



FOR IMMEDIATE RELEASE

2018 Quarterly State of the Market Report for PJM: January through September

MARKET MONITOR FINDS PJM WHOLESALE ELECTRICITY MARKETS COMPETITIVE

(Eagleville, PA November 8, 2018) PJM Interconnection's wholesale electric energy market produced competitive results during the first nine months of 2018, according to the *2018 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 2018," Bowring said.

Energy prices were significantly higher, the result of a combination of higher demand and higher natural gas and coal costs. The load-weighted average real-time LMP was 29.9 percent higher in the first nine months of 2018 than in the first nine months of 2017, \$39.43 per MWh versus \$30.36 per MWh.

Energy prices in PJM in the first nine months of 2018 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 and existing generation to serve PJM markets. Energy net revenues are significantly affected by energy prices and fuel prices. Energy prices and fuel prices were both higher and more volatile in the first nine months of 2018 than in the first nine months of 2017. The result was higher margins for all unit types. In the first nine months of 2018, average energy market net revenues increased by 70 percent for a new combustion turbine (CT), 33 percent for a new combined cycle (CC), 202 percent for a new coal plant (CP), 37 percent for a new nuclear plant (NP), 461 percent for a new diesel (DS), 22 percent for a new wind installation, and 10 percent for a new solar installation compared to the first nine months of 2017.

-MORE-

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

Total energy uplift charges increased by \$92.6 million or 109.4 percent, from \$84.6 million in the first nine months of 2017 to \$177.2 million in the first nine months of 2018.

Total payments for demand response programs increased by \$64.0 million or 17.2 percent, from \$371.1 million in the first nine months of 2017 to \$435.1 million in the first nine months of 2018. The capacity market is the primary source of revenue to participants in PJM demand response programs. In the first nine months of 2018, payments to demand response resources in the capacity market increased by \$60.9 million or 16.7 percent, while payments to demand resources in the economic program increased by 0.5 percent.

Congestion costs increased by \$660.8 million or 145.1 percent, from \$455.4 million in the first nine months of 2017 to \$1,116.2 million in the first nine months of 2018. 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 95.9 percent of total congestion costs for the first four months of the 2018/2019 planning period, which was the first planning period in which new rules allocated auction surplus to load. ARR and FTR revenues offset 50.6 percent of total congestion costs for load during 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: http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2018.shtml