

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

PJM Interconnection, L.L.C.)	
)	Docket No. ER11-3322-000
)	

**POST TECHNICAL CONFERENCE COMMENTS
OF THE INDEPENDENT MARKET MONITOR FOR PJM**

Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM (“Market Monitor”), provides these comments following its participation in the technical conference in the proceeding convened July 29, 2011. The topic of the Technical Conference was to further explore PJM’s proposed clarification of measurement and verification of demand response providers’ compliance with capacity obligations. The statements at the Technical Conference confirmed that opponents of this clarification confuse the capacity and energy products as they are defined in PJM markets.

The use of PLC as the basic metric of compliance with capacity obligations was specifically addressed in the Technical Conference. PLC is referenced in the current and proposed PJM rules, and is a reasonable measure of the obligation of a customer to purchase capacity. The goal of the compliance metric is to measure the MW of capacity that a customer is otherwise obligated to pay for, if it does not participate in the DR program. The Market Monitor believes that it may be possible to develop an even more accurate compliance metric.¹ The Market Monitor recommends that a narrowly focused PJM

¹ American Municipal Power suggested one such approach. *See* Motion to Intervene and Protest of American Municipal Power, Inc., Docket No. ER11-3322-000 (April 28, 2011).

stakeholder process be convened to address the technical issues of establishing the most accurate possible such metric.

There were various proposals to create exceptions to the measurement and verification metric for demand side participation in the capacity market. None of the proposed exceptions relate to the level of capacity which customers are obligated to purchase. The proposed exceptions are unnecessary and would create an inaccurate benchmark and complicate PJM's ability to maintain resource adequacy. The proposed exceptions would also inappropriately reassign performance risks that are the responsibility of customers or their Curtailment Service Providers ("CSPs") to other customers.

I. COMMENTS

A. This Proceeding Is Not An Invitation to Revisit Basic Features of How Resource Adequacy Has Been Addressed in PJM.

In prior pleadings, the Market Monitor and others explain that protesters of PJM's filing of April 7, 2011, confuse the energy and capacity market concepts. The July 29th Technical Conference reveals that this basic confusion persists. Specifically, opponents complain that the PJM capacity market rules using PLC as a benchmark cannot work because this approach (i) does not recognize that delivery of one MW of energy is equivalent to the delivery of one MW of capacity; (ii) is flawed because it is designed around the annual system peak or five coincident peaks; and (iii) does not require that capacity providers take real time actions in order to meet their capacity obligations.

These criticisms are misplaced. Capacity is not energy and the reduction of energy usage does not mean that the obligation to use only a defined level of capacity has been met. The capacity market is designed based on peak use and any proposals to change this

fundamental element of the market are not at issue here. The measurement and verification of DR requires only that a market participant demonstrate that its level of consumption is less than the level of capacity that it is otherwise obligated to purchase. The difference is its MW commitment to provide DR.

Opponents assert that a reduction in energy usage should be paid as if it were capacity. The view is that a reduction is a reduction, and that all reductions should be treated as capacity. In the PJM market design, the capacity market defines the capacity product and the capacity market results in a specific price for this defined product. In the PJM market design, the energy market defines the energy product and the energy market results in a specific price for this defined product.

Opponents ignore the difference in the definition of the energy and capacity products in PJM markets and ignore the difference in the defined value of the products.

All load is required to purchase capacity at a level based on their PLC. That is a fundamental tenet of the PJM capacity market. DR customers can avoid paying the capacity market price by agreeing to not use a part of the capacity they are obligated to purchase. DR customers cannot agree to not use capacity that they were not obligated to purchase. If the customer would not have otherwise had to purchase the capacity, it should not expect a refund for agreeing not to purchase it. The value of that agreement is a function of the capacity market price and the MW level to which the customer agrees to interrupt when called.

As a result, every reduction in energy usage is not a reduction in capacity usage. The value of a reduction in energy usage is the locational energy market price, the LMP.

Energy reductions which are not capacity reductions should receive the LMP, which is the market defined value of the energy reduction.

