

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

PJM Interconnection, L.L.C.)))	Docket Nos. ER15-623-000, -008
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**ANSWER AND MOTION FOR LEAVE TO ANSWER
OF THE INDEPENDENT MARKET MONITOR FOR PJM**

Pursuant to Rules 212 and 213 of the Commission’s Rules and Regulations,¹ Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM (“Market Monitor”),² submits this answer to, and moves for leave to answer, the protest filed in this proceeding by Advanced Energy Management Alliance (“AEMA”) on November 17, 2015.

On October 27, 2015, PJM’s proposed to apply its measurement and verification (“M&V”) method for performance by demand response resources (“DR”) that qualified as Capacity Performance (CP) resources, which was approved starting with Delivery Years 2018/2019, to the nearer term Delivery Years of 2016/2017 and 2017/2018 (“October 27 Filing”).³ AEMA objects, claiming that a different method should apply in the nearer term

¹ 18 CFR § 385.212 & 213 (2015).

² 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”).

³ As PJM explains (at 2–3), PJM did not propose to apply its approach to the 2016/2017 and 2017/2018 Delivery Years because it had initially proposed not to allow DR to serve as Capacity Performance Resources during those Delivery Years. PJM determined that the Commission order requiring PJM

Delivery Years. AEMA's arguments have no merit, and, if accepted would result in double counting DR capacity MW that DR provides in the summer months and in the winter months.

The M&V approach filed by PJM for use in the summer is just and reasonable, and this method has been approved by the Commission.⁴ AEMA's proposal to change this method should be rejected.

The M&V method filed by PJM and approved by the Commission for use in the winter months is also just and reasonable, but only if that the tariff language is interpreted and applied consistent with PJM's and the Market Monitor's position on double counting, which was accepted by the Commission in 2011.⁵ ⁶ In the decision on double counting, the Commission determined that compliance demand reductions must be consistent with the Firm Service Level ("FSL") method.

The CBL M&V method from the Capacity Performance tariff should be applied consistent with the FSL method.⁷ The October 27 Filing is PJM's first filed statement that their position on this issue is different from its historical position on double counting.

The winter CBL M&V method described by AEMA in its protest and confirmed by PJM in its answer is inconsistent with the tariff read in light of Commission precedent on double counting, and is illogical, unjust and unreasonable, and should not be allowed. In this proceeding, PJM should be directed to apply CBL M&V throughout the year in a

to allow DR to serve as Capacity Performance Resources meant that it should also apply its approach to M&V during the 2016/2017 and 2017/2018 Delivery Years.

⁴ *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208 at P 180 (2015).

⁵ *Id.*

⁶ *See, e.g., PJM Interconnection, L.L.C.*, 137 FERC ¶ 61,108 (2011).

⁷ For Firm Service Level end-use customers the current Delivery Year PLC minus the Load multiplied by the LF. The calculation is represented by: $PLC - (Load * LF)$. OA Schedule 1 § 8.9.

manner consistent with the method for summer M&V, PJM's historic position on double counting and the applicable Commission precedent. PJM should consistently measure demand reductions using Firm Service Level ("FSL"), Guaranteed Load Drop ("GLD") and Direct Load Control ("DLC") subject to the Peak Load Contribution ("PLC"). The PLC defines how much capacity a customer pays for. The FSL and GLD methods limit consideration of demand reductions to only those reductions below the customer's PLC. DR resources are willing to interrupt their use of capacity when the capacity that they elected to not pay for is needed by load that did pay for the capacity. Providing credit for a DR reduction when there is no reduction below the PLC is unjust and unreasonable double counting. It is double counting because the customer avoided paying for the capacity greater than PLC yet receives a DR credit for allegedly not using that same capacity.

The Market Monitor proposes an alternative method for measuring compliance during the winter and the summer. The alternative proposal would apply the GLD method to all DR, which is by definition limited to the full reduction less than PLC. This will ensure a standard way to measure capacity year round.

