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## FOR IMMEDIATE RELEASE

2017 State of the Market Report for PJM

## MARKET MONITOR FINDS PJM WHOLESALE ELECTRICITY MARKETS COMPETITIVE

(Eagleville, PA March 8, 2018) PJM Interconnection's wholesale electric energy and capacity markets produced competitive results during 2017, according to the 2017 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 and Capacity Markets were competitive in 2017," Bowring said.

Energy prices were higher as a result of higher fuel prices but remained low. The load-weighted average real-time LMP was 6.0 percent higher in 2017 than in 2016, \$30.99 per MWh versus \$29.23 per MWh. PJM real-time load-weighted energy market prices were lower in 2017 than in all but two other years in PJM history since the beginning of the competitive wholesale market on April 1, 1999.

Energy prices in PJM in 2017 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 resulted in a competitive energy market outcome.

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. Net revenues are significantly affected by fuel prices, energy prices and capacity prices. Energy prices and fuel prices were higher in 2017 than in 2016 and capacity prices lower on average. Gas prices increased more than energy prices and CTs and CCs ran with lower margins as a result. Coal prices increased more than energy prices but less than gas prices and CPs ran for slightly more hours and margins varied by zone. In 2017, a new CC would have been profitable in 11 of 20 zones while a new CT, a new coal plant and a new nuclear plant would have been significantly unprofitable. In 2017, average energy market net revenues decreased by 54 percent for a new CT, 9 percent for a new CC, 2 percent for a new coal plant, and 4 percent for a new solar installation

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compared to 2016. Average energy market net revenues increased by 49 percent for a new diesel unit, 11 percent for a new nuclear plant, and 11 percent for a new wind installation compared to 2016.

Total energy uplift charges decreased by \$7.5 million or 5.5 percent, from \$136.7 million in 2016 to \$129.1 million in 2017.

Total payments for demand response programs decreased by \$154.4 million or 23.5 percent, from \$657.1 million in 2016 to \$502.6 million in 2017. The capacity market is the primary source of revenue to participants in PJM demand response programs. In 2017, payments to demand response resources in the capacity market decreased by \$153.8 million or 23.7 percent, while payments to demand resources in the economic program decreased by \$0.9 million or 26.3 percent decrease.

Congestion costs decreased by \$326.1 million or 31.9 percent, from \$1,023.7 million in 2016 to \$697.6 million in 2017. Congestion reflects the underlying characteristics of the power system, including the capability of transmission facilities, the fuel costs and geographic distribution of generation facilities and the geographic distribution of load. Congestion is neither good nor bad, but is a direct measure of the extent to which there are multiple marginal generating units dispatched to serve load as a result of transmission constraints and the costs of operating those units.

ARR and FTR revenues offset 98.1 percent of total congestion costs for load during the 2016/2017 planning period but offset only 79.4 percent of total congestion costs for the first seven months of the 2017/2018 planning period, which was the first planning period in which new rules required the allocation of balancing congestion to load instead of FTR holders.

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: <u>http://www.monitoringanalytics.com/reports/PJM\_State\_of\_the\_Market/2017.shtml</u>