

Capacity Performance model and that the impact of the proposed artificially weakened measurement and verification method will increase correspondingly. The RRMSE is currently in use as part of the CBL measurement and verification protocol and is needed to ensure accurate measurement and verification of Demand Resource performance. Demand Resources are relied upon by PJM for reliability like all other Capacity Resources. Demand Resources have an impact on the efficiency of PJM markets. Demand Resources are substitutes for generation resources in the capacity market. The assertion that the measurement of Demand Resource performance should not be as accurate as possible is inconsistent with the fundamental principles of PJM markets and should be unacceptable.

PJM should not be proposing to weaken measurement and verification for Demand Resources in the capacity market but should be proposing to strengthen it by applying the same standards to Demand Resources in the capacity market as currently applied to Economic Resources.⁴ The KEMA report cited by PJM concluded that the method currently used by PJM to calculate the summer performance of Demand Resources is not the most accurate for measuring load reductions.⁵ There is no reason to have weaker measurement and verification for Demand Resources than for Economic Resources.

If PJM and the CSPs do not want the administrative responsibility to gather data and apply the RRMSE test, the Market Monitor will accept the administrative responsibility to do so, in the interest of efficient markets. Eliminating the RRMSE test should not be approved.

⁴ Throughout this pleading Economic Resources refer to economic load response.

⁵ *PJM Empirical Analysis of Demand Response Baseline Methods*, KEMA (April 20, 2011) at 66.

I. COMMENTS

A. The RRMSE Is Needed to Have Accurate Measurement of Load Reductions.

The introduction of the Capacity Performance approach to PJM Capacity Markets means that all Demand Resources are required to be annual resources and can no longer be summer only products (June through September). The requirement for Demand Resources to perform in the winter means that there must be a measurement and verification method for the winter. PJM proposed to use the same method of measurement for Demand Resources as is used for Economic Resources, for all months except for the months of June through September in the Delivery Year.⁶ The Commission accepted PJM's proposal.⁷ This measurement method is called a Customer Baseline (CBL). The CBL approach requires the use of a test called RRMSE (Relative Root Mean Square Error Test) to determine the most accurate CBL to apply to each resource.

Despite the fact that PJM proposed to use a defined method of measurement and verification for non-summer Demand Resources, PJM now proposes to weaken that method, and to do so without a factual or analytical basis. The February 2nd Filing proposes to discard use of the full, required measurement and verification method and would omit the step of selecting the most accurate CBL. PJM states that it "does not believe that requiring RRMSEs for all Curtailment Service Providers of Load Management Resources will result in *significantly* more accurate measurement of load reductions..." [emphasis added]. PJM does not define "significantly more accurate" and does not demonstrate the accuracy of its claim and does not argue for the appropriateness of that standard. PJM does not deny that use of RRMSE would result in more accurate measurement of load reductions. PJM cites to a 2011 KEMA report which was the basis for improving the

⁶ See PJM Filing, ER15-623-000 (February 23, 2016); *PJM Interconnection, L.L.C., et al.*, 151 FERC ¶ 61,208 at P 54 (2015); RAA Schedule 6 § K.

⁷ 151 FERC ¶ 16,208 at PP 91-105.

measurement of Economic Resources.⁸ The KEMA report does not support the February 2nd Filing. In fact, the KEMA report was the basis for PJM's adoption of the RRMSE for Economic Resources and in general the KEMA report supported improvements in measurement accuracy.

The KEMA report supported the use of the RRMSE as the metric for selecting the best CBL for each customer. PJM does not pay resources based on aggregate statistics. Resources are paid for individual resource performance. The KEMA report provides support for applying the RRMSE test to every Demand Resource in order to select an appropriate CBL as is the case for Economic Resources. By proposing to eliminate the requirement to apply an RRMSE test to each resource, PJM effectively and incorrectly assumes that the standard CBL type should be used for all Demand Resources. There is no basis for that assumption. In order to most accurately measure reductions from Demand Resources, an RRMSE must be completed for each Demand Resource to select the most appropriate CBL type.

Every Demand Resource customer is a separate customer, and should be treated as a separate customer. PJM should not assume that all Demand Resources will behave similarly.

B. There Is No Reason to Exempt Demand Resources from Accurate Measurement.

PJM claims (at 7) that requiring the RRMSE imposes an administrative burden that is not worth the resultant better measurement of performance. The Market Monitor disagrees. The Market Monitor considers a commitment to accurate measurement and verification to be necessary for demand response to function effectively in the PJM markets. The cost of accurately measuring performance is an appropriate and necessary precondition for

⁸ February 2nd Filing at 7 n.16, citing KEMA, PJM Empirical Analysis of Demand Response Baseline Methods (April 20, 2011).

participation in PJM markets. The markets cannot work and are subject to inefficient outcomes and potential gaming if accurate measurement is not required.

The reliability provided by Demand Resources must be comparable to the reliability provided by generation resources with which Demand Resources compete and sometimes replace in the market. Generation resources are subject to detailed measurement requirements which impose an administrative burden and costs, but the need for such tests is not disputed.

If PJM and the CSPs do not want the administrative responsibility to gather data and apply the RRMSE test, the Market Monitor will accept the administrative responsibility to do so, in the interest of efficient markets.

C. Current Capacity Market Conditions and Rules Increase the Need for the RRMSE Test.

The February 2nd Filing states (at 7) that “Curtailment Service Providers of Load Management Resources have never been required to submit RRMSEs.” This argument is irrelevant. It ignores the fact that PJM’s Capacity Performance filing changed the definition of Demand Resource (Load Management Resource) and proposed the use of the measurement method used for Economic Resources. This measurement method includes the use of CBL and RRMSE. PJM proposed the method to which PJM now raises objections.

Given the significance of Demand Resources in the capacity market and given that the definition of Demand Resources in the Capacity Market was just changed significantly by PJM, it is ironic that PJM is proposing to weaken the measurement and verification applied to these resources. PJM’s proposal can be viewed as one of many proposals to weaken and otherwise undercut the Capacity Performance model of the capacity market before it has even gone into effect for a Delivery Year. Instead of weakening the measurement and verification of Demand Resources, PJM should be proposing to strengthen the measurement and verification of all Demand Resources treated as PJM capacity resources. As a first step, Demand Resources’ production of energy when called by PJM should be subject to exactly the same measurement and verification methods now

applied by PJM to Economic Resources, including CBL and RRMSE. The importance of such improvements in accuracy is heightened by the fact that Demand Resources are paid based on predetermined strike prices, the bulk of which are greater than or equal to \$1,000 per MWh.

In addition, system and market conditions have changed in ways that make the performance measured by the RRMSE test more relevant. Even before the implementation of the annual product definition under the Capacity Performance model, PJM has begun dispatching Demand Resources during non-summer periods. In January 2014, there were seven demand response events.⁹ A customer's demand curve during the early hours of cold winter morning will likely be much different than the customer's demand curve during a hot summer day. The RRMSE test will ensure the Demand Resource has an appropriate CBL.

⁹ See PJM "Summary of PJM-Initiated Load Management Events," which can be accessed at: <http://www.pjm.com/~media/planning/res-adeq/load-forecast/alm-history.ashx>.

II. CONCLUSION

The Market Monitor respectfully requests that the Commission afford due consideration to these comments as it resolves the issues raised in this proceeding.

Respectfully submitted,



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Dated: February 23, 2016

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Eagleville, Pennsylvania,
this 23rd day of February, 2016.



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