



2009 Quarterly State of the Market Report for PJM:
January through June

Monitoring Analytics, LLC
Independent Market Monitor for PJM

August 14, 2009



PREFACE

PJM has filed to amend Attachment M (PJM Market Monitoring Plan) to the PJM Open Access Transmission Tariff in order to provide, consistent with Order No. 719,¹ a requirement that the Market Monitoring Unit (MMU) “report on aggregate market performance on no less than a quarterly basis to Commission staff, to staff of interested state commissions, and to the management and board of directors of the RTOs or ISOs.” Upon acceptance by the Commission, Section VI.A of Attachment M would read:²

The Market Monitoring Unit shall prepare and submit contemporaneously to the Commission, the State Commissions, the PJM Board, PJM Management and to the PJM Members Committee, annual state-of-the-market reports on the state of competition within, and the efficiency of, the PJM Markets, and quarterly reports that update selected portions of the annual report and which may focus on certain topics of particular interest to the Market Monitoring Unit. The quarterly reports shall not be as extensive as the annual reports. In its annual, quarterly and other reports, the Market Monitoring Unit may make recommendations regarding any matter within its purview. The annual reports shall, and the quarterly reports may, address, among other things, the extent to which prices in the PJM Markets reflect competitive outcomes, the structural competitiveness of the PJM Markets, the effectiveness of bid mitigation rules, and the effectiveness of the PJM Markets in signaling infrastructure investment. The annual reports shall, and the quarterly reports may include recommendations as to whether changes to the Market Monitoring Unit or the Plan are required.

Although the tariff language is not yet approved, Monitoring Analytics, LLC, which serves as the Market Monitoring Unit defined in Attachment M, has determined to meet the requirement for a quarterly report on the basis of the requirement established in Order No. 719. Accordingly, the MMU submits this *2009 Quarterly State of the Market Report for PJM: January through June*.

¹ 125 FERC ¶61,071 at PP 395, 413–19 (2008), *order on reh'g*, 128 FERC ¶61,059.

² PJM OATT, “Attachment M: PJM Market Monitoring Plan,” Sixth Revised Sheet No. 452–452A (proposed to become effective June 29, 2009).



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SECTION 1 – INTRODUCTION

The PJM Interconnection, L.L.C. operates a centrally dispatched, competitive wholesale electric power market that, as of June 1, 2009 had installed generating capacity of 167,454 megawatts (MW) and more than 500 market buyers, sellers and traders of electricity in a region including more than 51 million people in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.¹ As part of that function, PJM coordinates and directs the operation of the transmission grid and plans transmission expansion improvements to maintain grid reliability in this region.

PJM Market Background

PJM operates the Day-Ahead Energy Market, the Real-Time Energy Market, the Reliability Pricing Model (RPM) Capacity Market, the Regulation Market, the Synchronized Reserve Markets, the Day Ahead Scheduling Reserve (DASR) Market and the Long Term, Annual and Monthly Balance of Planning Period Auction Markets in Financial Transmission Rights (FTRs).

PJM introduced energy pricing with cost-based offers and market-clearing nodal prices on April 1, 1998, and market-clearing nodal prices with market-based offers on April 1, 1999. PJM introduced the Daily Capacity Market on January 1, 1999, and the Monthly and Multimonthly Capacity Markets in mid-1999. PJM implemented an auction-based FTR Market on May 1, 1999. PJM implemented the Day-Ahead Energy Market and the Regulation Market on June 1, 2000. PJM modified the regulation market design and added a market in spinning reserve on December 1, 2002. PJM introduced an Auction Revenue Rights (ARR) allocation process and an associated Annual FTR Auction effective June 1, 2003. PJM introduced the RPM Capacity Market effective June 1, 2007. PJM implemented the DASR Market on June 1, 2008.^{2, 3}

Total Price of Wholesale Power

The total price of wholesale power is the total price per MWh of purchasing wholesale electricity from PJM markets. The total price includes the price of energy, capacity, ancillary services, transmission service, administrative fees, regulatory support fees and uplift charges. This total price is an average price and actual prices vary by location.

Table 1-1 Total price per MWh: January through June 2009 (New Table)

Category	\$/MWh	Percent
Load Weighted Energy	\$42.48	73.1%
Capacity	\$9.76	16.8%
Transmission Service	\$3.88	6.7%
Operating Reserves (Uplift)	\$0.51	0.9%
Regulation	\$0.38	0.6%
Reactive	\$0.36	0.6%
PJM Administrative	\$0.33	0.6%
Transmission Cost Recovery	\$0.18	0.3%
Transmission Owner (Schedule 1A)	\$0.08	0.1%
Synchronized Reserves	\$0.04	0.1%
Supporting Facility	\$0.03	0.0%
Black Start Services	\$0.02	0.0%
RTO Startup and Expansion	\$0.01	0.0%
NERC/RFC	\$0.01	0.0%
Load Response	\$0.01	0.0%
Total	\$58.09	100.0%

¹ See the 2008 State of the Market Report for PJM, Volume II, Appendix A, "PJM Geography" for maps showing the PJM footprint and its evolution.

² See also the 2008 State of the Market Report for PJM, Volume II, Appendix B, "PJM Market Milestones."

³ Analysis of 2008 market results requires comparison to prior years. During calendar years 2004 and 2005, PJM conducted the phased integration of five control zones: ComEd, American Electric Power (AEP), The Dayton Power & Light Company (DAY), Duquesne Light Company (DLCO) and Dominion. By convention, control zones bear the name of a large utility service provider working within their boundaries. The nomenclature applies to the geographic area, not to any single company. For additional information on the integrations, their timing and their impact on the footprint of the PJM service territory, see the 2008 State of the Market Report for PJM, Volume II, Appendix A, "PJM Geography."



Conclusions

This report assesses the competitiveness of the markets managed by PJM during the first six months of 2009, including market structure, participant behavior and market performance. This report was prepared by and represents the analysis of the independent Market Monitoring Unit (MMU) for PJM.

The MMU concludes that in the first six months of 2009:

- The Energy Market results were competitive;
- The Capacity Market results were competitive;
- The Regulation Market results were competitive;
- The Synchronized Reserve Market results were competitive;
- The Day Ahead Scheduling Reserve Market results were competitive;
and
- The FTR Auction Market results were competitive.