132 FERC ¶ 61,032
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
John R. Norris, and Cheryl A. LaFleur.

Virginia Electric and Power Company | Docket No. EL10-69-000

v.

PJM Interconnection, L.L.C.

ORDER GRANTING COMPLAINT

(Issued July 15, 2010)

1. On May 25, 2010, Virginia Electric and Power Company (VEPCO) filed a complaint against PJM Interconnection, LLC (PJM) alleging that PJM improperly changed its load forecasting methodology for the Dominion Zone for the 2010-2011 Delivery Year, resulting in significant financial impact on VEPCO. In this order, the Commission grants the complaint and directs PJM to revert to its prior load forecasting methodology for the Dominion Zone, as discussed below.

I. **Background**

2. PJM uses a load forecasting model to predict annual peak loads, both for the Regional Transmission Organization (RTO) as a whole and for its zones. These load forecasts are used to establish the amount of capacity to be purchased by PJM and the allocation of the cost for such capacity to all zones on a load-ratio share basis. The model uses anticipated economic growth and normal weather conditions to predict peak load.

3. To determine the anticipated economic growth of a region, PJM has historically used the Gross Metropolitan Product (GMP), a measure of the size of the economy of a metropolitan area. VEPCO explains that the GMP is derived as the sum of the Gross Domestic Product (GDP) originating in all industries in the metropolitan area. VEPCO states that the Gross State Product (GSP), on the other hand, is a measure of a state’s economic output, and is the sum of the GDP originating in all the industries in a particular state.

4. According to VEPCO, PJM traditionally used the sum of the GMP's for Virginia Beach, Roanoke and Richmond (Three-GMP model) as the economic growth variable in its load forecasting for the Dominion Zone. VEPCO states that, in 2010, however, PJM used the Virginia GSP instead of the Three-GMP model for the Dominion Zone, but continued to use GMP for load forecasting in all other zones and for PJM as a whole.

5. The 2010-2011 Delivery Year began on June 1, 2010. The Base Residual Auction for 2010-2011 took place in January 2008 and was based on the 2007 load forecast, in which GMP was the economic driver. On February 1, 2010, PJM posted the Reliability Pricing Model (RPM) load obligations for each zone, which were based on the 2010 load forecast. According to VEPCO, the posting showed the impact of the 2010 load forecast on RPM settlement, including payment allocations to the Dominion Zone that are now based on the Virginia GSP model, but which were originally established using the Three-GMP model. VEPCO states that its initial review of the data revealed a significant increase in the Dominion Zone's load-ratio share cost responsibility due to changes in the 2010 load forecast for the Dominion Zone.

II. Complaint

6. VEPCO asserts that PJM changed the economic growth variable in its load forecasting methodology for the Dominion Zone for the 2010-2011 Delivery Year from GMP to GSP without adequate explanation. Further, according to VEPCO, the use of GSP, by itself, adds approximately 200 MW to the forecast of the Dominion Zone and is inconsistent with historical load growth relative to GSP growth. VEPCO emphasizes that the Dominion Zone is the only zone for which PJM changed the economic growth factor between the 2009 and 2010 forecast models. VEPCO asserts that by changing the load forecasting calculation for the Dominion Zone, PJM has failed to perform load forecasting, its tariff obligation, in a just, reasonable and unduly discriminatory manner. VEPCO also argues that the accuracy of a model, such as use of GSP, must be carefully considered and vetted prior to implementation. According to VEPCO, PJM failed to do so.

7. VEPCO therefore requests that the Commission require PJM to revise the 2010 load forecast for the Dominion Zone using the GMP model, as PJM has done in previous years. VEPCO states that, if PJM wishes to utilize GSP in the future, this should be done only after thorough vetting.

III. Notice of Filing and Responsive Pleadings

8. Notice of the complaint was published in the *Federal Register*, 75 Fed. Reg. 32,458 (2010) with interventions and protests due on or before June 14, 2010. Timely motions to intervene were filed by the Northern Virginia Electric Cooperative, Inc., PSEG Companies, Hess Corporation, Constellation Energy Commodities Group, Inc. and Constellation NewEnergy, Inc., Exelon Corporation, PJM Power Providers Group,

Allegheny Energy Companies, and Duke Energy Corporation. PJM, the Old Dominion Electric Cooperative (ODEC), the North Carolina Electric Membership Corporation (NCEMC) and Virginia Municipal Electric Association No. 1 (Virginia Municipal) filed timely motions to intervene with comments.

9. On June 16, 2010, Pepco Holdings, Inc. (Pepco) filed a motion to intervene out of time, stating that its intervention was filed two days late due to administrative oversight.