I. ANSWER

A. Background

The October 27 Filing proposes to use the customer baseline load ("CBL") method during the non-summer months (October through May) and a non-CBL method for the summer months (June through September), either FSL or GLD.⁸ The CBL method measures compliance reductions as the difference between an estimated load (CBL) and metered actual load. During a Load Management event, the customer's load is compared to their hourly expected usage as measured by CBL. The difference between real time load and CBL is defined to be the customer's reduction in energy use. The CBL is based on a customer's

⁸ See PJM proposed Tariff, Attachment DD-1 § K; proposed RAA, Schedule 6 § K.

load during a period prior to the demand reduction and is designed to measure what the customer's load would have been if there had been no demand reduction. There are different types of CBLs depending on a customer's previous behavior. The standard CBL is the three-day type with Symmetric Additive Adjustment ("SAA") for demand response customers.⁹

B. Double Counting Is Unjust and Unreasonable and Should Not Be Allowed in the Summer or the Winter.

AEMA objects to PJM's approach to M&V (at 6) because it measures a customer's reduction from their Peak Load Contribution ("PLC") during the summer months.

AEMA argues (at 2) that PJM should "utilize a consistent measurement and verification ("M&V") methodology to measure Demand Resource performance with respect to Transition Auction commitments in both summer and winter." AEMA rejects the prior Commission finding in the double counting case, which adopted the methods currently used by PJM in the summer.¹⁰

PJM's response to the AEMA filing highlights a previously unidentified problem (and a problem not reasonably identifiable based on the filed language) with PJM's approach to winter compliance. PJM in the October 27 filing, indicates that it wants to apply M&V in the winter so as to permit double counting. AEMA would accept PJM's double counting method for the winter and wants to apply it to the summer also.

To illustrate the problem with measuring reductions from CBL without accounting for PLC, Figure 1 and Figure 2 show an example customer's CBL, PLC, actual usage and reduction in load for a summer case and a winter case.

Figure 1 shows an example for a summer load reduction with a customer's CBL, PLC and actual usage, using the FSL method. Using the FSL method means that the

⁹ OA Schedule 1 § 3.3A.2.

¹⁰ 137 FERC ¶ 61,108.

customer must curtail load to a predetermined level in order to be compliant, regardless of the starting point. The customer in this example has a peak load of 5.0 MW but pays for only 3.0 MW of capacity (PLC) because it has reduced its capacity obligation by reducing its load on system peak days (peak shaving) apart from any PJM DR program. This means that capacity reductions are measured from the PLC at 3.0 MW and not the CBL at 5.0 MW. The customer in this example elects to participate in the demand response program in addition to its independent peak shaving. The customer elects an FSL of 1.0 MW, which means a reduction of 2.0 MW from the PLC. This results in the customer paying for only 1.0 MW of capacity because it is charged for 3.0 MW but receives DR credit for 2.0 MW.

In order to meet its FSL reduction obligation in the summer, the customer must reduce load to its FSL of 1.0 MW during an event to achieve full compliance. The customer's actual, unadjusted load at the time of the event would have been 5.0 MW as measured by the CBL. The hatched green bar in Figure 1 represents the required reduction of 4.0 MW from the CBL of 5.0 MW to the FSL of 1.0 MW. This is a reduction of 2.0 MW from its PLC of 3.0 MW to its FSL of 1.0 MW. If the customer used the GLD method for measuring the reduction, the customer would have also achieved a 2.0 MW reduction.¹¹ PJM rules explicitly require the measurement of a summer reduction in this manner, using the reduction only from the PLC rather than from the CBL.¹²

¹¹ GLD uses the minimum of $\{(\text{comparison load} - \text{Load}) * \text{LF}, \text{PLC} - (\text{Load} * \text{LF})\}$, or $\{(5.0 - 1.0) * \text{LF}, 3.0 - (1.0 * \text{LF})\} = 2.0 \text{ MW}$.

¹² See 137 FERC ¶ 61,108.

