

**BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

PJM Interconnection, L.L.C.)
)
) **Docket No. ER18-1314-000**

**Comments of American Municipal Power, Inc. on PJM Interconnection L.L.C.’s
Capacity Repricing or in the Alternative MOPR-Ex Proposal**

On April 9, 2018, PJM Interconnection, L.L.C. (“PJM”), pursuant to section 205 of the Federal Power Act (“FPA”), 16 U.S.C. § 824d, filed two, mutually exclusive sets of proposed revisions to the Reliability Pricing Model (“RPM”) rules in the PJM Open Access Transmission Tariff (“Tariff”) purportedly to address state subsidies and their impact on the “determination of just and reasonable prices in the PJM capacity market”¹: the Capacity Repricing Proposal and the MOPR-Ex Proposal. In response to its filing, PJM requested that the Federal Energy Regulatory Commission (“Commission”) take a number of actions: (1) issue an Order on PJM’s proposal by June 29, 2018, that accepts but suspends one of the two mutually exclusive alternatives proposed by PJM; (2) identify the subset of issues for which it seeks an additional record and order a paper hearing on those issues; (3) provide the option for the parties to use settlement judge procedures to address the identified issues; (4) set a deadline for the conclusion of settlement judge procedures by adopting an effective date of January 4, 2019, for the final Commission decision and Tariff revisions so PJM may implement the final, winning proposal for the

¹ Capacity Repricing or in the Alternative MOPR-Ex Proposal: Tariff Revisions to Address Impacts of State Public Policies on the PJM Capacity Market (hereinafter, “PJM Capacity Repricing Proposal”) at 1.

May 2019 Base Residual Auction (“BRA”) for the 2022/2023 Delivery Year; and, (5) grant a waiver of the Commission’s 120-day maximum notice rule.

Pursuant to Rules 211 and 214 of the Commission’s Rules of Practice and Procedure² and in accordance with the Commission’s Notice of comments and subsequent Notice of Extension of Time, American Municipal Power, Inc. (“AMP”) submits these comments on PJM’s April 9, 2018 filing (hereinafter, the “Proposal”) for the Commission’s consideration.³

I. BACKGROUND

PJM’s Proposal includes an extensive description of the concern that precipitated the Proposal, including the increased participation of generation resources receiving state revenue in addition to payments received from the capacity market, which have been driven down by a combination of flat to declining load growth and excess capacity.⁴ PJM characterizes this as “out-of-market support” and explains that, although there may be strongly held policy reasons, including social, political, or environmental public policy, for providing such out-of-market support to specific in-state resources or resource types, retaining or compelling the entry of resources that its administrative, resource adequacy construct does not regard as economic, suppresses prices for resources that the construct has deemed economic and either forces those resources to seek subsidies to compete or forces them out of the construct.⁵ PJM concludes that Commission action is needed to prevent out-of-market subsidies from undermining RPM’s ability to fulfill the

² 18 C.F.R. § 385.211, 18 C.F.R. § 385.214

³ AMP filed a doc-less intervention in this proceeding on April 30, 2018.

⁴ See, e.g., PJM Capacity Repricing Proposal at 10-11.

⁵ *Id.* at 14.

“first principles of capacity markets” identified in the Commission’s Order accepting changes to ISO New England Inc.’s (“ISO-NE”) capacity construct (referred to as “Competitive Auctions with Sponsored Policy Resources” or “CASPR”): (1) facilitate robust competition for capacity supply obligations, (2) provide price signals that guide the orderly entry and exit of capacity resources, (3) result in the selection of the least-cost set of resources that possess the attributes sought by the markets, (4) provide price transparency, (5) shift risk as appropriate from customers to private capital, and (6) mitigate market power.⁶

AMP agrees with PJM that, to be sustainable over the long term, resource adequacy constructs must accommodate state and local public policies that reflect consumer preferences. AMP also agrees that consumers lately have begun to place greater weight on such values as environmental compatibility, fuel source renewability and technology diversity in the resource selection process.⁷ However, administrative resource adequacy construct designs that thwart these preferences necessarily will face challenges and are more likely to fail than succeed. Furthermore, the views of economists and planners about what consumers *should* prefer must not stand in the way of effectuating consumers’ *actual* preferences (which is what competitive markets actually attempt to meet)⁸. When narrow priorities are given greater weight than consumers’

⁶ ISO New England, Inc., 162 FERC ¶ 61,205, at P 21 (2018) (“CASPR Order”).

⁷ Given the changes to capacity markets, states have attempted to take matters into their own hands to better control outcomes. See, e.g., *Calpine, et. al v. PJM*, FERC Docket No. EL16-49-000 (2016) and *Hughes v. Talen Energy Marketing LLC*, 136 S.Ct. 1288 (2016).

⁸ It is ironic that PJM is concerned about non-market impacts to a resource adequacy construct that itself is based upon prices administratively determined by a select group of economists and theoreticians, rather than prices determined by the broader, reality-based, true market. Resource adequacy constructs need to be able to anticipate and accommodate exogenous events.

express preferences, the problems capacity constructs are experiencing today are inevitable.

However, both the Capacity Repricing Proposal and the modified MOPR-Ex suffer from issues that outweigh any aspirational goals of the Proposal. PJM has failed to demonstrate that the Capacity Repricing Proposal or the MOPR-Ex are just and reasonable or even needed. Additionally, PJM's recent proposal to address fuel security⁹ as well as the proposed changes from the most recent Quadrennial Review propose even more far reaching changes than that currently before the Commission. PJM certainly has not demonstrated that either proposal helps accomplish the "first principles" of capacity constructs. As such, the Commission should reject the Proposal and direct PJM to reconvene the stakeholder process without arbitrary deadlines to complete the evaluation of whether and what types of changes are needed to accommodate state actions in its administrative resource adequacy construct, as well as the current Quadrennial Review process and the novel fuel security proposal.