A. PJM's Answer

10. On June 1, 2010, PJM filed an answer to the complaint, agreeing with VEPCO that it should revert to its former method of load forecasting for the Dominion Zone for purposes of the 2010/2011 Delivery Year. PJM states that it is not confident that the significant increase to the Dominion Zone's peak load is sufficiently reliable and, as such, it would not be reasonable to require VEPCO to bear significant additional costs. PJM further states that it intends to engage an independent consultant to review its load forecasting methodologies for the RTO as a whole, as well as its zones.

11. PJM also explains that, for the Dominion Zone, it had historically used the GMPs for the metropolitan areas of Richmond, Virginia Beach and Roanoke. PJM states that, in 2009, it reevaluated whether this Three-GMP model fully captured the expected economic growth for the Dominion Zone, since it does not include economic growth in Northern Virginia.[1] PJM states that it considered several alternatives to "improve the economic inputs to its Dominion load forecast," including using the GMP estimate for the greater Washington, DC area, which includes Northern Virginia. This estimate, however, includes Washington, DC and parts of Maryland. PJM explains that it therefore considered using the Virginia GSP as an alternative growth estimate. According to PJM, regression analysis showed that the GSP model performed as well as the Three-GMP model in explaining changes in daily peak loads. PJM states that, based on this analysis, it "tentatively determined to change the economic input to its Dominion Zone load forecast from the Three-GMP data to the GSP data since the GSP estimate covers more of the Dominion Zone and performed well in the regression analysis of daily peak loads."

12. PJM expresses support for VEPCO's requested relief, acknowledging that it did not engage in sufficient analysis last year to affirm that the Virginia GSP economic input to the Dominion Zone load forecast could properly be used for allocating capacity costs

[1] PJM maintains the Dominion Zone is not congruent with the Virginia state borders because it excludes part of western Virginia and includes part of North Carolina. According to PJM, Northern Virginia is a "major component of the economy of Virginia" and the Dominion Zone is "arguably the only PJM Zone with such a significant metropolitan area omitted from the economic component of the load model."

on the basis of forecast annual peaks. PJM acknowledges that a change from the GMP method to the GSP method for only the Dominion Zone "should only be made after thorough review," and states that, in this instance, while it assessed the GSP method's ability to predict daily peak loads, it did not separately analyze the revised model's predictive value for the annual peak. PJM further acknowledges that the annual peak is the figure of most immediate concern for the upcoming Delivery Year, as the annual peak (i.e., the final Zonal Peak Load Forecast) is used to determine the share of total RPM capacity costs for 2010-2011 that the Dominion Zone must bear.

13. According to PJM, VEPCO's complaint includes a backtesting analysis indicating that the GSP method tends to overstate the Dominion Zone annual peak load forecast. PJM states that, since it has not performed its own study of the Virginia GSP method's value in predicting annual peak loads, it is in no position to disagree with Dominion's conclusions. PJM acknowledges that, in retrospect, it would have been better served by considering the predictive value of the Dominion Zone load forecast model as a whole, rather than focusing only on whether to change a single input to that model. PJM states that, under these circumstances, using the revised forecasting method's annual peak to allocate the 2010-2011 capacity costs is not justified. PJM further states that it agrees it should rescind, for purposes of allocating capacity costs for the 2010-2011 Delivery Year, the change to the GSP method, and revert to the pre-existing Three-GMP method that has been in place for several years. PJM requests that the Commission "therefore should direct PJM to use the Three-GMP Dominion Zone load forecast for purposes of allocating RPM capacity costs for the 2010-2011 Delivery Year."

14. PJM seeks clarification on the impact of the change in load forecasting on capacity credits, stating that there is a possibility that a Commission-ordered change in the 2010-2011 Dominion Zone peak load forecast could change capacity credits issued to some parties after the affected parties have used those credits.[2] PJM states that load-serving entities are allocated certain capacity credits that they can convert during the Delivery Year into replacement capacity for use in their own supply portfolios or for sale to other parties that need replacement capacity.[3] Since parties may have converted such credits into, or sold them as, replacement capacity before final Commission action in this case, PJM asks the Commission to clarify that any change in the allocation of the credits under

[2] Capacity credits are an entitlement to a specified number of megawatts of unforced capacity from a specific resource, for the purpose of satisfying capacity obligations imposed under the Reliability Assurance Agreement. They may be used as replacement capacity or traded bilaterally. Capacity credits take two forms: excess commitment credits and excess Interruptible Load for Reliability credits.

