COMMENTS OF AMERICAN MUNICIPAL POWER, INC.
ON PJM’S CAPACITY PERFORMANCE PROPOSAL

I. Introduction and Background

On August 20, 2014, PJM Interconnection, L.L.C’s (“PJM”) Staff released a whitepaper that would add an “enhanced” capacity product (“Capacity Performance”) to its capacity market structure and refine the other capacity products. Under PJM’s proposal, there will now be a total of four capacity products: 1) Capacity Performance; 2) Annual Capacity; 3) Extended Summer; and, 4) Limited Demand Response. PJM states that the purpose of its Capacity Performance proposal is to ensure that the reliability of the grid will be maintained through the current industry fuel transition and beyond by providing PJM with fuel security, enhanced operational performance during peak periods, high availability of generation resources, flexible unit operational parameters, and operational diversity.

American Municipal Power, Inc. ("AMP"), on behalf of itself and its members, submits comments on PJM’s Capacity Performance proposal for PJM’s consideration.¹

II. AMP’s Interests

Briefly, AMP is a nonprofit multistate public power entity formed in 1971 that currently has 129 Members in Ohio, Pennsylvania, Michigan, Virginia, Kentucky, West Virginia and The Delaware Municipal Electric Corporation (“DEMEC”), that itself has nine municipal members. All of AMP’s Members are political subdivisions that own and/or operate municipal electric utility systems. AMP’s primary purpose is to assist its Member communities in meeting their electric and energy needs in a reliable and

¹ AMP also supports the comments filed jointly by stakeholders including AMP concurrently regarding the proposed transition. Accordingly, AMP will not repeat arguments regarding the transition herein.
economic fashion. This purpose is served in a number of ways, including through the ownership of electric generating facilities, scheduling and dispatch of Member-owned generation, and through power supply and transmission arrangements that AMP makes with third-parties at the request of and on behalf of its Members. AMP has load and generation resources in both PJM and MidContinent ISO ("MISO") and must operate within and across the RTOs to effectively serve its Members and optimize its resources.

As market participants and Load Serving Entities ("LSEs") within PJM, AMP will be affected directly by any changes made to the capacity construct as a result of PJM's proposal.

III. GENERAL COMMENTS

PJM begins its proposal by pointing out the shortcomings in individual generator performance during last winter when up to 22 percent of PJM capacity was unavailable due to cold weather-related problems. PJM Capacity Performance Proposal (August 20, 2014) at 4. PJM Staff concludes that the generators' failure to perform highlighted potentially significant reliability issues. PJM states that its analysis shows that a comparable rate of generator outages in the winter of 2015/2016, coupled with extremely cold temperatures and expected coal retirements, would likely prevent PJM from meeting its peak load requirements and concludes that for this reason and because of the transition from coal to gas-fired generation resources, PJM needs to develop a more "robust" definition of capacity. Id.

AMP agrees with PJM that the severe cold weather events of the 2013-2014 winter season highlighted fundamental problems with Regional Transmission Organizations ("RTO") markets, including PJM's capacity construct. And while AMP
greatly appreciates that PJM Staff is making efforts to ensure reliability, AMP believes that there are significant issues with PJM’s proposal from both substantive and procedural standpoints.

A. PJM’s Capacity Performance Proposal will increase capacity costs without any demonstration that it will increase reliability.

Most fundamentally, although PJM is ostensibly concerned with resource performance, its proposal appears to simply create capacity products that plainly provide market participants who have iron in the ground higher capacity revenues without any concrete support that an “enhanced” product and the other associated market rule revisions will provide any additional reliability for the retail electric consumers that ultimately pay the bills.

There has been no clear demonstration by PJM that its proposal has investigated the impact on customers or even whether it will provide superior reliability, particularly during the winter months about which PJM has claimed it is most concerned. While there is no denying or diminishing the magnitude of the ferocity of last winter and the polar vortexes, PJM must remember that it has determined that the winter event was a one in ten year event. If the system wasn’t close to the edge during the extreme winter events, it would have meant that the system was over-engineered and inefficient.