II. INTRODUCTION

PJM notes that the "PJM Tariff currently has no means to address the price-suppressing effects that might result from any of the existing or proposed state subsidy programs" and thus, Tariff revisions are required.¹⁰ AMP agrees that RPM is limited by its design. Thus, it should not come as a surprise that RPM is incapable of handling any issues beyond its design.

⁹ "Valuing Fuel Security" Scoping Document, April 30, 2018, available at: <http://www.pjm.com/-/media/library/reports-notice/special-reports/2018/20180430-valuing-fuel-security.ashx>.

¹⁰ PJM Capacity Repricing Proposal at 35.

Nonetheless, PJM states that “[a]s the RTO and public utility with tariff administration responsibilities over the capacity market rules under FPA section 205, PJM is taking the action it has determined is needed to fill the PJM Tariff gap demonstrated in this filing.” PJM Proposal at 17. To fill the gap, PJM offers one of two sets of changes to RPM.

A. PJM’s Capacity Repricing Proposal

Under PJM’s preferred option, PJM would institute a two-stage BRA in which the first stage is used to clear resources and assign capacity commitments to those resources that cleared, and the second stage determines the market clearing price. In the Proposal, the first stage allows capacity resources that receive “Actionable Subsidies” to clear based on their unmitigated offers, thus avoiding the risk that ratepayers pay reiteratively for capacity: once through the subsidy (which cannot be conditioned upon the resource clearing the market)¹¹ and once for the procurement of capacity to replace the subsidized resource that failed to clear.¹² Because PJM will not seek to mitigate any offers in the first stage, there is no Minimum Offer Price Rule (“MOPR”).¹³ In the second stage, PJM identifies the capacity resources with “Actionable Subsidies” and reprices their offers to the Actionable Subsidy Reference Price, which is defined as an amount that PJM determines would be a competitive offer for a specific capacity resource.¹⁴ This has the effect of increasing the clearing price without changing the resources that have a capacity

¹¹ *Hughes v. Talen Energy Marketing, LLC*, 136 S.Ct. 1288 at 1299 (2016). “So long as a State does not condition payment of funds on capacity clearing the auction, the State’s program would not suffer from the fatal defect that renders Maryland’s program unacceptable.”

¹² PJM Capacity Repricing Proposal at 59.

¹³ *Id.*

¹⁴ *Id.* at 50-64, 82-88.

commitment from the first stage. In other words, the new clearing price will be based upon the intersection of the supply and demand (or VRR) curves after having shifted the demand curve to the right, resulting in a higher clearing price than had PJM not repriced the capacity resources with Actionable Subsidies.¹⁵ In theory, increasing the clearing price in the second stage counteracts the clearing price suppression caused by below-cost, subsidized offers. However, PJM only performs the second stage of the process if more than 5,000 MWs for the entire PJM Region or 3.5% of the Reliability Requirement for any modeled Locational Deliverability Area (“LDA”) of capacity resources with Actionable Subsidies clear.¹⁶

B. MOPR-Ex

Under PJM’s version of MOPR-Ex, which, without explanation differs from the proposal supported by the Market Monitor through the Capacity Construct/Public Policy Senior Task Force (“C2P2”), the MOPR would apply to both new and existing resources but only those that receive a Material Subsidy and an Actionable Subsidy.¹⁷ MOPR-Ex would also apply to all types of capacity resources, regardless of fuel, unless the resource is a Qualifying Facility.¹⁸ MOPR-Ex does include categorical exemptions from mitigation, including a unit-specific exemption, a self-supply exemption for Public Power entities (that meet a net long threshold of 600 MW), and a competitive entry exemption.¹⁹ PJM has

¹⁵ *Id.* at 62-64.

¹⁶ *Id.* at 62.

¹⁷ *Id.* at 98.

¹⁸ *Id.* at 98-99.

¹⁹ *Id.* at 99-110.

not come to terms with how to treat renewable resources receiving payments for renewable energy credits they create. PJM offers two alternatives under MOPR-Ex: one that excludes renewable resources complying with Renewable Portfolio Standards (“RPS”) or a competitive process as a categorical exemption from MOPR; and one that does not.²⁰ PJM states that it believes that leaving the determination of whether renewable resources will be mitigated or not to the Commission satisfies the notice requirements of the Federal Power Act (“FPA”) section 205.

III. PJM HAS NOT DEMONSTRATED THAT THE PROPOSAL IS JUST AND REASONABLE OR EVEN NEEDED

Although it is true that the concern about state-subsidized resources has been discussed for some time now,²¹ PJM’s Proposal is simply not “ripe” for a Commission determination and sets a bad procedural precedent. Although PJM suggests that it is presenting two, fully fleshed out proposals, either of which could be selected by the Commission and implemented for the 2019 BRA, PJM requests that, if the Commission believes more work is needed on one of the proposals, that the Commission should “identify the subset of issues for which it seeks an additional record and order a paper hearing on those issues” and permit the parties to use “settlement judge procedures to address the identified issues.” PJM Capacity Repricing Proposal at 7.

PJM’s approach of offering up a “jump-ball” and asking for the Commission to forecast where the winning proposal should be improved should be rejected. The Commission’s filing regulations under FPA section 205 do not make provision for the

²⁰ *Id.* at 112-114.