Figure 1 Summer load reduction example

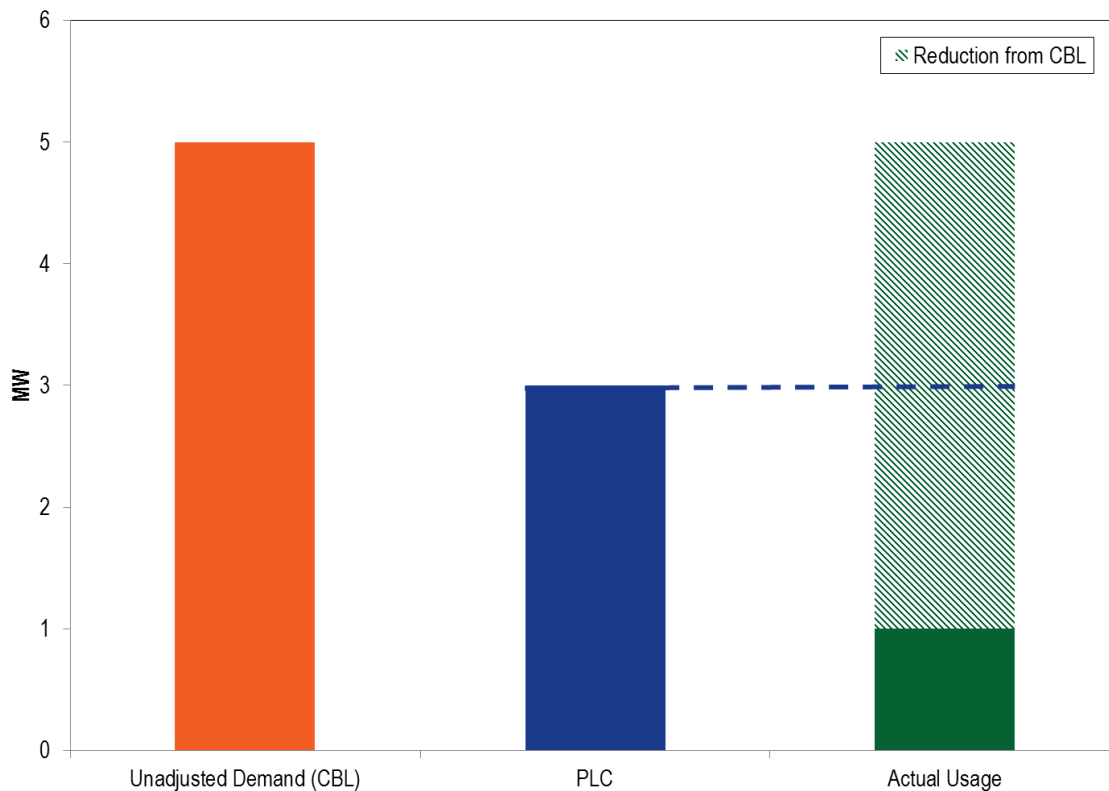


Figure 2 shows how the same customer would be treated under the PJM M&V method during the winter months.

Under PJM's approach, the customer's PLC of 3.0 MW, which is the level of capacity that the customer pays for based on its peak demand, is ignored. The customer's required reduction is the 2.0 MW difference between the PLC of 3.0 MW and the FSL of 1.0 MW. Under PJM's proposed approach, the customer could achieve the reduction of 2.0 by reducing from the CBL of 5.0 MW to 3.0 MW despite the fact that the PLC is 3.0 MW. The hatched green bar represents the reduction from CBL during a winter demand event. The customer would have to reduce 2.0 MW from their CBL to achieve compliance during the winter.