Based on the limited information provided thus far, it appears that PJM’s proposed measures to retain the mandatory capacity markets while breaking out the capacity product into separate categories will substantially increase market complexity and pose the potential for gaming at best. PJM’s proposal also fails to take into account the profound harm it will inflict on Load Serving Entities (“LSEs”) and ultimately end use customers through the capacity price increases that inevitably will result from the
Reliability Pricing Model ("RPM") changes PJM seeks. Any proposal to further alter the capacity construct should not only clearly demonstrate a superior ability of PJM operations to achieve reliability but must also demonstrate that the impact on consumers is least cost and the degree to which excess costs on consumers could be avoided has been investigated and implemented. If consumers are paying prices that are simply a wealth transfer to sellers of wholesale power, increasing earnings significantly above what is needed to cover the costs of providing reliable service, then that is an indicator of unjust and unreasonable rates.

Further, while legitimate costs should be considered part of the cost of the plant, without other reforms, incorporating more sources of revenue into this capacity construct could further harm consumers without achieving the desired outcome. There is no assurance that generation owners will actually use the extra revenue priced into capacity prices for the intended purpose (i.e., dual fuel capability, firm pipeline transportation, fuel storage). Instead, the outcome could simply be windfall earnings for other units.

Numerous stakeholders, including AMP, have urged both PJM and the Federal Energy Regulatory Commission ("Commission") to examine the extent to which the high prices experienced during the Polar Vortexes adversely impacted consumers and the economy without a benefit to reliability.\(^2\) To date and in spite of several technical conferences, AMP is not aware that any thorough investigation has been conducted or released. Without more support, AMP is unable to agree that the radical solutions PJM

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\(^2\) See, e.g., Price Formation in Energy and Ancillary Services Markets Operated by Regional Transmission Organizations and Independent System Operators, Docket No. AD14-14-000, Comments of Robert Weishaar on behalf of PJMICC at the Technical Conference (September 8, 2104).
proposes in its Capacity Performance Proposal are worth the significant increases in the cost of capacity that will result.

B. PJM’s Capacity Performance has broader implications – RPM simply is not working and should be revisited and comprehensively reformed.

Given the increasing difficulties the PJM markets are facing in ensuring reliable electric services at the least cost to consumers, it is essential that AMP (and others) have the unencumbered option to pursue means outside of the PJM markets to provide reliable, efficient and least-cost capacity to serve their customers.

As noted above, PJM’s admission that there are additional shortcomings of its capacity construct is yet another example of why RPM may not be the best, or even a good enough, resource adequacy construct for procuring the right amount and type of capacity at just and reasonable rates. Nevertheless, rather than stepping back and evaluating alternative resource adequacy and capacity procurement constructs, PJM persists in tinkering with a model that it may finally be acknowledging is ill suited to satisfying PJM’s reliability needs. It should be acknowledged that it is the design of RPM that is pushing the supply of capacity overwhelmingly towards gas-fired generation, and it is the availability of that gas-fired generation that so concerns PJM.

Rather than simply accepting yet another set of convoluted add-ons to what already has become a capacity construct worthy of Rube Goldberg, PJM should use this opportunity to examine the fundamental problem that PJM’s filing makes ever more evident — PJM’s capacity construct simply is not capable of procuring the right amounts and types of capacity, in the right locations, when needed, at just and reasonable cost.
AMP therefore renews its call for PJM to engage in real reform of the current mandatory capacity market constructs to allow them to serve as voluntary, residual capacity procurement mechanisms. Long-term bilateral contracts support the financing of capital intensive investments by providing assured cost recovery. For this reason, it makes infinitely more sense to procure capacity bilaterally in a real marketplace - where willing buyers and willing sellers negotiate arrangements tailored to meet their individual needs, including reliability, and use RTO-administered capacity constructs as a voluntary way to meet residual needs only - than it does to continue to rely solely on a constantly changing, mandatory centrally administered construct that is simply not working.

