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FOR IMMEDIATE RELEASE

2024 State of the Market Report for PJM

MARKET MONITOR FINDS PJM WHOLESALE ELECTRICITY MARKETS COMPETITIVE

(Eagleville, PA, March 13, 2025) PJM Interconnection's wholesale electric energy market produced competitive results during 2024, according to the *2024 State of the Market Report for PJM* 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 2024," Bowring said. "Our analysis concludes that the results of the July 2024 capacity market auction for the 2025/2026 delivery year were not competitive."

Energy prices increased in 2024, from 2023. The real-time load-weighted average LMP in 2024 increased \$2.66 per MWh, or 8.5 percent from 2023, from \$31.08 per MWh to \$33.74 per MWh. Of the \$2.66 per MWh increase, \$1.39 per MWh (52.4 percent) was in the transmission constraint penalty factor component of LMP, \$0.50 per MWh (18.9 percent) was in the fuel and consumables cost components of LMP, -\$0.05 per MWh (-1.9 percent) was in the emissions cost components of LMP, \$0.10 per MWh (3.7 percent) was in the scarcity component of LMP, and \$0.16 per MWh (6.2 percent) was in the market power components of LMP.

The total cost of wholesale power increased \$2.46 per MWh, or 4.6 percent, from \$53.08 per MWh in 2023 to \$55.54 per MWh in 2024. Energy (58.7 percent), capacity (6.6 percent) and transmission charges (31.9 percent) are the three largest components of the total cost of wholesale power, comprising 97.1 percent of the total cost per MWh in 2024. 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 2024 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 evidence of generally competitive behavior and competitive market outcomes, although high markups for some marginal units did affect prices.

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The real-time hourly average load in 2024 increased by 3.6 percent from 2023, from 86,193 MWh to 89,274 MWh.

In 2024, generation from coal units increased 1.4 percent, generation from natural gas units increased 3.5 percent, generation from oil units increased 53.1 percent, generation from wind units increased 8.5 percent, and generation from solar units increased 58.1 percent compared to 2023.

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 21 percent for a new combustion turbine (CT), increased by 9 percent for a new combined cycle (CC), increased by 67 percent for a new coal plant (CP), increased by 4 percent for a new nuclear plant, increased by 313 percent for a new diesel (DS), increased by 6 percent for a new onshore wind installation, increased by 12 percent for a new offshore wind installation and increased by 17 percent for a new solar installation.

Total energy uplift credits increased by \$113.0 million, or 72.0 percent, in 2024 compared to 2023, from \$156.9 million to \$269.9 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 \$685.8 million or 64.2 percent, from \$1,068.6 million in 2023 to \$1,754.4 million in 2024. Only 69.9 percent of total congestion paid by customers for the first seven 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 \$4.6 billion less in congestion revenues than load should have received, from the 2011/2012 planning period through the first seven 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/2024.shtml](https://www.monitoringanalytics.com/reports/PJM%20State%20of%20the%20Market/2024.shtml)