UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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PJM Interconnection, L.L.C.	)	Docket No. ER25-785-000
	)	

REQUEST FOR REHEARING OF THE
INDEPENDENT MARKET MONITOR FOR PJM

Pursuant to Rule 713 of the Commission's Rules and Regulations,[1] Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM[2] ("Market Monitor") for PJM Interconnection, L.L.C. ("PJM"), submits this request for rehearing of the order issued in this proceeding February 20, 2025 ("February 20th Order").[3] Specifically, rehearing is sought of the decisions (at PP 99, 123) to (i) "accept PJM's proposal to set an offer cap floor of the greater of net ACR or CPQR beginning with the 2026/2027 Delivery Year," and (ii) to "accept PJM's proposal to allow sellers to submit resource-specific, segmented offer caps." The February 20th Order is arbitrary and capricious and lacks reasoned explanation. The February 20th Order ignores arguments that the indicated rule changes allow noncompetitive offers and will result in unjust and unreasonable capacity market prices. Rehearing of these findings should be granted and the ability of the capacity markets to produce competitive results should be preserved.

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1 18 CFR § 385.713 (2024).

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 *See PJM Interconnection, L.L.C.*, 190 FERC ¶ 61,117 (2025).

I. REQUEST FOR REHEARING

A. The February 20th Order Erred in Finding a Standalone CPQR Based Offer Cap Is Just and Reasonable.

In the February 20th Order, the Commission found (at P 99) that setting an "offer cap floor of the greater of net ACR or CPQR … reasonably and accurately reflects the cost and risks of accepting a capacity supply obligation for all resource types."

The February 20th Order fails to reasonably address the fundamental flaw with the rule change. Changing the market seller offer cap ("MSOC") to the greater of net ACR and gross CPQR permits capacity offers in excess of competitive levels. The February 20th Order ignores how the revised rule changes the definition of a competitive offer in the capacity market.

The February 20th Order states (at P 108):

> Arguments that the sole reason for the capacity market is to provide the "missing money" are unpersuasive. Even a resource without "missing money" still incurs incremental non-performance risks, which are borne as costs, from taking on a capacity commitment, including, for example, costs to mitigate a risk of Non-Performance Charges (e.g., making arrangements for firm fuel supplies or winterization). Such a resource would have little to no incentive to incur the incremental costs of taking on a capacity commitment unless it was able to include such incremental costs in its offer.

The February 20th Order is incorrect when it states (at P 108) that the missing money is not relevant. The February 20th Order states the point but misunderstands the implications when it states (*id.*) that CPQR is an incremental cost that must be recovered. These statements ignore the Commission's own order establishing the PJM capacity market design.

It is an historical fact, stated explicitly at the time by PJM and by the Commission, that the PJM Capacity Market was created in order to provide the missing money. The PJM markets function as an integrated whole. The missing money exists when net energy and ancillary services revenues (net revenues or EAS) are less than avoidable costs. The

Commission stated the relationship between net revenues and the capacity market very clearly in its order denying rehearing on the original RPM filing in 2006.[4] The Commission in the present case simply ignores the fundamental basis for the capacity market and ignores its own prior findings.

Of course the February 20th Order is correct that CPQR costs are incremental costs that should be included in capacity market offers. However, the February 20th Order has not provided any supportable reason to treat CPQR costs differently in the offer than other avoidable costs. If net revenues cover or more than cover the total avoidable costs there is no reason for a positive offer in the capacity market. In that case, there is no missing money.

Contrary to the order, the avoidable cost rate is not the cost of being an energy only resource. The avoidable cost rate is explicitly defined in the tariff as the cost of being a capacity resource:

> The Avoidable Cost Rate for a Generation Capacity Resource that is the subject of a Sell Offer shall be determined using the following formula, expressed in dollars per MW-year:
>
> Avoidable Cost Rate = [Adjustment Factor * (AOML + AAE + AFAE + AME + AVE + ATFI + ACC + ACLE) + ARPIR + APIR + CPQR][5]

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4 *See PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331 at P 144 (2006) ("[T]he Settlement as it now exists does provide for interaction between PJM's capacity and energy markets. The revenues earned in the energy market will affect the price for capacity: capacity market revenues (and thus, the importance of capacity markets in eliciting adequate infrastructure) will be reduced as energy market revenues increase. That is, expected revenue from the energy and ancillary service markets will reduce the height of the demand curve, and thus, reduce the prices and revenues received by resources in the capacity market. Thus, to the extent that energy market revenues increase, capacity market revenues could be reduced proportionately so that the overall rate remains just and reasonable.").