Under the PJM proposal, the customer is treated in winter as though it paid for 5.0 MW of capacity, while in fact the customer paid for only 3.0 MW of capacity (PLC). The

customer did not pay for 2.0 MW of capacity and the customer receives a DR credit for not using the same 2.0 MW of capacity. This is double counting. If the customer used the FSL method as explicitly defined for the summer months, the customer would have a 0.0 MW compliance reduction. If the customer used the GLD method, the customer would achieve a 0.0 MW compliance reduction.¹³

The PJM proposal would create an illogical, unjust and unreasonable result in the winter. If this method were applied in the summer as proposed by AEMA, it would also create an illogical, unjust and unreasonable result in the summer.

Figure 2 Winter load reduction example

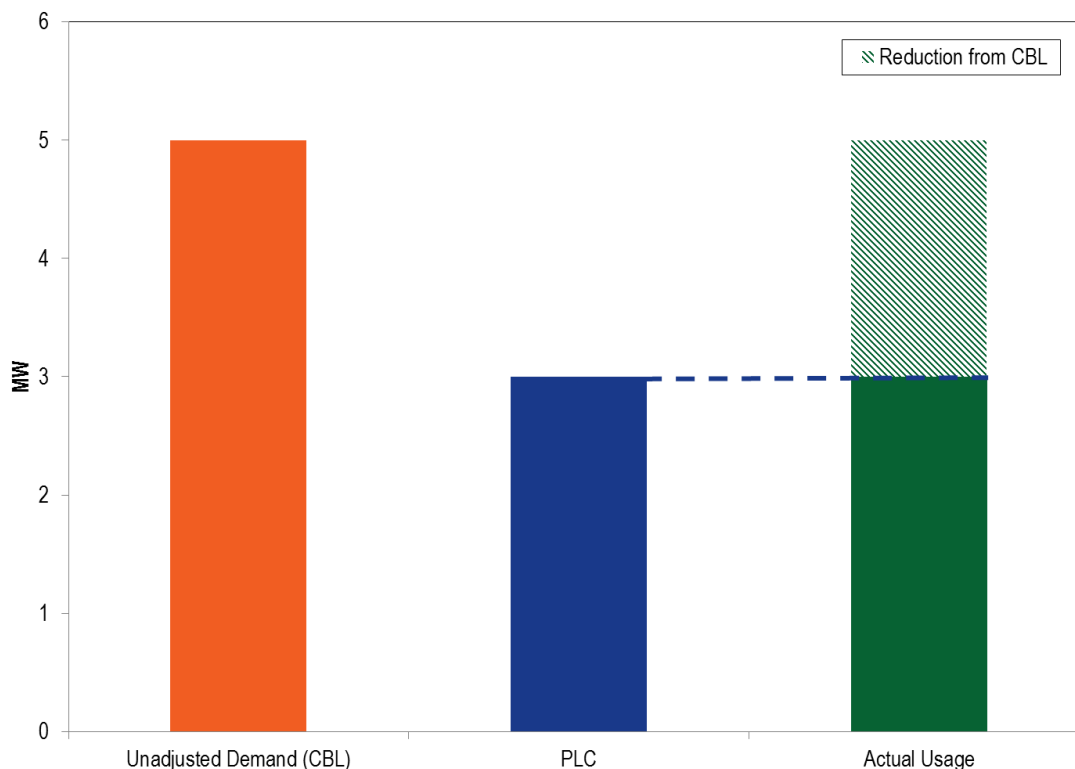


Table 1 shows the unadjusted demand or CBL, PLC, the actual usage, the reduction MW for winter or summer from CBL to actual usage and compliance for the summer and

¹³ GLD uses the minimum of $\{(\text{comparison load} - \text{Load}) * \text{LF}, \text{PLC} - (\text{Load} * \text{LF})\}$, or $\{(5.0 - 3.0) * \text{LF}, 3.0 - (3.0 * \text{LF})\} = 0.0 \text{ MW}$.

winter calculated using PJM’s proposed method. This example shows that the customer could achieve compliance under PJM’s method in the winter by reducing only 2.0 MW while compliance in the summer would require a reduction of 4.0 MW. The result is overpayment in the winter.