²¹ See, for example, *State Policies and Wholesale Markets Operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection, L.L.C.*, Notice of Technical Conference, Docket No. AD17-11-000 (March 3, 2017).

submission of “alternative filings.” See 18 CFR Part 35. While there have been some instances of entities providing alternative tariffs on limited issues for the Commission’s consideration, PJM is inappropriately seeking a declaratory order on a significant policy matter (i.e., how RPM should be modified to address state-subsidized capacity resources) and limiting the Commission to two options. Under these circumstances, the Commission would be well within its discretion to reject PJM’s Proposal.

Although the PJM stakeholders agree that this issue is worthy of thoughtful evaluation and discussion, as evidenced by the formation of the C2P2,²² it is equally clear that the PJM stakeholders do not share PJM’s sense of urgency or proclivity for the Capacity Repricing Proposal. In fact, a super majority of the PJM stakeholders, at the January 25, 2018 Markets and Reliability Committee, voted soundly against the then-current version of PJM’s Capacity Repricing Proposal²³ and status quo polled higher than either option in PJM’s Proposal.²⁴

AMP believes that any solution developed in response to state public policy initiatives should be developed with the input of PJM stakeholders. Although any

²² AMP and other PJM stakeholders were concerned about PJM’s direction and offered a problem statement and issue charge to bring the debate into the PJM stakeholder process. In forming C2P2 and imploring other stakeholders to take up this issue, to AMP, it was less of a matter of addressing a perceived problem but instead reacting to PJM’s comment at the August 2016 Grid 20/20 meeting that they would not be seeking stakeholder input on their “capacity re-pricing” proposal. AMP believed that the Grid 20/20 “capacity re-pricing” proposal was fraught with market design errors and having a robust stakeholder process with input from a diverse set of stakeholders from all of the PJM sectors could lead to a better solution than that developed unilaterally by PJM. Many stakeholders were reluctant to take up this effort. Over a six month period, AMP representatives appeared five separate times before the PJM Markets and Reliability Committee and facilitated the discussion as the stakeholders sought to define the problem and limit the universe of solutions.

²³ The voting ratio was 1.07 in favor of the Capacity Repricing proposal and 3.93 against.

²⁴ See, *CCPPSTF Vote Results* (11/21/2017), available at: <http://www.pjm.com/-/media/committees-groups/task-forces/ccppstf/20171121/20171121-ccppstf-vote-results.ashx>.

proposal made through a FPA section 205 filing must stand on its own merits, the Commission has long held that there is value in stakeholder engagement and consensus-based solutions.²⁵ Rather than seeking multiple arbitrary Commission deadlines and guided processes for the additional work needed to resolve issues with PJM's Proposal, the Commission should direct PJM to reconvene the C2P2 to address the issues with the two proposals and create a supportable proposal that achieves the first principles identified by the Commission in the CASPR proceeding.

AMP's concern over PJM's administrative resource adequacy construct is well documented.²⁶ The proposed actions of FirstEnergy and AEP, with approval by the Public Utilities Commission of Ohio, to recover "out of market" payments from retail customers paid to their unregulated generation affiliates in an effort to keep what were described as uneconomic capacity resources,²⁷ the advent of ZECs,²⁸ and the general angst over states having the right and authority to make public policy decisions appear to AMP as additional symptoms of the overall inadequacy of RPM to withstand any type of exogenous actions that threaten "the market." The Department of Energy's Notice of Proposed Rulemaking²⁹ and FirstEnergy Solutions' subsequent request for emergency

²⁵ See *PJM Interconnection, LLC*, 157 FERC ¶ 61229, P11 (2016), wherein the Commission stated that "stakeholder input is an essential element of a just and reasonable regional transmission planning process."

²⁶ See, for example, *State Policies and Wholesale Markets Operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection, L.L.C.*, Post-Technical Conference Comments of American Municipal Power, Inc., Docket No. AD17-11-000, (June 22, 2017).

²⁷ *Calpine et al. v. PJM Interconnection L.L.C.*, Complaint Requesting Fast Track Processing, FERC Docket EL16-49-000 (March 21, 2016).

²⁸ For example, see legislation enacted by the State of Illinois, known as the "Future Energy Jobs Bill" that adds new Section 1-75(d-5)(1) to the Illinois Power Agency Act to create zero emission credits or "ZECs").

²⁹ Grid Resilience in Regional Transmission Organizations and Independent System Operators, 162 FERC ¶ 61,012 at P 16 (Jan. 8, 2018).

relief are other symptoms of growing dissatisfaction with wholesale market results. PJM has inadvertently fueled this perception via its 27-plus major design changes to RPM since 2010, some rushed through, to preserve reliability. From AMP's perspective and experience, any resource action that does not squarely fit into the administratively determined construct is deemed a "threat" by PJM and the rules must be adjusted to protect the "market" (e.g., MOPR). Indeed MOPR has evolved from its stated purpose (to mitigate buyer-side market power) to a preferred mechanism to maintain prices administratively determined to be the "right" prices.

The capacity construct has become increasingly complicated and convoluted, bringing increased volatility and so much "rules churn" that any long-term planning and coordination is extremely difficult. PJM's proposed changes come at a time when stakeholders are still evaluating the last set of major changes through Capacity Performance and are already being forced to review an additional set of major changes just proposed by PJM to evaluate and incorporate fuel security vulnerabilities,³⁰ on a locational basis, as constraints into PJM's capacity market. Additionally, PJM last week kicked off the Quadrennial Review process, which will result in additional significant changes to RPM. In other words, rather than material changes to RPM in rapid succession, we are now in the position of addressing fundamental changes to RPM before decisions on the preceding proposed changes are even finalized, implemented and evaluated. AMP contends that this is not a result of a flexible construct adapting to

³⁰ While AMP looks forward to PJM's explanation of its thinking in this initiative, initial review indicates that the premise is contradictory to PJM's "no excuses" performance requirements set forth under Capacity Performance. Now PJM seems to be acknowledging fuel delivery could be an issue beyond a resource owner's control.

exogenous factors but rather an increasingly *inflexible* construct as regards eligible resource technologies and fuel types.³¹

AMP supports competitive markets. But RPM is not a market and both options in PJM's Proposal move RPM further away from market principles and create barriers to truly competitive results.