5 OATT Attachment DD § 6.8(a).

This defined total avoidable cost includes CPQR as one of the identified components. There is nothing unique about CPQR. It is one of a number of avoidable costs which are the costs of being a capacity resource.

The February 20th Order's explanation proves too much. Following that explanation, it could also be asserted that no market participant would ever offer capacity if high net revenues resulted in an offer price equal to zero because the incremental costs of being a capacity resource are not "included in its offer." All the relevant costs can be included in the offer and the offer can be zero if net revenues already provide for full recovery of those costs.

The February 20th Order ignores key tariff rules including that all capacity resources are subject to a must offer obligation, that capacity market clearing prices have never been zero or close to zero, that being a capacity resource has significant benefits, and that being a capacity resource is a long term commitment because it requires Capacity Interconnection Rights (CIRs) that generally require a long waiting period to acquire and that are expensive and that generally become more expensive with time. Together, these all mean that it is not possible to decide to be a capacity resource on an auction by auction basis.

The February 20th Order misses the point when it states that a capacity resource takes on incremental costs that it needs to include in its offer. The statement is correct but not relevant to the decision about CPQR or other avoidable costs of being a capacity resource. The Market Monitor agrees that CPQR should be included in the offer. The Market Monitor agrees that all parts of avoidable costs should be included in the offer. The question is what happens when CPQR and total avoidable costs are covered in whole or in part by net revenues from the energy and ancillary services markets. Those net revenues can be increased as a result of being a capacity resource, for example because capacity resources are deliverable based on CIRs and do not need to be concerned with interruptions when demand and prices are high.

There is no meaningful distinction among the avoidable costs to be a capacity resource either in the tariff or in economic logic.

The changes to the MSOC do not correctly account for the clearly defined and well established relationship between the energy and ancillary service markets and the capacity market.

Capacity is not a standalone product. The February 20th Order improperly treats the capacity market as if capacity were a real, separable product. But capacity is not a thing. Capacity does not power light bulbs or refrigerators or air conditioners. It is not possible to buy just capacity. The only real product provided in wholesale power markets is energy. The concept of capacity and a capacity market is an administrative mechanism designed to help make the energy market work. The only reason for the capacity market is to provide for the missing money in the energy and ancillary services markets. If there is no missing money there is no reason for a positive capacity market price. That is the basic, long time and well established logic of the PJM markets.[6] Capacity resource status is not required or mandatory. The incentive to be a capacity resource is the capacity market price and the associated benefits of being a capacity resource including the fact that energy from capacity resources is always deliverable to the markets. The capacity market price will equal the highest offer required to clear the market, including all components of ACR including CPQR, net of net revenues from the energy and ancillary services markets, or the maximum price on the VRR curve. The combination of energy market revenues and capacity market revenues will cover all the ACR costs, including CPQR costs, of the marginal resource and more than cover all those costs for inframarginal resources.

Allowing an offer cap based on gross CPQR, completely ignoring whether net revenues already cover CPQR, will raise the market price above the competitive level. The MSOC changes enable the market seller to set prices above the competitive price level and provide the capacity market seller with PJM sanctioned market power. The competitive price level is a result of offers based on gross ACR minus net revenues, and the VRR curve.

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[6] *See* 117 FERC ¶ 61,331 at P 144.

The Market Monitor agrees with the determination in the February 20th Order (at P 109) that incentives are not relevant to whether PJM's CPQR proposal is just and reasonable. PJM raised the incentive issue in an effort to support its proposal. That there is no incentive issue removes that argument and is another reason to reject the proposal. There is no incremental cost of selling capacity that is not about the actual product, the sale of energy. The performance penalties are about the failure to deliver energy. CPQR is a real cost of promising to deliver energy when it is needed. The CPQR cost is included in the definition of total ACR costs. All ACR costs are about the incremental cost of selling capacity. PJM's approach also proves too much. If PJM's CPQR approach were extended to each of the other components of ACR, then there would be no EAS offset at all and the link between the energy and capacity markets would be fully broken.

PJM's argument for changing the MSOC definition focused on capacity resources with net revenues that are greater than going forward costs (ACR). For a specific delivery year, these resources are expected to earn sufficient revenue in the PJM energy and ancillary service markets to cover the resource's going forward cost and do not need capacity market revenue to remain economically viable. In that case, there is no missing money. Going forward costs includes risk (CPQR) explicitly.[7] If net revenues are greater than going forward costs, all going forward costs are covered, including CPQR. The risks addressed by CPQR are performance risks, the risk of incurring a PAI penalty.