[3] *See* PJM Tariff, Attachment DD, sections 5.12(b)(vii) and 5.13.

those two sections (and in any resulting replacement capacity) should be effective only prospectively from the date of the Commission's order.

B. Other Comments

15. On June 2, 2010, ODEC filed a motion to intervene and comments in support of VEPCO's complaint and PJM's answer. ODEC states that it supports PJM's position that any changes to its load forecasting are best addressed in a more comprehensive review. It states that it supports PJM's efforts to develop better forecasting and fully vet any changes with its stakeholders prior to implementation, noting that in this situation, ODEC agrees that PJM should have done more before implementing such a change.

16. On June 3, 2010, NCEMC filed a motion to intervene and comments in support of VEPCO's complaint. NCEMC states that it also supports PJM's initiation of a process to develop better forecasting and to fully vet any changes to its forecasting through its stakeholders prior to implementation. NCEMC also asks the Commission to order PJM to submit an informational filing or proposed tariff changes, if necessary, noting any changes in its load forecasting as far in advance as possible.

17. On June 14, 2010, Virginia Municipal filed a motion to intervene and comments in support of VEPCO's complaint, stating that as the Dominion Zone has been treated differently from every other PJM zone, the discrimination against it was clear. Virginia Municipal argues that, although the Three-GMP methodology does not include Northern Virginia, PJM has not provided any evidence that this results in errant load forecasts for the Dominion Zone. Virginia Municipal states that it supports PJM's investigation into whether the Three-GMP methodology is no longer appropriate for the Dominion Zone and whether improvements can be made to this zone's load forecasting.

IV. Discussion

A. Procedural Matters

18. Pursuant to Rule 214, of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2010), timely unopposed motions to intervene serve to make the entities that filed them parties to these proceedings. We grant Pepco's motion to intervene out of time, given its interest, the early stage of the proceeding, and the absence of undue prejudice or delay.

B. Commission Determination

19. VEPCO argues that PJM's GSP methodology is unjust and unreasonable under section 206 of the Federal Power Act because it results in an improper measurement of load in the Dominion Zone. PJM agrees that it did not sufficiently analyze the appropriateness of the GSP method for determining the load forecast for the Dominion

Zone. It appears from PJM's answer[4] that although PJM agrees that it should revert to the Three-GMP method for the 2010-2011 Delivery Year load forecasting for the Dominion Zone, it may not have actually done so yet. Therefore, the Commission grants VEPCO's complaint and, under section 206 of the Federal Power Act, 16 U.S.C. § 824e (2006), orders PJM to revert back to utilizing the Three-GMP method in preparing load forecasting analysis for the Dominion Zone for the 2010-2011 Delivery Year as of the date of this order.

20. PJM requests that the Commission clarify that any changes to the allocation of capacity credits take place on a prospective basis; however, PJM provides limited information and argument in support of its request. Further, no parties provide comments on PJM's request. As such, the Commission cannot fully analyze the implications of this clarification to entities which have received capacity credits. We therefore do not rule on PJM's request for clarification at this time, but order PJM to provide the Commission with additional information on its request for clarification within fifteen days, including whether it seeks prospective application of relief only as it relates to the capacity credit issue or with respect to other refunds, and the justification for not granting such refunds effective June 1, 2010. Other parties may answer PJM's filing within fifteen days thereafter.

21. According to VEPCO, PJM's proposal to change the economic driver was first presented to stakeholders in draft form in mid-December 2009, only a short time before RPM cost allocations were determined. PJM acknowledges that such a change should be made only after a thorough review. The Commission strongly encourages PJM to fully engage all stakeholders in the future whenever it considers making changes that could materially impact the outcome of the load forecast, especially in light of the significant financial impact such changes could have. This complaint might well have been avoided with a more thorough up-front vetting of the issue with independent analysis and stakeholder input. We commend PJM for initiating a process to provide more notice to, and involvement of, stakeholders before any such changes are made to its load forecasting methodology in the future.

<u>The Commission orders</u>:

(A) VEPCO's complaint is hereby granted, as discussed in the body of this order.

(B) As of the date of this order, PJM is hereby required to revert to the Three-GMP method for its load forecasting for the Dominion Zone.

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[4] PJM Answer at 5.

(C) PJM is hereby directed to file further information regarding its request for clarification, as discussed in the body of this order, within fifteen (15) days of the date of this order. Other parties may answer the further information filed by PJM, within fifteen (15) days of that filing.

By the Commission. Commissioner LaFleur voting present.

(S E A L)

Kimberly D. Bose,
Secretary.