A. Capacity Repricing Proposal

One of PJM's justifications of the Capacity Repricing Proposal is that it is needed to provide price signals that guide the orderly entry and exit of capacity resources. PJM Capacity Repricing Proposal at 17. While AMP agrees that long-term price signals are necessary for capacity investment, the price signals from PJM's mandatory capacity construct, which provides only a one-year capacity price signal three years in advance, is highly volatile,³² limited to one year, and is not used, as the basis for long term resource decisions – or at least is not the basis for AMP's decision to undertake its significant capacity resource construction and development plan, including, among other things, a \$3 billion investment in 350 MW at four new run of the river hydro projects on the Ohio River and up to 80 MW of solar, with the largest utility scale project in Ohio now online in

³¹ See *PJM Interconnection, L.L.C.*, Order on Proposed Tariff Revisions, 151 FERC ¶ 61,208 (Jun. 9, 2015). Capacity Performance was particularly stressful to the stakeholder community due to the paradigm shift for seasonal resource participation, penalties that are disconnected from the value of performance at the time and with the potential to exceed capacity revenue, and a near complete unwind of the market mitigation rules surrounding offer caps, all of which were enacted in an expedited timeframe. Moreover, rather than adding flexibility to the capacity construct, the new capacity definition standardized the capacity product in a way that specifically defines the performance requirements but fails to account for variations in forced outage rates, fuel supply arrangements, ramping and minimum load levels, and environmental restrictions, among other things. In other words, Capacity Performance made PJM's capacity construct less flexible and capable of handling diverse resources and policy initiatives.

³² Ironically, PJM is currently not supportive of the Brattle Quadrennial Review proposal to use combined cycles as the VRR curve reference units as Brattle recommends this would address clearing price volatility as well as reflect what is actually being built in PJM.

Bowling Green, Ohio. Those local decisions were made as part of a diverse power supply strategy based on AMP members' preferences, and to avoid future price volatility.

Under PJM's Capacity Repricing Proposal, capacity prices will be increased, sending the wrong price signal. Specifically, the offers of those capacity resources deemed to have Actionable Subsidies are mitigated upward to the *higher* of the resource's Avoidable Cost Rate ("ACR") or the resource's opportunity cost of committing as a Capacity Performance resource. PJM notes that the ACR for nuclear resources is \$706 per MW-day for a single unit or \$663 per MW-day for a dual unit and solar is \$185 per MW-day. PJM Capacity Repricing Proposal at 85. In other words, if nuclear units set the BRA clearing price at the ACR, the cost of capacity would increase from \$76.53 per MW-day for the rest of RTO³³ to \$706 per MW-day, or almost ten times the last BRA clearing price for the RTO. PJM has not justified the increases that may likely result from the Capacity Repricing Proposal.

As PJM noted, there is already a glut of capacity in its market. Capacity commitments in PJM are well above the installed reserve margin and the PJM Region continues to see new entry. Dramatically increasing the capacity clearing price is directly contrary to PJM's stated goal of addressing the price suppressing effects that might result from existing or proposed state subsidy programs – artificially higher prices encourage more entry and less resource exit, further exacerbating PJM's problem. This is opposite from the price signal that PJM's oversupplied market ought to be sending. PJM's administratively determined price is already too high and results in an oversupply of new resources when a true market would indicate there is not a need for new entry (prices are

³³ State of the Market Report for PJM, at 271-272 (Section 5, Capacity) (March 8, 2018) available at http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2017/2017-som-pjm-sec5.pdf.

low when supply is high) and signal retirements. PJM fails to address how increasing prices for all resources by administratively increasing offers will do anything but further harm RPM over the long-term. PJM's Proposal would further increase prices and work against the goal of competitive markets.

B. MOPR-Ex

As with the Capacity Repricing Proposal, MOPR-Ex as modified by PJM, would unnecessarily further complicate an already complex construct and unnecessarily, unjustly and unreasonably increase prices. While AMP appreciates the recognition of Public Power business models as exempt from MOPR application, the problems with MOPR-Ex warrant rejection.³⁴ Under PJM's modified MOPR-Ex proposal, new and existing capacity resources with Actionable Subsidies will have their offers mitigated to the higher of the ACR or opportunity cost. One of the main differences between the MOPR-Ex and the Capacity Repricing Proposal is that the mitigation under MOPR-Ex takes place prior to a resource receiving a capacity commitment. However, as with the Capacity Repricing Proposal, PJM has not demonstrated that MOPR-Ex is just and reasonable.

Applying MOPR to existing units flies in the face of basic economic theory where an existing resource's rational bid is to be a price taker. While AMP does not agree that any facts have been established to warrant any MOPR,³⁵ the existing PJM MOPR at least has a theoretical basis in economic theory: it targets a limited set of new or updated

³⁴ As part of the stakeholder process of consensus and compromise, AMP supported the IMM's MOPR-Ex proposal, despite AMP's steadfast opposition to the application of any MOPR to public power. Given PJM's modification, as well as the modifications waiting in the wings for the next round of RPM modifications, AMP urges the Commission to reject both proposals.