PJM asserted that there is an incentive issue because if the unit were an energy only resource it would not face PAI risk. [8] PJM's simple assertion is: why should a resource take on the PAI risk if it can earn more as an energy only resource without being a capacity

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7 OATT Attachment DD § 6.8(a).

8 Capacity performance penalties are called Non-Performance Charges in the PJM OATT. See Attachment DD § 10A(e). Non-Performance Charges are applicable when a capacity resource does not provide a defined level of capacity during a Performance Assessment Interval.

resource. This is the same basic argument that PJM once made but no longer makes in support of unit specific offer caps of Net CONE. The answer is simple. The choice to be a capacity resource cannot be made on a year by year or auction by auction basis. The choice to be a capacity resource is a long term decision that depends on the incremental costs, the price of capacity and the other benefits of being a capacity resource. Capacity market prices have never been zero and are not expected to be zero and are especially not expected to be zero for a sustained period. As a result, resources are better off receiving capacity market revenues than not at a clearing pricing greater than or equal to an offer from the marginal resource equal to net ACR, recognizing that ACR includes CPQR. The incentive to be a capacity market resource is the capacity market price and the other benefits of being a capacity resource. An offer of zero does not mean that the resource expects the clearing price to be zero. No resource is forced to be a capacity resource. Resources can choose to be energy only resources if they think it would be more profitable. That is a decision is about the long term participation in the capacity market and includes the requirement to give back the unit's CIRs and means a long wait to return to capacity market status. The actual behavior of resources to date shows that resources expect higher profits from participating in the capacity market, with CPQR included in the definition of ACR, and not, per PJM's proposal, as a standalone adder regardless of net revenues.

In the case that net revenue (EAS) is larger than ACR, the current MSOC is $0 per MW-day.[9] Capacity market offers are never required to be less than $0 per MW-day.

Allowing offers based on gross CPQR when net revenues are greater than total gross ACR, including CPQR, permits offers greater than the competitive level by allowing resources with a competitive offer of $0 per MW-day to make positive offers equal to one component of ACR, the gross CPQR component, ignoring net revenues entirely. The rule

[9] OATT Attachment DD § 6.4(a) states that the MSOC rules are applicable to offers above $0 per MW-day.

also permits offers greater than the competitive level by allowing resources with a competitive offer greater than $0 per MW-day but less than gross CPQR to make offers equal to one standalone component of ACR, the gross CPQR component, also ignoring EAS entirely.

The February 20th Order erred in accepting PJM's unsupported rule change allowing MSOCs based on standalone CPQR. The result is an arbitrary and capricious market design that permits the exercise of the market power. Rehearing of the February 20th Order should be granted.

B. The February 20th Order Erred in Finding Resource Specific Segmented Offers Caps Just and Reasonable.

In the February 20th Order, the Commission found (at P 123) that allowing "sellers to submit resource-specific, segmented offer caps … is just and reasonable." The February 20th Order states (*id.*) that the rule "sufficiently balances the objectives of giving Capacity Market Sellers the opportunity to more accurately reflect the non-performance risk they will face at different capacity commitment levels while also giving PJM the ability to ensure that a resource's proposed segmented offer caps reasonably reflect their costs and non-performance risks." The February 20th Order rejected (at P 127) the Market Monitor's concern that under the rule a seller could "include all of its going forward costs in the first segment, thus inflating the offer cap," finding that PJM's review and the requirement that a segment include ascending levels (which the February 20th Order required be made explicit) would sufficiently guard against manipulation. However, the rules do provide that all going forward costs are included in the first segment, divided by an arbitrarily lower number of MW in the first segment.

If the proposal to allow offers based on gross CPQR is rejected, the proposal to allow segmented offers should also be rejected because the segmented offers are based on gross CPQR.

The decision to allow segmented market seller offer caps (MSOC) is a radical change to market seller offer caps that could significantly increase capacity market prices above competitive levels for no substantive reason. The tariff language is unclear and inadequate. PJM has failed to do any testing of the impacts of this change. The February 20th Order fails to address the potentially extreme consequences of this proposal. There is no basis for the finding that any review by PJM could avoid these consequences because PJM must apply flawed rules.

