

Monitoring Analytics, LLC 2621 Van Buren Avenue, Suite 160 Valley Forge Corporate Center Eagleville, PA 19403

Phone: 610-271-8050 Fax: 610-271-8057

FOR IMMEDIATE RELEASE

2025 Quarterly State of the Market Report for PJM: January through March

MARKET MONITOR FINDS PJM WHOLESALE ELECTRICITY MARKETS COMPETITIVE

(Eagleville, PA, May 8, 2025) PJM Interconnection's wholesale electric energy market produced competitive results during the first three months of 2025, according to the 2025 Quarterly State of the Market Report for PJM: January through March released today by Monitoring Analytics, LLC, the Independent Market Monitor for PJM.

The Independent Market Monitor, Joseph Bowring, announced findings of the report today. The report is the Independent Market Monitor's assessment of the competitiveness of the wholesale electricity markets managed by PJM in 13 states and the District of Columbia. The report includes analysis of market structure, participant behavior and market performance for each of the PJM markets.

"Our analysis concludes that the results of the PJM Energy Market were competitive in the first three months of 2025," Bowring said. "Our analysis concludes that the results of the capacity market auction for the 2025/2026 Delivery Year were not competitive."

Energy prices increased in the first three months of 2025, from the first three months of 2024. The real-time load-weighted average LMP in the first three months of 2025 increased \$21.19 per MWh, or 68.3 percent from the first three months of 2024, from \$31.01 per MWh to \$52.20 per MWh.

Of the \$21.19 per MWh increase, \$15.85 per MWh (74.8 percent) was in the fuel and consumables cost components of LMP, \$2.43 per MWh (11.4 percent) was in the transmission constraint penalty factor component of LMP, \$1.83 per MWh (8.6 percent) was in the market power components of LMP, -\$0.32 per MWh (-1.5 percent) was in the emissions cost components of LMP, and -\$0.22 per MWh (-1.0 percent) was in the scarcity component of LMP.

The total cost of wholesale power increased \$23.65 per MWh, or 43.8 percent, from \$53.95 per MWh in the first three months of 2024 to \$77.60 per MWh in the first three months of 2025. Energy (70.2 percent), capacity (4.6 percent) and transmission charges (23.0 percent) are the three largest components of the total cost of wholesale power, comprising 97.8 percent of the total cost per MWh in the first three months of 2025. Starting in the third quarter of 2019, the cost of transmission per MWh of wholesale power has been higher than the cost of capacity.

Energy prices in PJM in the first three months of 2025 were set, on average, by units operating at, or close to, their short run marginal costs, although this was not always the case. This is

Page 2 of 2 MARKET MONITOR FINDS PJM WHOLESALE ELECTRICITY MARKETS COMPETITIVE

evidence of generally competitive behavior and competitive market outcomes, although high markups for some marginal units did affect prices.

The real-time hourly average load in the first three months of 2025 increased by 7.1 percent from the first three months of 2024, from 89,478 MWh to 95,801 MWh.

In the first three months of 2025, generation from coal units increased 31.3 percent, generation from natural gas units decreased 0.8 percent, generation from oil units increased 91.8 percent, generation from wind units increased 12.6 percent, and generation from solar units increased 61.8 percent compared to the first three months of 2024.

Net revenue is a key measure of overall market performance as well as a measure of the incentive to invest in generation to serve PJM markets. Theoretical energy market net revenues increased by 45 percent for a new combustion turbine (CT), increased by 51 percent for a new combined cycle (CC), increased by 202 percent for a new coal plant (CP), increased by 67 percent for a new nuclear plant, increased by 243 percent for a new diesel (DS), increased by 82 percent for a new onshore wind installation, increased by 80 percent for a new offshore wind installation and increased by 121 percent for a new solar installation.

Total energy uplift charges increased by \$385.3 million, or 498.4 percent, in the first three months of 2025 compared to the first three months of 2024, from \$77.3 million to \$462.6 million.

When there are binding transmission constraints and locational energy price differences, customers pay more for energy than generation is paid to produce that energy. The difference is congestion revenue. Congestion revenue belongs to customers and should be returned to customers. Total congestion increased by \$182.3 million or 56.8 percent, from \$321.0 million in the first three months of 2024 to \$503.3 million in the first three months of 2025. Only 51.3 percent of total congestion paid by customers for the first ten months of the 2024/2025 planning period was returned to customers through the ARR and self-scheduled FTR revenues offset. The goal of the FTR market design should be to ensure that customers have the rights to 100 percent of the congestion that customers pay. Customers have received \$4.8 billion less in congestion revenues than customers should have received, from the 2011/2012 planning period through the first ten months of the 2024/2025 planning period, as a result of flaws in the PJM FTR market design.

The Independent Market Monitor (also known as the IMM, the Market Monitoring Unit or the MMU) evaluates the operation of PJM's wholesale markets to identify ineffective market rules and tariff provisions, proposes improvements to market rules and tariff provisions when needed, monitors compliance with and implementation of the market rules, identifies potential anticompetitive behavior by market participants and provides comprehensive market analysis critical for informed policy and decision making. Joseph Bowring, the Market Monitor, ensures the independence and objectivity of the monitoring program.

For a copy of the State of the Market Report, visit Monitoring Analytics at: https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2025.shtml