³⁵ *PJM Interconnection L.L.C.*, 135 FERC ¶ 61,022 (2011).

resources (new gas-fired resources) and does not apply to new nuclear, coal, hydroelectric, renewable, or energy storage, because these resources cannot be developed on a timeframe and at a size that could allow the exercise of buyer-side market power. And, it properly does not include existing resources. Expanding the MOPR to existing units does not have the same basis in rational economic theory because existing units have sunk costs that new units do not have - once they are sunk, they are sunk and it makes sense for them to be price takers.

IV. PUBLIC POWER ENTITIES DO NOT RAISE PRICE SUPPRESSION CONCERNS

AMP appreciates that under either option, PJM recognized the long-standing public power business model as legitimate and not the type likely to raise price suppression concerns. It is important to fully understand this important point regardless of whether any revisions are made to the capacity construct.

Public power entities have long used a business model that accords with their status as components of municipal governments, which is premised on securing a reliable supply of power for each utility's citizen-owners at a reasonable and stable cost. An essential element in meeting that objective is to include in the utility's power supply portfolio an appropriate component of *long-term* supply. Generally speaking, municipal utilities do not base their supply arrangements on short-term market developments, but rather seek to "lock in" a significant part of their cost structure through ownership of assets or long-term contracts. In fact, the desire of municipal utilities to utilize such long-term arrangements was one of the driving forces behind the adoption of 16 U.S.C. §824q(b)(4), which directs the Commission to use its authority in a manner that enables Load Serving

Entities (“LSEs”) to secure firm transmission rights (or equivalent rights) on a long-term basis for long-term power supply arrangements to meet their needs.

In the context of meeting resource adequacy requirements, municipal LSEs have sought to stabilize this part of their overall cost structure by avoiding, to the extent possible, the price volatility that has been an unfortunate hallmark of RPM.³⁶ It is for this precise reason, among others, that a number of municipal LSEs in PJM have pursued long-term capacity supply arrangements in the form of asset ownership. These arrangements serve their intended purpose, however, only if the sponsoring LSE is assured that it will be able, over the long term, to use its resource to meet all or a portion of its PJM capacity obligation. Absent this assurance, a municipal LSE that had taken steps to stabilize its costs instead would face the prospect of simultaneously paying for the resource it secured on its own while also purchasing capacity from PJM to meet its resource adequacy obligation.³⁷

PJM is also correct that because of the business models employed by municipal LSEs, there is little if any opportunity for municipal LSEs to build generation for market manipulation reasons. Specifically, in order to secure long-term capacity supply arrangements in the form of asset ownership at the lowest possible cost, municipal LSEs utilize tax exempt and tax advantaged financing, such as Build America Bonds (collectively “tax advantaged obligations”). For example, a municipal LSE may use a

³⁶ See *The Brattle Group, Fourth Review of PJM’s Variable Resource Requirement Curve* at 59 (April 19, 2018) available at: <http://www.pjm.com/-/media/library/reports-notices/special-reports/2018/20180420-pjm-2018-variable-resource-requirement-curve-study.ashx?la=en>. The Brattle Report states that the “consequence of these relatively large deviations in cleared supply, combined with PJM’s current and past VRR curves, is that RPM has produced relatively volatile price outcomes.” That same price volatility and uncertainty also increases the risks and costs faced by LSEs.

³⁷ *Id.* at 150.

combination of interim and permanent bonds and other obligations intended to provide the lowest cost financing that does not expose the municipal LSE to undue interest rate risk. Included in the mix of bonds and obligations may be those that are eligible to receive direct and indirect federal tax exemptions or credits that provide a lower cost to the municipal LSEs, for financing the long-term capacity supply assets that are critical to public power entities. This access is especially critical when financing high capital cost projects or generation such as AMP's several hydroelectric facilities referenced earlier. However, in order to maintain the critically important tax exempt and tax advantaged status, municipal LSEs must meet and maintain several mandatory conditions.

The Internal Revenue Code of 1986, as amended, the Treasury Regulations (including final, temporary and proposed regulations) promulgated thereunder and the rulings with respect thereto, set forth conditions that must be satisfied on a continuous basis in order for tax-advantaged obligations to retain their tax status and impose limitations on the use of the property financed with the proceeds of the tax-advantaged obligations as long as the tax-advantaged obligations are outstanding and on the use and investment of proceeds of the tax-advantaged obligations and certain other moneys relating to the tax-advantaged obligations. If the municipal LSEs or one or more participants in a project financed with tax-advantaged obligations fail to comply with the requirements, the tax status of obligations issued by the municipal LSEs could be jeopardized and result in the loss of the tax advantaged status.

For example, neither the municipal LSE nor any participants in a project financed with tax-advantaged obligations may use the project for anything other than the governmental purposes of such municipal LSE or project participant. Additionally, so long

as any tax-advantaged obligations are outstanding with respect to a project, neither the municipal LSE nor any project participant may use their interest in the project for any activities that constitute a “private use.” Private use means any activity that constitutes a trade or business that is carried on by persons or entities other than state or local governmental entities (“nongovernmental persons”). Any activity carried on by a person other than a natural person is treated as a trade or business. In most cases, private use will occur if a nongovernmental person has a “special legal entitlement” to use the power associated with the project under an arrangement with the municipal LSE or any project participant. Such a special legal entitlement would include ownership or actual or beneficial use pursuant to a lease, management or incentive payment contract, output contract, research agreement or similar arrangement. Private use may be also established solely on the basis of a special economic benefit to one or more nongovernmental persons.

