State Policies and Wholesale Markets	)	
Operated by ISO New England Inc., New York	)	Docket No. AD17-11-000
Independent System Operator, Inc., and	)	
PJM Interconnection, L.L.C.	)	

American Public Power Association Post-Technical Conference Comments

I INTRODUCTION

Pursuant to the Commission's Notice Inviting Post-Technical Conference Comments in the above captioned docket issued on May 23, 2017,[1] the American Public Power Association (APPA) submits these post-technical conference comments. In these comments, APPA reviews the history and performance outcomes of the capacity constructs, makes recommendations regarding the five pathways, and urges the Commission to encourage implementation of alternatives to the mandatory capacity markets outside of these pathways.

II DESCRIPTION OF APPA

APPA is the national service organization representing the interests of the nation's 2,000 not-for-profit, community-owned electric utilities. Public power utilities are located in every state except Hawaii. They collectively serve over 49 million people and account for 15% of all sales of electric energy (kilowatt-hours) to ultimate customers. Public power utilities are load serving entities, with the primary goal of providing the communities they serve with safe, reliable electric service at the lowest reasonable cost, consistent with good environmental stewardship. This orientation aligns the interests of the utilities with the long-term interests of the residents and businesses in their communities.

[1] *State Policies and Wholesale Markets Operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection, L.L.C.,* Docket AD17-7-000, Notice Inviting Post-Technical Conference Comments, May 23, 2017.

Public power utilities operate in all Commission-approved RTOs and ISOs. Many public power utilities are located within the footprint of the Eastern RTOs and must operate within the constraints created by the centrally-administered capacity procurement mechanisms. APPA has a vital interest in maintaining just and reasonable rates for capacity, as well as for transmission, energy, and ancillary services in these RTO and ISO regions.

III APPA and Public Power Perspective on Eastern RTO markets

Public power utilities serve their customer load at least cost, while meeting reliability, environmental, and other important policy objectives. Unlike the investor-owned utilities within the retail choice states, public power utilities can own or contract directly for power supplies and have retained an obligation to serve their customer load. Self-supply and local control are therefore central to the public power business model. Because public power utilities purchase a portion of their capacity and energy from the RTO-operated wholesale markets, ensuring just and reasonable rates in those markets is also critical.

Public power's experiences with the Eastern RTO-operated capacity markets has been characterized by impediments to both self-supply and to purchasing capacity at just and reasonable rates. As such, public power has long advocated for market reforms that would create a viable *residual* capacity market without mandatory capacity market restrictions coupled with a truly competitive market for bilateral contracts of varying terms; well-functioning and competitive energy markets; and the right to pursue resource ownership and contracts without impediments from market rules.[2]

[2] *See Summary of APPA's Proposal to Reform the Mandatory Capacity Markets Operated by Regional Transmission Organizations* at: http://www.publicpower.org/files/PDFs/APPA_Capacity_Market_Reform_Proposal.pdf

These public power goals are aligned with the interests of both the rural electric cooperatives and the states within the Eastern RTOs that are seeking to select resources that meet specific policy objectives, including the provision of affordable power to utility customers, without market impediments.

IV Capacity Market History

It has been nine and ten years since the initial capacity auctions were held in ISO-NE and PJM respectively, and auctions have been held in the NYISO since 2000. This wealth of experience must be considered in the determination of the best path forward. The history of the capacity markets is not that of a construct that is continually evolving, adapting and improving as lessons are learned. Instead, these constructs have been characterized by a constant restating of their purpose and rules. Many of these rule changes have placed restrictions on the amount of or type of supply that can participate in the capacity auctions, including the Minimum Offer Price Rule (MOPR) in PJM and ISO-NE and Buyer-Side Mitigation (BSM) provisions in NYISO; the capacity performance rules in PJM and Performance Incentives in ISO-NE, restrictions on imports and Demand Response in PJM, and others.[3] Rather than moving towards greater competition, the capacity constructs instead have become more restrictive, while witnessing an increase in state actions to compensate for these market shortcomings.

The original impetus for the creation of capacity markets was a recognition that the energy markets and locational marginal pricing (LMP) were not leading to the development of

[3] *See PJM Interconnection, L.L.C.*, Docket Nos. ER15-623, EL15-29, EL15-41, 151 FERC ¶ 61,208(2015) (accepting capacity performance rules); *ISO New England Inc.*, Docket Nos. ER14-1050, EL14-52, 147 FERC ¶ 61,127 (2014) (accepting Pay-for-Performance rules); *PJM Interconnection, L.L.C.*, Docket No. ER14-504, 146 FERC ¶ 61,052 (2014) (accepting stricter rules on DR participation); *PJM Interconnection, L.L.C.*, Docket No. ER14-503, 147 FERC ¶ 61,060 (2014) (accepting capacity import limitations); *PJM Interconnection, L.L.C.*, Docket Nos. ER11-2875, EL11-20, 135 FERC ¶ 61,022(2011) (accepting MOPR); *ISO New England Inc.*, Docket Nos. ER10-787-000, EL10-50-000, EL10-57-000; ER10-787-004, EL10-50-002, EL10-57-002, 135 FERC ¶61,029 (2011) (accepting MOPR).

generation resources in those areas where it was most needed, i.e., in the higher priced constrained zones.[4] PJM also noted that the new construct would allow for ‘‘the continued use of self-supply and bi-lateral contracts to meet capacity obligations.”[5]

But the capacity markets did not achieve these goals. Facing rising costs and limited new capacity development, New Jersey and Maryland chose to take actions through competitive RFPs for the development of new natural gas combined cycle units. In New England, even before the advent of the FCM auctions, Connecticut's legislature passed bills that enabled the Department of Public Utility Control (DPUC) to arrange long-term contracts with new peaking units in constrained regions, which were then bid into the first FCM auctions.[6]

