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*FOR IMMEDIATE RELEASE*

*2021 Quarterly State of the Market Report for PJM: January through September*

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

(Eagleville, PA November 11, 2021) PJM Interconnection's wholesale electric energy market produced competitive results during the first nine months of 2021, according to the *2021 Quarterly State of the Market Report for PJM: January through September* 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 nine months of 2021," Bowring said.

Energy prices increased significantly in the first nine months of 2021 from the very low levels in 2020. The real-time, load-weighted average LMP in the first nine months of 2021 increased 68.1 percent from the first nine months of 2020, from $21.22 per MWh to $35.68 per MWh. Of the $14.46 per MWh increase, 91.5 percent was a direct result of higher fuel costs, particularly higher natural gas prices. The real-time, average hourly load in the first nine months of 2021 increased by 4.2 percent from the first nine months of 2020, from 85,886 MWh to 89,515 MWh.

Energy prices in PJM in the first nine months of 2021 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.

The total cost of wholesale power consists primarily of the cost of energy, capacity and transmission. The cost of energy has been the largest component, the cost of capacity has been the second largest and the cost of transmission service has been the third largest. In 2020, for the first time since the start of the PJM Capacity Market in 2007, the cost of transmission was greater than the cost of capacity for an entire year. The cost of transmission continued to be greater than the cost of capacity in the first nine months of 2021. The total cost of wholesale power increased by 37.6 percent, from $43.67 in the first nine months of 2020 to $60.10 in the first nine months of 2021.

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Higher energy prices and higher gas costs changed the relative economics of coal and gas units in the first nine months of 2021. Coal generation increased 30.9 percent and gas generation decreased 6.4 percent in the first nine months of 2021 compared to the first nine months of 2020. The changes in relative fuel prices slowed but did not change the long term declining share of coal and the increasing share of gas. The share of total PJM energy produced from coal was 24.0 percent in the first nine months of 2021, down from 55.0 percent in the first nine months of 2008, and the share of energy produced from natural gas was 37.0 percent, greater than any other fuel source, and up from 7.7 percent in the first nine months of 2008.

Net revenue is a key measure of overall market performance as well as a measure of the incentive to invest in new generation to serve PJM markets. Theoretical net revenues from the energy market increased for all unit types in the first nine months of 2021 compared to the first nine months of 2020. Theoretical net revenues increased by 42 percent for a new combustion turbine, 50 percent for a new combined cycle, 974 percent (from a level near zero in 2020) for a new coal unit, and 68 percent for a new nuclear plant.

Total energy uplift charges increased by $72.2 million, or 123.3 percent, in the first nine months of 2021 compared to the first nine months of 2020, from $58.6 million to $130.8 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. Congestion belongs to customers and should be returned to customers. Total congestion increased by $218.5 million or 55.1 percent, from $396.1 million in the first nine months of 2020 to $614.6 million in the first nine months of 2021. But only 61.1 percent of total congestion paid by customers for the first four months of the 2021/2022 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.

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/2021.shtml