Avoidable costs are incurred in order to provide capacity from an entire resource. There is no basis in PJM's rules for assigning those avoidable costs to the first segment and no basis for defining the MW size of the first segment. There is no basis in economics, in accounting or in logic for assigning avoidable costs to only the first segment, especially when there are no rules defining the MW size of the first segment. The February 20th Order approves a rule that highlights the Market Monitor's point that a resource could assign 100 percent of its avoidable costs to its first segment, thus overstating the offer compared to an equal sharing of avoidable costs over all the MW of the resource. That is exactly what the rule allows and requires for a segmented offer. The rules do not clarify whether the gross ACR assigned to the first segment includes any CPQR. Based on the example in the Graf affidavit, the first segment does include CPQR. Simply stating that PJM will prevent bad outcomes without a definition from PJM about what standard would be applied is meaningless. Under PJM's segmented MSOC, the first segment is the only segment to which the net ACR offer cap is applicable, including both gross ACR and net revenues, and that is only if the market seller expects the resource's net EAS to be less than the energy only going forward cost. Sellers will include 100 percent of going forward costs in the first segment, thus inflating the MSOC by dividing by an arbitrarily smaller number of MW. The rules or even principles for dividing single resources into multiple segments are not stated or defined. The tariff is not clear. Segment 2 up to segment 10 would have a MSOC equal to a segment specific standalone gross CPQR.

The proposed redline in OATT Attachment DD § 6.4(e) includes:

> Segmented Market Seller Offer Caps shall be comprised of multiple Market Seller Offer Caps, each calculated in accordance

> with Tariff, Attachment DD, sections 6.4(a) and 6.8. If elected by the Capacity Market Seller, the first segment shall have a Market Seller Offer Cap reflective of the resource-specific Avoidable Cost Rate, less the Projected PJM Market Revenues for such resource. All subsequent offer segments (and in the first segment if solely requesting a Capacity Performance Quantifiable Risk for the Market Seller Offer Cap) shall include only incremental Capacity Performance Quantifiable Risk associated with the incremental capacity commitment in that offer segment to the extent such value has been supported and obtained approval pursuant to the requirements set forth in this Tariff, Attachment DD, section 6.8(b).[10]

The February 20th Order accepts tariff language on segmented offer caps that is unacceptably vague, lacks essential details, and is therefore not enforceable. The referenced sections of the tariff do not provide any details about how to define CPQR by segment or how to define the MW break points between segments.

The decision to allow segmented offer caps means allowing the exercise of market power. This is the case first because the segmented offer caps require that all avoidable costs be spread over a first MW segment that is smaller than the full resource, thus inflating the MSOC, and allow offer caps for all segments after the first segment based on gross CPQR with no net revenue offsets. The February 20th Order fails to address this unjust and unreasonable consequence of the rule. If avoidable costs can be assigned to the first, self defined MW offer segment, and the later MW segments are not defined in the rules, MSOCs are meaningless. Assigning gross CPQRs and no net revenues to one or more undefined MW tail blocks would permit offers that exceed the correctly calculated MSOC by multiples and would permit the exercise of market power. The rule does not use any net revenue offset for the CPQR segments. The competitive level is defined as total gross avoidable costs, net of net revenues, divided by the total MW in the offer. The competitive clearing

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10 *Id*.

price is set by the interaction between competitive offers and the PJM demand curve (VRR curve).

The February 20th Order fails to provide any details or examples of what would qualify as "adequate justification for the use of a segmented offer cap" or explain how the MW would be allocated to segments or supported.[11] The tariff language is too vague to enforce any reasonable standard of review.

Segmented MSOCs allow the capacity clearing price to be set above the competitive level. All the arguments about standalone CPQR related to the definition of the MSOC apply to the segmented MSOC proposal as well.

CPQR values can be very high. Values have exceeded $100 per MW-day. In a tight capacity market that requires segmented offer tail blocks to clear, the segmented offer tail blocks can set capacity market prices at arbitrarily high levels that are not consistent with a competitive outcome.

The February 20th Order erred in accepting PJM's unsupported rule change allowing segmented offers. The result is an incoherent, arbitrary and capricious market design that permits the exercise of the market power. Rehearing of the February 20th Order should be granted.

II. STATEMENT OF ISSUES

The February 20th Order is arbitrary and capricious and lacks reasoned explanation because it permits capacity market market seller offer caps based on standalone gross CPQR contrary to the fundamental principles of capacity market design defined by the Commission and permits segmented offers based on standalone gross CPQR and has no enforceable rules defining segments or how to assign risk to segments.

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[11] *See* OATT Attachment DD § 6.4(e).

III. CONCLUSION

For the reasons provided above, the Market Monitor respectfully requests that the Commission grant rehearing.

Respectfully submitted,

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Dated: March 19, 2025

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 19th day of March, 2025.

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