Opponents also assert that a customer who has usage at the level to which it committed to reduce is not providing capacity unless there is a reduction at the time DR is called on by PJM. This is incorrect and again is based on a misunderstanding of the capacity product and the nature of the DR product in the capacity market.

The basic capacity transaction between PJM and a customer in the DR program is an agreement by the customer to avoid using some or all of the capacity which it is obligated to purchase, in return for not paying for that capacity. The customer agrees to use no more than a defined level of capacity when PJM calls on DR and in return pays only for that defined level of capacity. The verification of compliance with this obligation does not require a Demand Resource to adjust consumption if it is already consuming at or below the level of capacity which it purchased. As a result, customers whose demand is at or below the defined level of capacity purchased are in compliance regardless of whether they took an explicit action when called by PJM. Similarly, customers whose demand is above the defined level of capacity purchased are not in compliance regardless of whether they took an explicit action when called by PJM.

If a Demand Resource provides capacity by operating at the level to which it has committed and took specific actions to achieve that level which show a real-time reduction in energy usage against its Customer Base Line (“CBL”), then such resources may be entitled to both a capacity and an energy payment.

Protestors’ arguments divert attention from the scrutiny of behavior and practices adopted by certain CSPs that significantly over measure compliance with capacity obligations. Demand resources have a commitment to curtail usage to a defined level when called. Failing to do so means that they are using capacity paid for by others. Claiming capacity payments for reductions that were not provided is not consistent with a

competitive and well-functioning market. Significant payments have been made by PJM participants for capacity that was never delivered to them and that could never have been reasonably expected to be delivered by the identified resources.

B. PLC Should Be Reviewed In A Stakeholder Process To Determine If Improvements In Accuracy Are Possible.

The current rules and the proposed clarified rules use PLC as the benchmark to measure and verify compliance with a capacity obligation for a demand resource.

The objective of the benchmark is to measure the level of capacity which a customer is obligated to purchase. Individual customers can only avoid paying for capacity they are obligated to purchase.

PLCs are determined by customer usage on the five coincident peaks (5 CP) in the year prior to the delivery year. PLCs are used to allocate the costs of the capacity purchased by the LSE based on the RPM outcome.

To the extent that the sum of total PLCs is less than the level of capacity purchased by the LSE, the obligation of individual customers to purchase capacity could exceed the PLC. To the extent that the sum of total PLCs is greater than the level of capacity purchased by the LSE, the obligation of individual customers to purchase capacity could be less than the PLC. To conservatively account for this, the Market Monitor supported in its April 28th Comments the recommended transitional corrective measure, a 25 percent upward adjustment to PLC (1.25 x PLC) to accommodate the possibility that a customer's required level of capacity purchase could exceed the PLC.

The Market Monitor supports a stakeholder process over a relatively short period (no more than three months for example) which is focused entirely on validating that PLC is the correct measure of the amount of capacity which a customer is obligated to purchase

or recommending technical improvements to PLC. The purpose would not be to reopen the debate on the correct measurement philosophy. One such improvement could be to use the “Obligation Peak Load” in Schedule 8 to the PJM RAA to determine the amount of capacity procured through RPM for each zone that is assigned to each LSE. The resulting “Daily Unforced Capacity Obligation,” would be the amount for which each LSE is responsible.²

PLC remains the best benchmark for measuring the provision of DR in the capacity market. The use of the Guaranteed Load Drop (GLD) measurement and verification approach as a benchmark for compliance with capacity obligations is unjust and unreasonable and should be prohibited.

C. Once the Capacity MW Procured by PJM and Allocated to a Customer Have Been Identified, No Customer Specific Adjustments Are Appropriate

Viridity accepts PLC as the most appropriate benchmark, but argues for certain customer specific exceptions to benchmark. Viridity suggests that changes in load should be included in the measurement of performance of DR resources. For example, if the load at a customer’s site increases from five to ten MW between the summer in which the 5 CP load days are measured and the next summer, the delivery year for capacity, the suggestion is that the measurement of a reduction in capacity use should reflect the 10 MW rather than the 5 MW.³ While there is a superficial plausibility to this argument, it is not correct.