As an alternative and a minimum step to reform the capacity constructs, AMP requests that PJM revise its capacity procurement construct market rules to restore public power's ability to self-supply their own loads with their own resources.

AMP urges PJM to put a hold on further RPM market rule changes while it considers more fundamental reform of the reliability and capacity procurement construct.

C. If PJM will not consider more fundamental capacity construct reform, it should at least halt the constant rules churn.

AMP is troubled that PJM is attacking the perceived shortcomings of its capacity construct and other market problems from multiple directions in parallel. While AMP appreciates that PJM has consolidated and reduced the separate stakeholder groups

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and the cold weather-related issues, AMP remains concerned that PJM continues to push forward with the Capacity Performance Proposal that will drastically change its capacity construct while other such proposals remain pending before the Commission, are being implemented currently, and of which we have not seen the full effects.

For example, on September 10, 2014, the PJM Board sent a letter to the PJM Markets Committee members stating that it will file changes to its Variable Resource Requirement ("VRR") curve shape based on PJM Staff proposal with modifications to the Energy and Ancillary Service offset methodology and the labor cost estimates, in spite of the fact that PJM Members did not approve any of several packages relating to the CONE Triennial Review and that the PJM proposal that the Board is moving forward with received the least stakeholder support. The result of shifting the VRR curve to the right (even further than Brattle recommended) is that PJM will procure capacity materially beyond what would be required to meet our resource adequacy objectives and at a higher price, now without knowing exactly what the capacity product will even be.

The result of such a piecemeal approach will likely be that we end up implementing multiple rules that all simultaneously mitigate the perceived problems at a significant cost, for a minimal increase in reliability.

AMP again urges PJM to pause and not make yet another series of extensive overhauls in the barrage of *ad hoc* band aid filings attempting to deal with perceived specific shortcomings of RPM. Rather, PJM should bring all of its proposals related to its capacity construct and related market rules together, look at their collective impacts, and consider the timing of implementation of these changes as a group, and what that
might mean to operations and the capacity and energy markets. Providing an appropriate amount of time for such a momentous task is also essential.

IV. Specific Comments

PJM’s proposal will virtually remake its capacity construct and PJM is moving at a breakneck speed. Market participants have been given less than one month to review, understand, and comment on PJM’s Proposal, significant aspects of which remain entirely undefined. Given the lack of details on profound aspects of PJM’s proposal, AMP’s ability to provide meaningful feedback is constrained. Thus, the following comments briefly highlight a lack of detail or provide a recommendation or follow up action required by PJM.

A. Generator choice of product

- PJM has indicated that it needs 85% of all capacity in its footprint to elect to be in the Capacity Performance category. Yet, PJM has not provided any analysis or basis for its conclusion. Further, it is unclear what will happen if PJM fails to reach its goals. PJM needs to flesh out this portion of its proposal and provide support for the same.

- To the extent that generators can meet the eligibility requirements, PJM has stated that the election to be in the Capacity Performance category is voluntary. PJM has also stated that the election can be divided down to the unit level such that a single unit may elect to have a portion of its capacity in the Capacity Performance category and a portion in the Base Capacity category. However, given that the elections are voluntary, it would also appear that if a unit has scheduled but fails to deliver a portion of its energy, the generator could determine which portion of the energy not delivered fell into the Capacity Performance category and would always designate undelivered energy as the Base Capacity category first such that the lower penalties apply.

- The ability of generation owners with large portfolios to split resource MWs between the Capacity Performance and Base Capacity resource categories presents substantial market power concerns.

B. Penalties
AMP believes that no new penalties should apply to the Base Capacity category. PJM has not articulated a reason to modify the current performance penalty structure for Base Capacity resources.

The penalties proposed for the Capacity Performance product, including the 2.5 times the clearing price credit cap is too draconian, and will result in overpriced capacity as generators build large penalty risk premiums into their bids. All market participants have to take care not to make things so onerous for generators that they either lose the ability to operate efficiently and that PJM loses both necessary resources and flexibility or, more likely, they build the risk premium into their capacity offers and ultimately load pays for an undefined and uncertain increase in reliability.

