

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

PJM Interconnection, L.L.C.

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Docket No. ER14-504-000

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**COMMENTS OF THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

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**I. INTRODUCTION**

The Pennsylvania Public Utility Commission (PA PUC) hereby submits the following Comments in support of PJM L.L.C.'s (PJM) proposed tariff revisions filed with the Federal Energy Regulatory Commission (FERC) on November 29, 2013, at this docket which modify certain aspects of the Reliability Pricing Model (RPM). As explained below, the PA PUC supports PJM's tariff revisions and requests FERC approve the filing.

**II. BACKGROUND**

On November 29, 2013, PJM filed revisions to its Open Access Transmission Tariff (OATT) and its Reliability Assurance Agreement (RAA) to correct aspects of the RPM implemented in 2011 that have resulted in unintended adverse implications for the PJM region's long term ability to procure quantities of product needed to assure reliability. As background, PJM asserts that certain RPM changes have adversely affected the impact of the sloped demand curve which is the administrative mechanism approved by FERC for procurement of products in the annual capacity auction process

known as the Base Residual Auction (BRA). These changes to the RPM coincided with implementation of new demand resource products in the BRA with differing levels of availability such as Limited Demand Response (LDR) and Extended Summer Demand Response (ESDR).<sup>1</sup>

Under the existing version of RPM, PJM alleges that the annual minimum required megawatt (MW) levels (or minimum resource requirements) are set for the auction for the capacity product with the greatest availability (i. e. annual resources).<sup>2</sup> PJM further explains that these minimum resource requirements set a floor for the amount of annual resources that clear the auction. Once the reliability requirement for annual resources is met, the auction algorithm immediately turns to clearing the lower availability products as they have a lower price. Consequently, PJM alleges the model automatically selects the lower-priced, lower-availability product because satisfaction of the minimum resource requirement for the higher availability products allows it to seek out the lowest price offers which are primarily lower quality DR products such as LDR and ESDR.<sup>3</sup> Additionally, PJM contends that the model's preference for lower-

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<sup>1</sup> Limited Demand Response is defined as a demand resource available for use from June through September and may only be called between 12 p. m. and 8 p. m. EST for at least ten service interruptions a year of at least six hours' duration. Extended Summer Demand Response is defined as a demand resource available May through October between 10 a. m. and 10 p. m. EST for an unlimited number of interruptions of at least ten hours. Annual demands response is available throughout the year for periods of at least ten hours.

<sup>2</sup> Annual resources may consist of generation, annual demand response and energy efficiency products.

<sup>3</sup> In support of its tariff filing, PJM provides the affidavit of Professor Benjamin F. Hobbs of Johns Hopkins University who originally provided critical theoretical support at FERC for the implementation of the sloped demand curve that RPM utilizes today. Professor Hobb's affidavit confirms that PJM's current version of the model has re-introduced the vertical demand curve which by definition limits the availability of higher quality products. PJM provides both hypothetical and actual illustrations of the impact of the current RPM mechanism on BRA prices at pp. 12-13 of its filing.

availability products is exacerbated by the option for DR providers to submit coupled offers for a single resource that can qualify for two or more product types.<sup>4</sup>

PJM submits that its prior iteration of the RPM mechanism has inadvertently established a vertical demand curve at the minimum requirement for annual resources. This result occurs every time annual resources receive a price premium thus making it less likely that annual resources clearing the auction will intersect with the sloped demand curve that establishes the clearing price for capacity. PJM alleges that this results in a preponderance of lower quality, lower priced LDR displacing higher quality annual resources and ESDR out to the sloped demand curve.<sup>5</sup> In essence, PJM asserts that the current model is deficient in how it selects products for clearance resulting in the suppression of higher quality annual resources and the clearing of larger quantities of lower quality LDR. In the long term, each megawatt procured of more limited resources displaces more valuable annual resources sending incorrect capacity price signals. PJM asserts that these price signals may lead to the premature retirement of generation resources and dissuade investors from developing new annual resources.<sup>6</sup> Also, PJM is concerned that LDR may not perform when needed. PJM avers that this deficiency in the model may lead to lessened reliability and more price volatility.

PJM proposes to change the process by which resources clear in the RPM auction such that the more limited, lower value resources will only be allowed to clear up to a

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<sup>4</sup> PJM November 29, 2013 Filing at 2-3.

<sup>5</sup> *Id.* at 16-18.

<sup>6</sup> *Id.* at 18.

pre-determined ceiling. Accordingly, PJM proposes to replace the minimum resource requirement with binding resource constraints applied to the more limited resources such as LDR. PJM proposes to implement these changes starting with the BRA to be held in May 2014 for the 2017/2018 Delivery Year.<sup>7</sup>

Specifically, PJM proposes to retire the Minimum Annual Resource (MAR) and Minimum Extended Summer Resource (MESR) Requirements and create a Limited Resource Constraint (LCR) and a Sub-Annual Resource Constraint (SARC). In effect, PJM proposes to replace minimum “floors” for annual products with defined constraints on LDR and ESDR. The LCR will apply to LDR while the SARC will apply to both LDR and ESDR. Both of these constraints will rely on reliability targets that the FERC has previously approved for LDR and ESDR. PJM states that these FERC-approved reliability targets appropriately define the quantities of the more limited resources that can be procured without negatively affecting reliability. Finally, PJM proposes to reduce the LCR and SARC by the 2.5% Short-Term Resource Procurement Target (STRPT) (“the 2.5% hold-back”) to properly reflect the purpose of the STRPT.<sup>8</sup>

On December 2, 2013, the FERC issued an official notice of PJM’s filing and established a comment deadline of December 20, 2013.