The objective of the benchmark is to measure the level of capacity which a customer is obligated to purchase. Individual customers can only avoid paying for capacity they are

² AMP made the same point in its protest of April 28, 2011.

³ Technical Conference Comments of Audrey Zibelman on Behalf of Viridity Energy, Inc., Docket No. ER11-3322-000 (July 28, 2011) at 6–9; *see also* Tr. 16–24 / 1–17.

obligated to purchase. The correct approach to measuring the reduction in capacity usage should depend only on the MW of capacity for which a customer is obligated to pay during the delivery year.

For example, if an existing customer is required to pay for additional capacity, the existing customer should be able to sell DR up to that obligation to pay for capacity and that obligation should be the benchmark for measuring compliance. However, if the existing customer has to pay for only five MW of capacity, then the benchmark for providing capacity cannot exceed five MW.

Similarly, a new customer added after the summer in which the 5 CP load days are measured, will pay for capacity based on a class average or other estimate by the EDC. In that case, the new customer should be able to sell DR up to that obligation to pay for capacity and that obligation should be the benchmark for measuring compliance.

Viridity also proposed two other related exceptions to the use of PLC as a benchmark: (i) a customer with a PLC that significantly varies from year to year but has an on-site generator that can reliably produce energy and (ii) a customer that has no summer load and zero PLC, but that could respond in the off season.⁴⁵

The logical flaw is the same for each proposed exception. The exceptions do not recognize the basic nature of the DR capacity market transaction. In that DR capacity market transaction, customers are agreeing to use only a specified level of capacity when called on to reduce. In return customers are agreeing to pay only for that specified level of

⁴ Tr. at 119 l. 5-18.

⁵ EnerNOC welcomed this list, "because they pretty much swallow the rule." Tr. at 122 l. 14-15.

capacity and agreeing not to pay for the level of capacity that they would otherwise have to purchase (PLC). In every case where a customer's obligation to purchase capacity varies, the DR benchmark should also vary. But, if a customer's obligation to purchase capacity is unchanged, then the other changes are irrelevant to the basic capacity market transaction.

Annual variations in PLC are irrelevant because the customer's obligation to purchase capacity is determined by PLC and therefore the PLC appropriately measures the capacity costs the customer can avoid by not purchasing part of that PLC, regardless of whether it varies.

Customers with zero summer load and zero PLC have no obligation to purchase capacity and therefore cannot benefit by agreeing to not purchase capacity. If this raises broader concerns about how system planning is done, those concerns should be raised in the appropriate venue. That is not at issue here.

In addition to the fact that the exceptions are not consistent with the basic nature of the capacity market transaction, the proposed exceptions would transfer performance risk from the individual customers providing Demand Resources to all other customers. Changes in individual customers' circumstances are not relevant to the obligations that they assume when they sell capacity as Demand Resources. Those obligations are defined by the amount of capacity which individual customers are obligated to purchase. In order to release capacity for which they were obligated to pay, and avoid payment for that capacity, customers must reduce their load to the level of capacity for which they paid even if load variability and unpredictability make that more difficult. The costs of addressing such uncertainty should be borne directly by the beneficiaries and not assigned to those not participating in the DR program. Customers providing Demand Resources should manage

their own risks of non performance or participate in portfolios managed by PLCs to manage those risks.⁶

To the extent that selling DR in the capacity market requires the seller to take on certain risks, such risks are not unreasonable. These risks are consistent with the risks borne by generators who have a higher than expected forced outage rates. These risks are precisely those which CSPs can address through aggregation. If one resource has difficulty complying with obligations due to unanticipated load increases, it may have an opportunity to compensate with legitimate over compliance by a customer whose load unexpectedly decreases.

⁶ “The actual load forecast is not just a question of calculating the reserve margin; the actual forecast takes into account all the uncertainties that Audrey is telling us she's willing to grant exceptions to look at.” Tr. at 122 l. 9–13.

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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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 15th day of August, 2011.



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