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*FOR IMMEDIATE RELEASE*

*2023 Annual State of the Market Report for PJM*

## **MARKET MONITOR FINDS PJM WHOLESALE ELECTRICITY MARKETS COMPETITIVE**

(Eagleville, PA, March 14, 2024) PJM Interconnection's wholesale electric energy market produced competitive results during 2023, according to the *2023 Annual 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 2023," Bowring said.

Energy prices decreased significantly in 2023 from 2022. The real-time load-weighted average LMP in 2023 decreased 61.2 percent from 2022, from \$80.14 per MWh to \$31.08 per MWh. This was the largest annual price decrease (\$49.06 per MWh) and the largest annual percent price decrease (61.2 percent) since the creation of PJM markets in 1999. Of the \$49.06 per MWh decrease, 64.7 percent was a direct result of the decreased costs of fuel, emissions allowances, and consumables. Both coal and natural gas prices were lower in 2023 compared to 2022. The real-time hourly average load in 2023 decreased by 3.0 percent from 2022, from 88,884 MWh to 86,193 MWh.

The total price of wholesale power decreased from \$105.30 per MWh in 2022 to \$53.42 per MWh in 2023, a decrease of 49.3 percent. Energy, capacity and transmission charges are the three largest components of the total price of wholesale power, comprising 96.7 percent of the total price per MWh in 2023. 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 2023 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.

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

In 2023, generation from coal units decreased 27.9 percent, generation from natural gas units increased 8.4 percent, generation from oil units decreased 0.8 percent, generation from wind units decreased 8.1 percent, and generation from solar units increased 20.1 percent compared to 2022.

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 net revenues from the energy market decreased for all unit types in 2023 compared to 2022. Theoretical energy market net revenues decreased by 44 percent for a new combustion turbine, 46 percent for a new combined cycle, 67 percent for a new coal unit, 57 percent for a new nuclear plant, 61 percent for a new onshore wind installation, 62 percent for a new offshore wind installation and 65 percent for a new solar installation.

Total energy uplift charges decreased by \$125.7 million, or 44.2 percent, in 2023 compared to 2022, from \$284.5 million to \$158.7 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 decreased by \$1,432.7 million or 57.3 percent, from \$2,501.3 million in 2022 to \$1,068.6 million in 2023. But only 70.0 percent of total congestion paid by customers for the first seven months of the 2023/2024 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. Load has received \$4.0 billion less in congestion revenues than load should have received, from the 2011/2012 planning period through the first seven months of the 2023/2024 planning period, as a result of flaws in the PJM FTR market design.

The Independent Market Monitor (also known as the Market Monitoring Unit or 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: [http://www.monitoringanalytics.com/reports/PJM\\_State\\_of\\_the\\_Market/2023.shtml](http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2023.shtml)