The 2.5 times the clearing price cap is structured such that generators can never really hedge their penalty risk. Because they cannot precisely hedge their risks, generators are likely to build inflated risk premiums into their bids.

C. Allocation of costs

PJM’s proposal will allocate costs of capacity to load. Load pays the cost of RPM. When resources committed as capacity fail to comply with their commitments, load is the primary entity to suffer from the non-compliance. As such, PJM should not agree to allocate any benefits resulting from generator over-performance to other generators or any other category of market participants other than the load who pay for capacity.

D. Transition

PJM proposes to hold incremental auctions for the 2015/16, 2016/17 and 2017/18 Delivery Years that would permit both cleared and uncleared capacity to essentially change its name to the Capacity Performance product and receive more money. AMP strongly urges PJM to only implement proposed changes on a going forward basis. It should resist the urge to hold incremental auctions that interfere with or modify the auctions it has already run and completed for the reasons stated in the joint letter referenced above.

E. Discrimination against renewables

PJM’s proposal limits renewables and demand response (“DR”) resources essentially to compete for the remaining 15% of non-Capacity Performance capacity. AMP anticipates that there will be many resources competing for the limited space available in the 15%, which will result in miniscule or even zero payments to those resources, which will drive capable generation and DR from the capacity market entirely. In other words, PJM’s proposal is discriminatory against renewables and DR and will effectively disincent development of those resources in the PJM footprint. Not only is this illogical
from a reliability standpoint as it reduces system fuel diversity that renewables help provide the market and eliminates DR resources that helped keep the lights on when a significant portion of generators failed to show up during the Polar Vortex, but it is also contrary to the sustained push for renewable energy in this country including the US EPA’s proposed 111(d) rules.

- The proposal discriminates against not only intermittent renewables and DR, but also hydroelectric generation resources. AMP has invested over $2 billion in new renewable run-of-the-river hydroelectric facilities to self-supply energy and capacity to its Members. As proposed, this extensive investment in renewable generation would not qualify as a Capacity Performance product. The proposal, if adopted, could devalue AMP’s and others’ significant efforts to develop renewable resources.

- PJM must revisit this portion of its proposal and include renewable energy and DR resources that have and could continue to play a significant role in ensuring reliability of the grid will be maintained through the current industry fuel transition and beyond, perhaps by allowing multiple units to be aggregated to provide an enhanced capacity product for a portion of their total capacity.

F. **PJM as arbitrator of eligibility**

- The proposed changes appear to create a new role for PJM which is that of arbiter of whether resources are eligible for the Capacity Performance category. For example, it is not clear what information a generator must provide to PJM for a planned generation capacity resource seeking Capacity Performance eligibility. Before market participants can seriously consider PJM’s proposal it is essential that PJM clearly explain the process for determining eligibility for the Capacity Performance product. While AMP understands that PJM cannot address every conceivable situation, PJM can and should detail the process and to what level of detail PJM will review generator claims to comply with the Capacity Performance resource requirements.

- PJM should provide a process by which generation owners may request a determination by PJM that fuel security measures meet the intent of the Capacity Performance product requirements.

G. **Add a fail-stop to protect load**

- Neither PJM nor any market participant has estimated or can predict with precision the impact of PJM’s Capacity Performance proposal. However, AMP believes that it will significantly drive capacity prices higher for the vast majority of capacity purchased by PJM resulting in higher revenues for nuclear and coal generators, with no increase in reliability related to these resources. Given the uncertainty of the impact of the proposal and the speed
that it is being pushed forward, AMP strongly recommends that PJM add a fail-stop process whereby PJM would not implement the results of any auction that results in an increase to load over some percentage of current rates. While that percentage should be negotiated by stakeholders, to not include such an exit strategy is, frankly, irresponsible.

V. CONCLUSION

AMP respectfully urges PJM to consider its comments and looks forward to working with PJM and other stakeholders on this matter.

Respectfully submitted,

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