Additionally, neither the municipal LSE nor any project participant may enter into any output contract that results in private use with respect to the project or any share in the project. Generally, an output contract is one under which the municipal LSE or any project participant agrees to sell electricity to a nongovernmental person and, thus, transfers the benefits of the tax advantaged financed property and the burdens of paying the debt service on the tax-advantaged obligations to a nongovernmental person.

In other words, the federal tax requirements on tax-advantaged obligations that are critical to the long-standing business models of public power entities serve as effective barriers against such entities building generation as merchant generation, market manipulation, or anything other than legitimate self-supply. Accordingly, it is not unduly

discriminatory to exclude public power entities from capacity offer mitigation regardless of its form.

V. ALTERNATIVE PROPOSALS

While it is necessary to have some administrative construct for capacity, it need not be a barrier to consumer preferences as expressed through state and local public policies. A simpler capacity construct as proposed by AMP in both the Commission's Technical Conference on state policies and wholesale markets³⁸ and in the C2P2, along with a focused look at energy market price formation to ensure we are identifying all intrinsic value from existing units, is required.

The original RPM construct served to provide states an opportunity "...to resolve a projected capacity shortfall in the Delivery Year affecting that state as determined pursuant to a state evidentiary proceeding...".³⁹ The capacity construct needs to return to being a residual construct and not a primary source of revenue for supply. The Commission should direct PJM to perform an assessment of RPM's overall performance and make wholesale improvements rather than tweaks to the same construct.

One such alternative approach is for LSEs to satisfy most or all of their capacity needs through bilateral arrangements, in a real marketplace where willing buyers and willing sellers negotiate arrangements tailored to meet the parties' individual wants and needs (e.g., as to contract term, fuel type and resource flexibility, location on the grid, and financial terms), with a capacity auction available to satisfy any residual needs. Under

³⁸ *State Policies and Wholesale Markets Operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection, L.L.C.*, Notice of Technical Conference, Docket No. AD17-11-000 (March 3, 2017).

³⁹ See *PJM Interconnection, L.L.C.*, 137 FERC ¶ 61,145 at P 87-88 (Nov. 17, 2011).

such an approach, the RTO would retain its role of developing and specifying resource adequacy requirements for its footprint and Local Distribution Companies (“LDCs”) of concern. Each LSE, LDC or other Relevant Electric Retail Rate Authority (“RERRA”) would be responsible for securing capacity to meet its peak load obligation plus a predetermined reserve margin and would face significant penalties for failing to do so. LSEs, LDCs and RERRAs could procure resources bilaterally on a long-term portfolio basis in compliance with their respective resource adequacy requirements. The RTO could then conduct a residual auction to accommodate LSEs and supply that did not enter into long-term arrangements. This alternative has numerous advantages over current capacity constructs, and AMP encourages the Commission to review the executive summary of the specifics of a bilateral approach put forward by AMP in the C2P2 (attached hereto as Appendix A) for a comparison to PJM’s Proposal.

VI. CONCLUSION

The most recent changes to RPM have had the result of overly narrowing the “market” and PJM’s Proposal, regardless of the option selected by the Commission, has the effect of increasing prices without commensurate benefits and shifting more of the auction process behind closed doors as either PJM and/or the Market Monitor administratively determine capacity resources’ appropriate offers. PJM has not met its burden of proving that either proposal is just and reasonable. AMP urges the Commission to reject the Proposal and direct PJM to go back to the proverbial drawing board and utilize the stakeholder process to work out the issues that need additional work and support. Such rejection would be without prejudice to PJM’s right to refile the proposal when all issues have been resolved.

Respectfully submitted,

/s/ Lisa G. McAlister

Lisa G. McAlister

SVP/General Counsel for Regulatory Affairs

Kristin V. Rothey

Assistant Deputy General Counsel

American Municipal Power, Inc.

1111 Schrock Road, Suite 100

Columbus, OH 43229

(614) 540-1111

lmcalister@amppartners.org

krothey@amppartners.org

CERTIFICATE OF SERVICE

I hereby certify that I have on this date caused a copy of the foregoing document to be served on each person included on the official service list maintained for this proceeding by the Commission's Secretary, by electronic mail or such other means as a party may have requested, in accordance with Rule 2010 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.2010.

Dated this the 7th day of May, 2018.

/s/ Lisa G. McAlister
Lisa G. McAlister

Appendix A

American Municipal Power, Inc.'s

Proposal to the Capacity Construct/Public Power Senior Task Force

Executive Summary

I. Introduction

The genesis of the AMP proposal was in part due to AMP's strong belief that any "solution" developed in response to state public policy initiatives should be developed with the input of PJM stakeholders. AMP, and other PJM stakeholders were concerned about PJM's direction and offered a problem statement and issue charge to bring the debate into the PJM stakeholder process.

Many stakeholders were reluctant to take up this effort. Over a six month period, AMP representatives appeared five separate times before the PJM Markets and Reliability Committee ("MRC") and facilitated the discussion as the stakeholders sought to define the problem and limit the universe of solutions.

This background is important to understand as AMP wants it be crystal clear that AMP did not necessarily perceive a problem but instead reacted to PJM's comment at the August 2016 Grid 20/20 meeting that they would not be seeking stakeholder input on their "capacity re-pricing" proposal. The "capacity re-pricing" proposal is fraught with market design errors and having a robust stakeholder process with input from a diverse set of Members from all of the PJM sectors could lead to a better solution than that developed unilaterally by PJM.

