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Case No. 07-796-EL-ATA Case No. 07-797-EL-ATA

October 12, 2007

Alan R. Schriber Chairman Ohio Public Utilities Commission 180 East Broad Street Columbus OH 43215-3793

#### Dear Chairman Schriber:

PJM appreciates the opportunity to comment as an interested party in Case Nos. 07-796-EL-ATA and 07-797-EL-ATA regarding Staff's comments on the FirstEnergy Companies' Proposed Bidding Process (CBP). PJM is concerned about certain misconceptions and material misunderstandings presented in this proceeding regarding the state of efficiency and competitiveness of PJM and MISO wholesale markets comprising the relevant market area for the FirstEnergy Companies. It appears that a *premise* of "the failure of wholesale markets to discipline prices to reasonable levels" has led to the conclusions presented. As our comments herein attest, wholesale markets are competitive, and LMP-based prices established in RTO markets are fair and reasonable. Additionally, the competitive LMP-based market provides reliability benefits through coordinated congestion management, operational efficiency and supply diversity across the PJM and MISO regions. Based on review of the actual facts and under a reasonable analysis, prices have not risen faster in deregulated states than regulated states, contrary to recent assertions in USA Today. A reasoned assessment of the relevant market area defining the scope of potential bidders into the CBP belies the Staff's "reasonable questions about the amount of supply that can compete with the Company's affiliated generation in a competitive process." Due to the geographic scope of the PJM and MISO wholesale markets and due to the lack of persistent transmission constraints into the region, the diversity of supply alternatives for Ohio is quite broad and extends well beyond the borders of the FirstEnergy transmission zone. Contrary to the assertion that "a coordinated market does not exist" between PJM and MISO, the fact is that PJM and MISO have implemented joint congestion management protocols in real-time operations which further facilitate interregional energy transactions. While it is true that the PJM and MISO markets are not jointly dispatched, the level of real-time coordination far exceeds what was present prior to the MISO market implementation. Prior to the regional markets, real-time coordination of interregional congestion management through economic dispatch was virtually non-existent. Under the previous bifurcated operating approach, interregional transactions were curtailed using



much less efficient transmission loading relief mechanisms which severely restricted transactions and reliability alternatives.

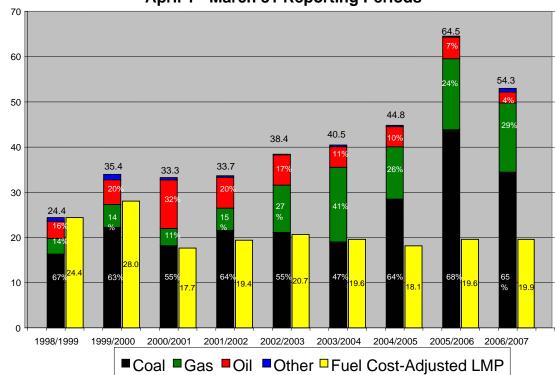
We provide the following comments for your consideration, addressing in turn the justness and reasonableness of wholesale market prices; the competitiveness of wholesale markets; the tempering impact coordinated wholesale markets have had on retail electricity rates; the successful coordination of the PJM and MISO energy markets; incorporation of local market power mitigation in PJM's automatic dispatch function in real time; and incentives for buyers and sellers to enter into forward contracts to hedge spot market price outcomes.

## Wholesale Market Prices Are Just and Reasonable

Over the past several years, concern over increases in electricity prices has risen in both traditionally regulated and deregulated jurisdictions. The primary drivers that have caused these increases are increases in fuel costs and emission control costs. Figure 1 illustrates the impact of various fuels on the average wholesale price of power in the PJM market. The stacked bars on the chart show the contribution of each fuel type to the wholesale power price. For example, in 2006/2007 the average price was \$54.30 per MWh; 65% of this price, or \$35.30, was driven by coal-fired generation, 29% was driven by gas-fired generation and 4% was driven by oil-fired generation. The yellow bars to the left of the stacked bars illustrate what the average wholesale price would have been if fuel costs had remained at the levels they were in 1998/1999. As illustrated by the trend shown in Figure 1, the fuel cost adjusted prices have actually fallen since 1999/2000. This fuel-cost adjusted price calculation demonstrates that the underlying fuel costs are the primary cause of wholesale energy price increases over this period. The trend of decreasing fuel-cost adjusted prices also demonstrates the benefits of more efficient operations under the regional wholesale market as the markets have expanded their regional scope.