Table 1 Summer and winter reduction example

	Summer	Winter
Unadjusted Demand (CBL)	5	5
PLC	3	3
Actual Usage	1	3
Reduction MW	4	2
Compliance	100%	100%

C. Guaranteed Load Drop should be the Only Method Used for Calculating Compliance.

With the implementation of CP, DR is now an explicitly annual product. The GLD M&V method measures reductions in load, regardless of when an event occurs during the delivery year. The GLD M&V method measures the difference between a customer’s expected load and a customer’s actual load during a Load Management event, while ensuring that reductions are credited only if the full reduction is below PLC. The GLD method most accurately measures the reduction for a DR customer, compared to the FSL method or the DLC method. By requiring all customers to use GLD to measure compliance during the entire year, PJM would measure compliance reductions more accurately than under the proposed PJM method or the other methods.

Winter and summer compliance should follow the same rules for GLD customers currently in place by the PJM Tariff:

For Guaranteed Load Drop end-use customers, the lesser of (a) comparison load used to best represent what the load would have been if the Office of the Interconnection did not declare a Load Management Event or the CSP did not initiate a test as outlined in the PJM Manuals, minus the metered load (“Load”) and then multiplied by the loss factor (“LF”) or (b) the current Delivery Year peak load contributions (“PLC”) minus the metered load multiplied by the loss factor (“LF”). A load reduction will only be

recognized for capacity compliance if the metered load multiplied by the loss factor is less than the current Delivery Year peak load contribution. The calculation is represented by: Minimum of $\{(comparison\ load - Load) * LF, PLC - (Load * LF)\}$ ¹⁴

The GLD method from the PJM Tariff defines reductions for compliance to be less than PLC. This is the correct way to measure compliance.

The Commission took extraordinary action, with strong support from PJM, to eliminate double counting from the PJM market rules related to DR.¹⁵ AEMA's protest has exposed a problem with PJM's interpretation of the CP rules that could allow double counting. PJM's proposed interpretation is incorrect and requires corrective action by the Commission.

There is no indication in the CP order that the Commission meant to reverse its prior precedent.¹⁶ It is not evident from the filed language or the Commission holding that under

¹⁴ OA Schedule 1 § 8.9.

¹⁵ See, e.g., 137 FERC ¶ 61,108 at PP 65–67 (2011) (“... Capacity DR commitments are based on the capability of Capacity DR resources to meet PJM’s system reliability requirements, as currently measured by the PLC. PJM states that the most accurate, available measure of an end user’s contribution to the system peak load is its PLC and thus is the best available proxy for the amount of capacity that PJM procures for the customer’s use on the peak day of the year... [W]e agree with PJM that PLC and its inputs are linked to the forecasts that are used by PJM in procuring capacity... [I]f PJM were not able to base compliance on the PLC, end-use customers that are providing Capacity DR would not be required to perform in the delivery year in a manner consistent with PJM’s capacity objectives in the RPM auctions. *When resources do not drop below their historical PLC, there is more load on the PJM system than was anticipated when capacity resources were procured in the capacity auctions.* Additional capacity resources could well be required to meet this load, thus leaving less capacity available to meet other customers’ loads. In this respect, the system reserve margin potentially could be eroded, thus putting PJM at risk of violating reliability criteria, potentially necessitating increased capacity procurement at associated costs” [emphasis added]).

¹⁶ The Commission held, concerning the language in question: “We also accept PJM’s proposal to use Customer Baseline Load as the measure of a Demand Resource’s performance during non-summer Emergency Action hours.[citing proposed RAA Schedule 6 § G] We are not persuaded by AEMA’s claims that it is inappropriate to use an energy market measure for performance of a capacity resource. We note that the stated aim of PJM’s capacity performance revisions is to tie capacity revenue to resource’s performance in the energy markets during Emergency Action hours. Because Customer Baseline Load is an appropriate measure of such performance, we find that it is a

the new rules CBL would be defined to permit double counting. The CBL rules should be defined to be consistent with the M&V standards which are in RAA Schedule 6 § G. The application of CBL and FSL should be coordinated in a manner similar to the coordinated treatment of the GLD and FSL M&V approach, which the Commission accepted in the course of addressing the double counting issue in 2011.¹⁷