II. AMP's Perspective

AMP's concern over PJM's administrative resource adequacy construct is well documented. The proposed actions of FirstEnergy and AEP, with approval by the Public Utility Commission of Ohio, to recover "out of market" payments from retail customers paid to their unregulated generation affiliates in an effort to keep what were described as uneconomic capacity resources, the advent of ZECs, and the general angst over states having the right and authority to make public policy decisions appears to AMP as yet another symptom of the overall inadequacy of RPM to withstand any type of exogenous actions that threaten "the market." The Department of Energy's Notice of Proposed Rulemaking is another symptom of growing dissatisfaction with wholesale market results. PJM has inadvertently fueled this perception via its 27 major design changes to RPM since 2010, some rushed through, to preserve reliability. From AMP's perspective and experience, any resource action that does not fit into the administratively determined construct is deemed a "threat" by PJM and the rules must be adjusted to protect the "market" (e.g., MOPR). Indeed MOPR has evolved from its stated purpose (mitigate buyer-side market power) to a preferred mechanism to maintain prices administratively determined to be the "right price."

AMP supports competitive markets. But RPM is not a market and, in our opinion is moving further away from market principles and is creating barriers to truly competitive results. While it is necessary to have some administrative construct for capacity, it need not be a barrier to consumer preferences as expressed through state and local public policies. A simpler capacity construct as proposed by AMP, along with a focused look at

energy market price formation to ensure we are identifying all intrinsic value from existing units, is required.

AMP notes that the original RPM construct served to provide states an opportunity “...to resolve a projected capacity shortfall in the Delivery Year affecting that state as determined pursuant to a state evidentiary proceeding...”. The capacity construct needs to return to being a residual construct and not a primary source of revenue for supply.

With this perspective, AMP observes the following regarding state public policy decisions:

- States clearly have the right and authority to develop public policy so long as payment of funds are not conditioned on capacity clearing the auction. There are many reasons that states may grant subsidies, but the subsidies that are the focus of this stakeholder process are those that are intended to support an otherwise uneconomic merchant generator that results in an artificially low offer into the capacity construct. We need to decide what action, if any, PJM should take in response to state public policy initiatives.
- The current structure of RPM is of itself a barrier to states implementing public policy decisions:
 - PJM’s “market” is too narrow and ignores the wider, organic market around it;
 - RPM rules have become too complex (this is also a barrier to state public policy decisions);
 - A resource adequacy construct with an administratively determined price will always be overly sensitive to external influences;
 - PJM’s administratively determined price is too high and results in an oversupply of new resources when a true market would indicate there is not a need for new entry (prices are low when supply is high) and signal retirements; and,
 - The rules keep changing, at a minimum every four years (i.e., quadrennial review) and in reality much more frequently than that with 27 major rule changes to RPM since 2010.
- Resolution of the “state subsidy issue” requires not only AMP’s proposed modifications to the resource adequacy construct but also significant changes to energy price formation to provide accurate price signals based on system operational needs.

III. What is an actionable subsidy?

Before we can decide what to do in response to a subsidy, we first need to define an actionable subsidy. For the purposes of AMP's proposal we define a subsidy that would require some action (*i.e.*, "actionable") as:

Actionable Subsidies include any payments, concessions, rebates, or incentives other than Market Revenue where Market Revenue is defined as revenue that is received under a tariff administered by PJM or other RTO or ISO and regulated by the Commission but shall not include payments (including payments in lieu of taxes), concessions, rebates, subsidies or incentives:

- A. that are consistent with and part of a public power business model made to a municipal utility, a cooperative utility, a joint action agency or any instrumentality of the state;
- B. designed to incent participation in a program, contract or other arrangement that promotes general industrial development in an area;
- C. are from a county or other local governmental authority using eligibility or selection criteria designed to incent the siting of facilities in that county or locality rather than another county or locality;
- D. are from the federal government and are available to generators without regard to the geographic location of the generation (e.g., production tax credits, investment tax credits, and similar tax advantages);
- E. that are supported through any contracts obtained in any state-sponsored or state-mandated procurement processes that are deemed to be Competitive and Non-Discriminatory as described in under the requirements for a procurement process to be deemed "Competitive and Non-Discriminatory" as specified in Attachment DD, Section 5.14 h) (7) ii), which requires that the process must:
 - i. allow both new and existing resources to satisfy the requirements of the procurement;
 - ii. the requirements of the procurement are fully objective and transparent;
 - iii. the procurement terms do not restrict the type of capacity resources that may participate in and satisfy the requirements of the procurement;
 - iv. the procurement terms do not include selection criteria that could give preference to new resources; and,

- v. the procurement terms do not use indirect means to discriminate against existing capacity, such as geographic constraints inconsistent with LDA import capabilities, unit technology or unit fuel requirements or unit heat-rate requirements, identity or nature of seller requirements, or requirements for new construction.;
- F. that are unknowable or unquantifiable; or
- G. that are in exchange for a tradeable credit that both: 1) represents the environmental attributes of one megawatt hour of energy produced from a renewable energy resource as defined by a state or federal law; and 2) is not contingent on the price of energy or capacity.

IV. AMP's Proposal

A. Accommodation

AMP's proposal seeks to accommodate state policy decisions in the sense that there must be a place for these decisions in the *entire* market. AMP doesn't believe a price driven, administrative construct should reprice state decisions to maintain an artificially high price in the RPM auction. Accommodation is not modification of what has been offered. The entire market, not just the administrative residual construct, should drive the price.

B. Bilateral Contracts

The current construct allows for bilateral contracting. However, it is AMP's experience that this option is detrimentally limited by the three year forward administratively determined price available from the base residual auction and PJM's consistent attempts to artificially prop up the auction prices in the near term at the expense of a properly developed long-term price signal that is truly reflective of what investors look to for guidance. In short, AMP's view is that suppliers are reluctant to tie up resources in an oversupply situation for the long term so long as there is the possibility of more revenue as regulatory intervention continues to inflate the auction results.