PJM Load-Weighted and Fuel-Cost-Adjusted LMP by Fuel Factors

April 1 - March 31 Reporting Periods



\$/MWH



As clearly articulated in the paper by John Chandley attached to this letter, locational marginal pricing (LMP) assures that electricity consumers are <u>reliably</u> served at the lowest-cost combination of power plants and demand-side resources available to the RTO. First and foremost, RTOs are responsible for assuring the reliability of the high voltage transmission network. As Chandley eloquently establishes, nodal LMP price signals consistently encourage generators and price-responsive demand-side resources to follow the RTO's dispatch instructions: spot market pricing and maintaining reliability are inextricably linked. Chandley explains that RTO spot prices must reflect the market value of the energy each generator produces at the time and place it is produced, and that spot market prices encourage generators to submit offers at or near their marginal operating costs. Among other things, Chandley explains the threats to reliability that pay-as-bid and split-savings approaches pose, dispels the myth that the highest cost resource on the system "sets the clearing price", and demonstrates that rents obtained by low-cost plants under an LMP regime do not provide "unjust enrichment."

As illustrated by the Chandley paper and by the price analysis shown in Figure 1, LMP prices are just and reasonable. They reflect the cost of maintaining system reliability, and the recent increases in wholesale prices are not driven by the exercise of market power or a faulty market design. The competitive performance of the wholesale market is independently reviewed by the PJM market monitor and by FERC as explained below.

## Wholesale Markets Are Competitive

The PJM Market Monitor's 2006 State of the Market Report certifies that PJM's Energy Market is competitive, as well as its Capacity, Spinning, and FTR Markets. The competitiveness of PJM's Energy Market is reflected in the Market Monitor's findings regarding the extent and degree of price markups over costs in generator offers submitted into the PJM market. The PJM Market Monitor determined that in 2006, load-weighted unit markup indices were negligible. According to the Market Monitor's Report, the markup component for units setting marginal prices was \$1.54 per MWh. The report stated that generator markup accounted for only \$1.54, or 2.9 percent, of the average, load-weighted LMP in PJM in 2006. These facts provide clear evidence that the wholesale market design provides incentive for generators to submit competitive offers and provide direct evidence that the wholesale market results are competitive.

### Impact of the Presence of Coordinated Wholesale Power Markets on Retail Electricity Rates

Critics of retail deregulation often rely on statistics purporting to show that it, in conjunction with wholesale electricity markets, has resulted in increased retail prices in deregulated states. Such comparisons of rates in regulated and deregulated states often neglect to consider that to begin with, deregulation was more likely to be implemented in states facing higher regulated rates than states which did not restructure their retail electricity markets. Often intended to buttress a preconceived notion, such comparisons do not attempt to isolate and control for underlying economic factors affecting retail electricity prices such as retail market structure, historic fuel mix, and the establishment of retail access. As a result, such comparisons mask the beneficial effects attributable to the implementation of coordinated wholesale markets by PJM and other RTOs/ISOs. PJM recently commissioned a study<sup>1</sup> to disentangle the impacts of underlying economic factors from the effects attributable to the presence of two coordinated wholesale markets, PJM and NYISO. The LECG study found that the implementation of coordinated markets in PJM and NYISO is producing rate reductions that are saving consumers between \$430 million and \$1.3 billion annually, compared to the charges consumers would have faced under a traditional regulatory regime. The study overcame the conceptual difficulties inherent in evaluating the economic impact of coordinated markets on consumers by distinguishing the impact on retail electricity rates of economic trends, such as rising fuel prices, from the impact of implementing coordinated markets; controlling for the impact on average retail rates of differences in retail access programs across utilities and regions; and finding an appropriate way to take into account the impact of

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<sup>&</sup>lt;sup>1</sup> Analysis of the Impact of Coordinated Electricity Markets on Consumer Electricity Charges, Scott M. Harvey, Bruce M. McConihe and Susan L. Pope, LECG LLC, November 20, 2006.



differences in regional generation fuel mix, in particular gas dependence, on changes over time in average retail rates. Among other findings, the study revealed that since 1997, the level of gas dependence has declined in the coordinated market states of Delaware, New Jersey and New York while rising in traditional market structure states such as Alabama and Florida.

