\$)	RMMCP_CREDIT	2340.33	NUMBER
Reg Lost Opportunity Cost Credit (\$)	REG_LOC_CREDIT	2340.16	NUMBER
Version	VERSION	4000.07	VARCHAR2(12)

6 CSV Report Example

See Excel file titled "Regulation Summary CSV Format.csv"

7 XML Report Example

See XML file titled "Regulation Summary XML Format.xml"

8 Supporting Calculations

Calculations for Regulation Market Redesign Phase 2, effective 12/1/2026:

RegUp Obligation = Total Effective RegUp * (RT Load / Total PJM RT Load)
1340.28 = 1340.26 * (1340.19 / 1340.20)

RegDn Obligation = Total Effective RegDn * (RT Load / Total PJM RT Load)
1340.29 = 1340.27 * (1340.19 / 1340.20)

Adjusted RegUp Obligation = RegUp Obligation + Bilateral RegUp Sales - Bilateral RegUp Purchases
1340.34 = 1340.28 + 1340.30 - 1340.32

Adjusted RegDn Obligation = RegDn Obligation + Bilateral RegDn Sales - Bilateral RegDn Purchases
1340.35 = 1340.29 + 1340.31 - 1340.33

RegUp RMCCP Charge = Total PJM RegUp RMCCP Credits * (Adjusted RegUp Obligation / Total PJM Adjusted RegUp Obligation)
1340.05 = 1340.38 * (1340.34 / 1340.36)

RegDn RMCCP Charge = Total PJM RegDn RMCCP Credits * (Adjusted RegDn Obligation / Total PJM Adjusted RegDn Obligation)
1340.06 = 1340.39 * (1340.35 / 1340.37)

RegUp RMMCP Charge = Total PJM RegUp RMMCP Credits * (Adjusted RegUp Obligation / Total PJM Adjusted RegUp Obligation)
1340.07 = 1340.40 * (1340.34 / 1340.36)

RegDn RMMCP Charge = Total PJM RegDn RMMCP Credits * (Adjusted RegDn Obligation / Total PJM Adjusted RegDn Obligation)
1340.08 = 1340.41 * (1340.35 / 1340.37)

RegUp Purchases = MAX (Adjusted RegUp Obligation - Self-Scheduled RegUp, 0)
1340.42 = MAX (1340.34 - 2340.70, 0)

RegDn Purchases = MAX (Adjusted RegDn Obligation - Self-Scheduled RegDn, 0)
1340.43 = MAX (1340.35 - 2340.71, 0)

Reg Lost Opportunity Cost Charge = Total PJM Reg Lost Opportunity Credit * ((RegUp Purchase + RegDn Purchase) / (Total PJM RegUp Purchase + Total PJM RegDn Purchase))
1340.02 = 1340.17 * ((1340.42 + 1340.43) / (1340.44 + 1340.45))

RMCCP Credit (2340.32) = Sum of RegUp RMCCP Credit + RegDn RMCCP Credit for all 5-min intervals in the hour. See Regulation Market Credits report documentation. Note that the hourly customer account credits are the sum of 5-min interval RMCCP Credits adjusted by ownership share from the Regulation Market Credits report.

RMMCP Credit (2340.33) = Sum of RegUp RMMCP Credit + RegDn RMMCP Credit for all 5-min intervals in the hour. See Regulation Market Credits report documentation. Note that the hourly customer account credits are the sum of 5-min interval RMMCP Credits adjusted by ownership share from the Regulation Market Credits report.

Reg Lost Opportunity Cost Credit (2340.16) = Sum of Regulation Lost Opportunity Cost Credit for all 5-min intervals in the hour. See Regulation Market Lost Opportunity Cost Credits documentation. Note that the hourly customer account credits are the sum of the 5-min interval Regulation Lost Opportunity Cost Credits adjusted by ownership share from the Regulation Market Lost Opportunity Cost Credits report.