AMP proposes to address this deficiency by moving to a one year versus three year forward auction, referred to as the Annual Residual Auction or “ARA” in AMP’s proposal. Shortening this timeframe will enable the broader market forces to come into play for resource entry and exit decisions. It also provides the opportunity to eliminate MOPR for new entry as natural gas resources would need more than a year to develop its facility.

C. How State Actions Fit In

States would be free to offer subsidies for specific units or technologies. Several paths would be available to resource owners that are eligible for actionable subsidies: 1) the resource owner could decline the actionable subsidy and either enter into a bilateral contract or participate in the ARA; or 2) the resource owner could accept the actionable subsidy in lieu of seeking additional capacity revenue – essentially opting out of the ARA. The resource can choose only one of these options, which are described in greater detail below.

D. Annual Residual Auction (ARA)

The ARA would retain the same design as PJM’s current Base Residual Auction (“BRA”), but would only be one year forward, as opposed to three. Additionally, it would be comprised of those suppliers and load that did not enter into long term bilateral arrangements, load serving entities that did not choose to self-supply, or capacity resources without an actionable subsidy.

This approach would make the auction truly residual (which is what the BRA was touted as when PJM first implemented RPM in 2006). The entire and true market would drive prices and outcomes as opposed to forcing everything through the centralized auction.

The auction will occur annually, one-year ahead of time and will follow all of the rules within today's BRA such as, but not limited to:

1. Utilizing the VRR Curve
2. Utilizing existing rules for RPM bids
3. Abiding by the approved Capacity Performance rules
4. Abiding by the approved RPM rules
5. Maintaining PJM development of auction planning parameters which includes, among other things, the calculated installed reserve margin required to maintain reliability.

Additionally, moving the timing for the ARA to one year forward will allow PJM to utilize a better, and ideally more accurate, forecast of projected demand levels than is in place today. It is undebatable that the three-year forward nature of the BRA has produced an over-procurement of capacity due to load forecast error. Moving the auction closer to the start of the delivery year will help to minimize over-procurement of capacity due to load forecast error.

E. Annual Incremental Auction (AIA)

As a result of moving the timing of the ARA to one-year forward, RPM would no longer require three Incremental Auctions as we have today. Only one incremental auction would be required. AMP proposes modifying the incremental auction calendar such that the timing would be the same as the Third Incremental Auction (i.e., three months forward) that is conducted today. This auction would simply be called the Annual Incremental Auction.

F. PJM's Role

Five months before the ARA, PJM would verify the resource and load obligations for resources that accepted an actionable state subsidy and long-term bilateral contracts between resources and LSEs. PJM would also determine each LSE's peak load obligation based on the previous year's contribution to the 5 coincident peaks.

PJM would continue to calculate its installed reserve margin (“IRM”) and Forecast Pool Requirement (“FPR”). Load associated with resources accepting a subsidy and not participating in the ARA would be adjusted down to reflect the FPR. LSEs’ load would be adjusted to include their peak load obligation plus FPR. The demand curve in the ARA would utilize IRM as its inflection points as done today and load utilizing the ARA would procure an amount of resources determined by the ARA clearing mechanism (possibly IRM plus 2-5%).

G. Resource Owner Options

For resource owners with no actionable subsidies, they may either enter into a bilateral contract or participate in the ARA.

For resource owners who accept an actionable subsidy, the generator is excused from participating in the ARA along with a corresponding, but reduced, amount of load accounting for the IRM. Specifically, the amount of load participating in the ARA would be reduced, on a pro-rata basis, across its footprint accounting for any internal constraints (*i.e.*, Locational Deliverability Areas). The generator would also not be eligible to enter into a bilateral contract with an LSE as the subsidy is equivalent to a bilateral contract with the state that awarded the actionable subsidy.

In order to enable and implement any actionable subsidy, the state would be required to authorize a non-bypassable retail charge that requires the regulated distribution utilities to collect the cost of the actionable subsidy from all jurisdictional retail customers, that may be filed at FERC and included as part of the PJM RAA to obtain cost recovery, as well as any credit mechanism required to allocate the actionable subsidy to the appropriate resource owner.

These options respect the rights of the states to enact public policies they deem to be in the best interests of their jurisdictional retail customers but within the limits of *Hughes v. Talen*. Should a state wish to subsidize a particular resource, it should design the subsidy as a substitute for the resource owner's capacity revenue. States would thus be able to achieve their desired resource adequacy outcomes unencumbered by the residual capacity construct rules.

These options also respect the rights and business models of both competitive generators and competitive retail electric service ("CRES") providers in retail choice states. The competitive generators have the option to seek out subsidized capacity payments that fully compensate them if they are not getting what they need from RPM. The nearer term capacity commitment (not more than one year forward as opposed to three years forward) should give CRES providers adequate time to know their capacity obligations.

H. Curtailment Service Providers

AMP's proposal has evolved over the course of the PJM stakeholder discussion. We have carefully listened to the comments raised and concerns expressed by various stakeholder groups and have modified our proposal to address these concerns whenever possible.

One area AMP is still evaluating is the impact its proposal may have on curtailment service providers ("CSPs"). We recognize there may be significant barriers to implementing load side demand response in some states. AMP expects that supply side DR will still be able to participate in the ARA and AIA. AMP will continue to discuss this issue with the CSPs to determine if transitional measures could be employed to mitigate

potential impacts to this market segment until such time as retail barriers to demand response can be addressed.

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