# PJM's and MISO's Energy Markets Are Effectively Coordinated

Some entities have raised unsubstantiated concerns over the sufficiency of coordination between MISO's and PJM's wholesale markets, which together generally comprise the relevant market area for FirstEnergy. FERC recently reaffirmed its conclusions that, through their Joint Operating Agreement (JOA), PJM and MISO have achieved levels of coordination unequalled by other RTOs.<sup>2</sup> Pursuant to the Agreement, PJM and MISO coordinate their re-dispatch on a least-cost basis, with financial settlements through which each RTO is compensated for the re-dispatch it provides to the other RTO. FERC's Order Denying Rehearing (Order) dismisses the complainant's concern over differences between shadow prices and proxy bus prices at the PJM-MISO border, pointing out that FTRs may offset such costs, and that PJM's implementation of marginal losses and recently implemented identical treatment by MISO and PJM of dynamically scheduled generation units will reduce the level of price separation observed at the RTO's borders. FERC's Order concludes there are no major barriers to inter-RTO trades, as evidenced by intensive hourly cross-border activity. FERC's Order acknowledges that the Market Monitors for both PJM and MISO have analyzed price convergence between the RTOs and concludes that while some improvement is warranted, the JOA is operating well, with hourly absolute differences in border prices lower in 2006 than in 2005. Indeed, FERC highlights the PJM Market Monitor's finding that the simple average interface price difference suggests that competitive forces prevent price differentials from persisting.

As FERC acknowledges in its Order, "MISO and PJM already operate two well-functioning competitive markets and closely coordinate those competitive markets under the JOA." In short, there is no empirical basis to justify an assertion that there is no coordinated market between PJM and MISO.

#### PJM Markets Are Effectively Monitored for the Exercise of Market Power

PJM's markets are monitored in real time by the independent Market Monitor to detect the exercise of market power. Any time that a generation unit is dispatched out-of-merit economic order to relieve congestion, and that generator fails the Three Pivotal Supplier test, the automated market power mitigation software mitigates that generator's offer to a level equal to cost plus ten percent. Generation units are required to provide and update cost schedules to PJM, and the Market Monitor is authorized by FERC to audit the cost schedules submitted. Automated and real time monitoring for the exercise of market power assures that small transactions will not go unnoticed or unmitigated and will not have large and unforeseen impacts on long term prices.

FERC has established the scope and oversees the activities of PJM's Market Monitor.<sup>3</sup> Responsibilities of the PJM's Market Monitoring Unit include the duty to monitor matters related to transmission congestion pricing, exercise of market power, structural problems in the PJM market, design flaws in the operating rules, and compliance with the standards, procedures, or practices as set forth in the PJM OATT, Operating Agreement, Reliability Agreement, and the PJM Manuals. Notably, the PJM Market Monitor is authorized by FERC to report its findings directly to that agency. Furthermore and as noted above, in its 2006 State of the Market Report, the Market Monitoring Unit certified the competitiveness of PJM's Energy Market, as well as its Capacity, Spinning, and FTR Markets.

<sup>&</sup>lt;sup>2</sup> EL06-97-001, Order Denying Rehearing of February 8, 2007 Order Dismissing Wisconsin Public Service Corporation Complaint, September 24, 2007.

<sup>&</sup>lt;sup>3</sup> ER98-3527-000, Order Approving Market Monitoring Plan as Modified, March 10, 1999.



# <u>Spot Market Price Outcomes Provide the Incentive for Buyers and Sellers to Hedge by Entering Into Forward Contracts</u>

Spot market transactions account for only a small proportion of transactions occurring in the PJM Energy Market. According to the PJM Market Monitor's 2006 State of the Market Report, spot market transactions accounted in 2006 for only 6.1 percent of market transactions, with bilateral contracts accounting for 92.8 percent. Additionally, the spot market provides price transparency to validate forward market prices. In doing so, it establishes an incentive for buyers and sellers to enter into forward contracts to hedge spot market volatility. The spot market allows participants to rationalize price. But the discipline it provides does not allow entities to "beat the market" by arriving at terms and conditions that do not reflect the market value of generation, which internalizes the costs associated with maintaining system reliability. I implore you again to consider the rationale John Chandley sets forth in the attached paper regarding wholesale market pricing, and to reject the hyperbole and rhetoric resounding among those market participants seeking to satisfy private interests rather than public interests.

Sincerely,

Andrew L. Ott/s

Andrew Ott Vice President, Markets

cc: Commissioner Paul Centolella Commissioner Rhonda Fergus Commissioner Valerie Lemmie Commissioner Donald Mason

Enclosure:

Attachment 1: John Chandley, "How RTOs Set Spot Market Prices – and How It Keeps the Lights On"

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Summary: Correspondence Letter with comments and attachment electronically filed by Ms. Susan M Kelly on behalf of PJM Interconnection