

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

PJM Interconnection, L.L.C.

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Docket No. ER19-511-001

**COMMENTS OF THE INDEPENDENT MARKET MONITOR FOR PJM**

Pursuant to Rules 211 of the Commission’s Rules and Regulations,<sup>1</sup> Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor (“Market Monitor”) for PJM Interconnection, L.L.C. (“PJM”),<sup>2</sup> submits these comments on the filing submitted by PJM on March 6, 2019 (“Deficiency Response”) in response to the deficiency notice issued in this proceeding on February 4, 2019 (“Deficiency Notice”), and the original filing submitted by PJM on December 7, 2018 (“Peak Shaving Filing”).

**I. RESPONSE AND DEFICIENCY RESPONSE**

**A. RERRA Involvement**

The Market Monitor agrees with and supports PJM’s response to the response to subparts a, b, e, g and h to question 1.

The following comments are a response to subparts c, d and f.

PJM can and should allow commitments as short as a year and make immediate adjustments to the forecast as necessary. PJM has not shown why it must require participants or the associated peak shaving program to be available for several years. If a

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<sup>1</sup> 18 CFR § 385.211 (2018).

<sup>2</sup> Capitalized terms used herein and not otherwise defined have the meaning used in the PJM Open Access Transmission Tariff (“OATT”), the PJM Operating Agreement (“OA”) or the PJM Reliability Assurance Agreement (“RAA”).

peak shaving program does not continue for future delivery years, PJM should adjust the forecast to reverse the change it had made.

There is no reason to assume that the RERRA governed programs will be better at enrolling end use customers compared to PJM demand response programs. This assumption is not needed for allowing peak shaving programs to participate in PJM.

The changes in the load forecast do not threaten to undermine market certainty. Participation within the peak shaving program will be well documented. If participation in the program fluctuates, PJM can adjust the forecast to account for the changes. This increased visibility will allow PJM to account for changes better than estimating the increases or decreased in behind the meter generation and the changing cost of new entry, which only occurs every four years. The changes to supply resources' offer behavior affect the supply stack for the capacity market, but the peak load shifting program will only affect the demand curve. The changes in the load forecast due to fluctuations in the peak shaving program do not undermine the market. Demand changes and the ability to change demand are essential to any market. The assertion that accounting for the actual behavior of demand side participants is too hard is unconvincing and should not be an acceptable response even if some additional administrative effort is required.

## **B. Dual Participation**

The Market Monitor agrees with and supports PJM's response to subparts a and b to question 2. PJM responds (at 13): "Allowing a Market Participant to enroll in the Peak Shaving Adjustment program on the demand side while also as an Economic Load Response Participant as a supply resource in the energy and ancillary services market is problematic and presents several challenges." PJM's response is correct, but understated. There is no reasonable way to reconcile participation in both programs and customers must be required to make a choice. With the new proposed peak shaving option, customers will have the option to manage their wholesale load obligation by participating as either demand response, price responsive demand (PRD) or as part of a summer peak shaving

program. The PJM demand response participants are on the supply side, and the PRD and peak shaving programs are on the demand side of the market. The proposed peak shaving program is meant to allow resources that cannot participate as an annual capacity product to behave as true demand side participants and avoid paying for energy and capacity they choose not to use. “[T]he purpose of the subject filing is to value summer-only demand response resources that are otherwise unable to participate as an annual resource in PJM’s market.”<sup>3</sup> PJM correctly identifies that, in order to avoid double counting a resource’s reduction capability, a resource cannot participate in multiple programs at the same time. Participation in the peak shaving program or PRD program reduces the load forecast, effectively reducing their capacity requirement. Participation in the demand response programs adds to the available supply stack of resources, allowing load to compete with other supply side resources. If a resource is eligible to participate in demand and supply side load reduction programs, PJM will overestimate potential load reductions of resources. A resource participating in the proposed peak shaving program is committed by PJM for all hours of the program. The peak shaving MW are reflected in the shift of the load curve. Since resources are responding to the real time THI threshold, customers are committed to respond if the threshold is hit. Allowing a peak shaving customer to also supply economic demand response or ancillary services when the MW are already committed, is inconsistent with the market design.

Having multiple meters on a single customer will not help alleviate the problem of dual participation, but could potentially make it worse. If a large customer has two meters, but the capability to power the entire facility from either meter, the customer could shift the location of the power draw, while having one meter show a drop. This is not a desired outcome and will lead to possible gaming opportunities. To further complicate the issue, a

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<sup>3</sup> See Peak Shaving Filing at 7.

participant could be registered by two different parties for each program, and be receiving conflicting signals on what to do during an event.

### **C. Loss of Load Expectation Shift**

Demand response will be valuable regardless of the level of participation. The value is a function of the market clearing prices for capacity. PJM's design should reflect that. As the demand for capacity is reduced as a result of such programs, the incremental savings for the participants will track the price of capacity. No special limits or other design modifications are required to address this basic market dynamic.

### **D. Potential Cost Shifting**

Facilitating true demand response is part of making the PJM markets more efficient. The goal of facilitating true demand response is not to achieve a specific outcome but to permit customers to express their willingness to pay for capacity. The design should not be modified to ensure a particular outcome or to limit customers' choice.

### **E. Measurement and Verification Method**

PJM's reliance on the customer baseline (CBL) to measure compliance brings all the flaws that already exist in other demand response programs to the proposed peak shaving program. The CBL estimates normal load usage and the difference between the CBL and real time load is the calculated load reduction. There are multiple CBL methods, but all use previous load data to estimate normal load usage for the future.<sup>4</sup> The CBL is a moving target that will fluctuate depending on real-time usage and previous conditions. For example, imagine a program has 1.0 MW of registered capacity and a reduction capability of 0.7 MW of load during high temperature humidity index (THI) days. If the registered customer has a CBL of 1.0 MW, the customer must reduce to 0.3 MW during for the duration of the program's hours to receive full reduction credit. Using the CBL metric to

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<sup>4</sup> OA Schedule 1 § 3.3A.2.

calculate compliance will punish load that consumes less than their capacity commitment on a peak day by requiring them to reduce possibly below their capability. For example, if the same customer has a CBL of 1.2 MW, higher than the capacity registered in the program, the customer must reduce to 0.5 MW during the duration of the program's hours to receive full reduction credit. Similarly, if the same customer has a CBL of 0.6 MW, lower than the capacity registered in the program, the customer must reduce to -0.1 MW during the duration of the program's hours to receive full reduction credit. It is impossible to reduce load to a negative value without running a generator, and load cannot inject power without an interconnection agreement.

The existing Firm Service Level (FSL) is a superior basis for reliable measurement and verification.<sup>5</sup> The use of actual metered data is strongly preferred over the use of artificial and necessarily inaccurate measurement and verification protocols. Continuing the example of a 1.0 MW resource with a 0.3 MW FSL, the customer must reduce to or below 0.3 MW when the peak shaving program is triggered. The FSL measurement and verification method sets a clear, static goal and does not need any complicated metrics for measuring performance. Using the FSL commits a customer to be at or below the defined threshold, based on metered data, without metrics to estimate load usage and reduction performance.

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<sup>5</sup> *Summer-Only Demand Response Senior Task Force*, PJM, <<https://www.pjm.com/-/media/committees-groups/task-forces/sodrstf/20180829/20180829-item-04a-mm-proposal-presentation.ashx>> (August 24, 2018).

## 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: March 27, 2019

## 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 27<sup>th</sup> day of March, 2019.



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