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<sup>7</sup> *Id.* at 24-25.

<sup>8</sup> *Id.* at 20-21. FERC established the STRTP specifically to allow short lead time resources like LDR to provide capacity through the incremental auction.

### III. COMMENTS

The PA PUC is a retail choice state and has been a national leader in promoting retail competition since the 1997 enactment of the Electricity Generation Customer Choice and Competition Act.<sup>9</sup> A significant portion of PJM load is located in Pennsylvania. As a consequence, the PA PUC monitors closely any modifications to the RPM mechanism to ensure that these changes are consistent with the growth of retail markets, ensuring electric service reliability and enhancing retail choice opportunities for Pennsylvania electric customers.

The PA PUC supports PJM's proposed tariff revisions to the RPM.<sup>10</sup> The PA PUC has endorsed the development of the RPM as an effective mechanism for promoting necessary investment in capacity resources and efficiently selecting capacity resources through PJM's auction process. The PA PUC contends that the RPM has operated in a reasonably effective fashion that contributes to a vibrant wholesale electric market by promoting investments in capacity resources and by providing resource adequacy, reliability and relative price stability for the entire PJM region.

The PA PUC recognizes, however, that RPM is an evolving model and corrections to the proper functioning of that model need to be made when actual market results indicate that the auction process is being adversely impacted. For the reasons that follow, the PA PUC supports PJM's proposed revisions to its OATT and RAA as reasonable modifications to correct inadvertent results caused by changes to the RPM

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<sup>9</sup> 66 Pa. C. S. §§ 2801-2812.

<sup>10</sup> The PA PUC intervened in this proceeding on December 3, 2013.

introduced in 2011, namely the introduction of new demand resource products and the method for clearing those products in the RPM.

As the PA PUC understands the proposal, PJM proposes to correct the unintended consequence of RPM selection of LDR over more valuable annual resources. The proposed changes will reverse the current unintended preference for selection of excessive amounts of LDR and ESDR to a model that favors the selection of higher valued, more reliable annual resources in a manner that reduces price volatility. The MAR and MESR would be replaced by the LRC and SARC in a manner that serves as “hard caps” on the amount of LDR and ESDR that clear the auction. These changes would be implemented in the 2014 BRA for the 2017-2018 Delivery Year.

The PA PUC shares PJM’s concerns that the current RPM mechanism has resulted in increased clearing of lower value, lower priced LDR at the expense of more reliable annual resources which include both traditional generation and annual demand response products. PJM’s recitation of actual 2015-2016 BRA results in its tariff filing supports this conclusion.<sup>11</sup> Moreover, the PA PUC closely monitors PJM’s capacity auctions and is keenly aware of the increased quantity of LDR clearing those auctions.

The PA PUC believes that LDR is a resource with some value in the capacity market but LDR also has inherent limitations, such as limited availability, which raise real concerns about improper price signals being sent to the market when excessive amounts of LDR clear in the auction while other higher value, more reliable resources, such as traditional generation and annual demand products are prevented from clearing

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<sup>11</sup> PJM November 29, 2013 Filing at 13.

the RPM auction. PJM's reliance on the current RPM mechanism without correcting for the deficiencies identified in its filing may result in the overvaluation of LDR and ESDR in the auction process. This result leads to inaccurate price signals being sent to existing and potential capacity resources that could lead to additional retirements of base-load generation facilities coupled with investor reluctance to invest in new generation resources. This concern is more than theoretical for Pennsylvania in light of recent closures of coal-fired, base-load facilities in the western part of the state. While the reasons for these retirements were driven more by the costs associated with environmental considerations, the PA PUC is keenly aware that other factors such as excessive clearing of lower quality resources at the expense of annual resources may result in additional plant retirements.

The PA PUC recognizes that PJM's proposal to cap the amount of LDR that can clear the BRA may have the short-term impact of raising the price of capacity insofar as lower cost resources will be replaced with higher cost annual resources. However, the PA PUC also recognizes that the long-term benefits, both in terms of increased reliability and assurance of resource adequacy into the future, should contribute to a more stable capacity pricing environment which operates to the benefit of all market participants. Indeed, the proper price signals for capacity are essential to ensure adequate investment in capacity resources and the reliability that comes with that investment.

#### IV. CONCLUSION

For the foregoing reasons, the PA PUC respectfully requests that the Commission consider its Comments in this proceeding and approve PJM's tariff filing.

Respectfully submitted,

/s/ James P. Melia

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**CERTIFICATE OF SERVICE**

I hereby certify that the foregoing document has been served in accordance with 18 C.F.R. Sec. 385.2010 upon each person designated on the official service list compiled by the Secretary in this proceeding.

James P. Melia  
James P. Melia

Dated at Harrisburg, PA this \_\_\_\_\_, 2013.