It is now clear that PJM intends to interpret the language in Section K of Schedule 6 to the RAA in a manner that would allow double counting for CP DR during winter months. The Market Monitor does see any explicit basis in the RAA for such an interpretation. Without such an explicit basis, the interpretation must be consistent with prior Commission holdings. Allowing double counting is contrary to prior Commission holdings and is fundamentally inconsistent with the requirement for just and reasonable rates under the Federal Power Act. To the extent that the filed language is ambiguous, a correct interpretation would not allow double counting. There is no evidence that the Commission intended to approve language that would have that result.

The core objective of CP reform is to establish a consistent definition of capacity that explicitly links payments for capacity with performance. Allowing double counting means that DR would be paid for reductions from MW levels that it did not pay for in the first place. DR fails to meet its obligation in these circumstances. If DR fails to meet its obligation, it is not providing capacity. It is unjust and unreasonable for customers to pay

reasonable measure for assessing performance and penalties during non-summer Emergency Action hours.” 151 FERC ¶ 61,208 at P 180.

¹⁷ See 137 FERC ¶ 61,108 at P 64 (“By requiring that GLD Capacity DR load reductions in the delivery year be referenced to a baseline that is the lesser of a customer’s PLC, or comparison load, PJM has ensured that resources will respond to peak period emergencies in a manner consistent with the RPM procurement process”).

for capacity that they do not receive.¹⁸ It is unduly discriminatory to excuse DR from the performance requirements that apply to other Capacity Performance Resources, with which DR competes in market MW for MW and from the performance requirements that apply to the same DR in the summer.¹⁹

Recent winter events have emphasized that capacity is an annual product and the same standards for performance that apply in the summer must apply in the winter as well. Whatever action is necessary to conform the interpretation of the M&V rules for CP with Commission precedent and to fully realize the CP reform for the capacity market should be taken to address resolve the issue in this proceeding.

II. MOTION FOR LEAVE TO ANSWER

The Commission's Rules of Practice and Procedure, 18 CFR § 385.213(a)(2), do not permit answers to answers or protests unless otherwise ordered by the decisional authority. The Commission has made exceptions, however, where an answer clarifies the issues or assists in creating a complete record.²⁰ In this answer, the Market Monitor provides the Commission with information useful to the Commission's decision-making process and

¹⁸ See *id.* at P 65 ("we agree that the rules applicable to the performance of Capacity DR resources must be consistent with the rules governing procurement of Capacity DR commitments in RPM auctions.").

¹⁹ See *id.* at P 74 ("PJM's capacity market treats DR, generation, and energy efficiency as supply resources. Like generation, Capacity DR resources receive a full capacity payment in the delivery year for capacity performance, with no revision accepted here altering or otherwise limiting this right. Moreover, PJM's filing draws a necessary link between capacity resource performance and procurement to ensure system reliability. ").

²⁰ See, e.g., *PJM Interconnection, L.L.C.*, 119 FERC ¶61,318 at P 36 (2007) (accepted answer to answer that "provided information that assisted ... decision-making process"); *California Independent System Operator Corporation*, 110 FERC ¶ 61,007 (2005) (answer to answer permitted to assist Commission in decision-making process); *New Power Company v. PJM Interconnection, L.L.C.*, 98 FERC ¶ 61,208 (2002) (answer accepted to provide new factual and legal material to assist the Commission in decision-making process); *N.Y. Independent System Operator, Inc.*, 121 FERC ¶61,112 at P 4 (2007) (answer to protest accepted because it provided information that assisted the Commission in its decision-making process).

which provides a more complete record. Accordingly, the Market Monitor respectfully requests that this answer be permitted.

III. CONCLUSION

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

Respectfully submitted,



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Dated: December 2, 2015

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 2nd day of December, 2015.



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