These state actions – while achieving a fundamental goal of the capacity markets: to incent the development of needed resources – resulted in a backlash of protests from merchant generators, the removal of key exemptions from the MOPR in PJM and the creation of a MOPR in ISO-NE, and eventually the Supreme Court decision in the *Hughes v. Talen*[7] case. This outcome demonstrated a fundamental flaw of the capacity markets: for price signals to work, high prices must incent the development of new supply or demand resources which lead to a reduction in prices. But a decline in prices reduces the earnings of the largest incumbent merchant generators – key stakeholders in the determination of rule changes that block that fundamental supply-price relationship from functioning as it should. Recent years have seen a

[4] For a more detailed discussion of this history, see *Markets in Name Only: Mandatory Capacity Markets and their Adverse Impact on Load-Serving Entities*, by Elise Caplan and Patrick E. McCullar, The Electricity Journal, Volume 26, Issue 6, July 2013, pages 52-60.

[5] *Id.*

[6] *Public Act 05-01, An Act Concerning Energy Independence*, July 2005, and *Public Act 07-242, An Act Concerning Electricity and Energy Efficiency*, June 2007.

[7] *Hughes v. Talen Energy Marketing, LLC*, 136 S.Ct. 1288 (2016).

second surge of state actions in PJM, ISO-NE, and the NYISO to procure renewable energy or prevent the retirements of nuclear units facing retirement.

This brief history of the capacity markets shows an absence of a stable end state where policymakers and generation owners are generally satisfied with the market outcomes. Rather than considering that such a dissatisfaction reflects fundamental flaws in the capacity constructs, the RTOs have responded with a patchwork of problematic market rules changes in an effort to keep these constructs intact. APPA urges the Commission to instead look outside of the capacity markets box for solutions.

V Capacity Market Evaluation

The determination of the best path to follow should begin with an assessment of whether the capacity markets are in fact "working." Such an assessment also requires the establishment of appropriate performance measures. But as APPA has noted in past dockets, efforts to develop performance metrics to evaluate the RTO market outcomes did not lead to effective measures of the success of these markets in achieving their original goals.[8]

In the absence of such measures, APPA and others have sought to provide data to measure capacity market outcomes. For example, APPA conducts annual analyses of the financial arrangements behind new electric generation facilities, showing that new resource development occurs much more frequently under stable streams of revenues from long-term contracts and ownership, than in response to volatile RTO market price signals. In every year but 2015, over 90 percent of new capacity was constructed under long-term bilateral contracts or utility or customer ownership, both within and outside of the Eastern RTOs. (In 2015, the percentage financed under contracts or ownership declined to 81 percent due to merchant plant

[8] *Comments of the American Public Power Association*, filed in Docket No. AD14–15–000 on November 3, 2014.

development in PJM and Texas.) In 2016, only seven percent of the new capacity built nationwide, and just under half of the new generation in the Eastern RTOs, was from "purely" merchant plants, all of which was in PJM. [9]

While there are entities willing to finance new merchant projects in PJM based on expected energy and capacity revenues, this new trend is not necessarily an indicator of a successful outcome of the capacity markets.[10] Pure merchant generation does not involve long-term planning or coordination of resource decisions, requires a higher cost of capital as a reflection of the greater risk involved in relying on volatile markets, and tends to have a lower rate of completion than plants built under a long-term contract or other ownership model.[11]

A fundamental question is therefore whether this mix of merchant plant developments along with increased state actions within the Eastern RTO footprints represents the achievement of resource adequacy in an optimal and cost effective manner. Over $120 billion has been spent or committed for future payments in the Eastern RTO capacity markets, without any evaluation of whether the resulting outcome justifies these costs or whether an alternative construct could achieve a better outcome. The Commission should consider whether there is a need to preserve

[9] Analysis of new capacity constructed in 2016 by the American Public Power Association. Publication of full results is forthcoming.

[10] For a longer discussion, see Caplan, Elise, "Is Increase in Merchant Generation Capacity a Positive?" Blog Post, http://blog.publicpower.org/sme/?p=1179 (Feb. 3, 2017).

[11] For example, Monitoring Analytics found based on historical completion rates, 70 percent of the merchant projects are expected to go into service, compared to 88 percent of non-merchant projects. *New Generation in the PJM Capacity Market: MW and Funding Sources for Delivery Years 2007/2008 through 2018/19*, Monitoring Analytics, May 4, 2016, p. 10-11, http://www.monitoringanalytics.com/reports/Reports/2016/New_Generation_in_the_PJM_Capacity_Market_20160504.pdf.

the capacity markets simply for the sake of capacity markets or whether it should instead explore alternative means of ensuring capacity requirements at a lower cost to consumers.[12]

VI APPA Comments on the Five Pathways

The tortuous history of the capacity markets and discussions at the technical conference continue to demonstrate the benefits of APPA's long-standing proposal to transition from mandatory capacity markets to a voluntary residual market, with a greater reliance on bilateral procurement and the ability to self-supply. Such an approach would allow the states, and public power and cooperative utilities to take greater control over resource decisions, determining when to procure new resources or take steps to prevent the retirement of existing resources with needed attributes unimpeded by artificial and arbitrarily amended capacity construct rules.

Commissioner LaFleur noted at the end of the technical conference that, in reference to the restructured states, "nobody said they wanted re-regulation or taking back of resource adequacy."[13] But having a voluntary capacity market does not necessarily entail complete state control of resource adequacy. APPA has long proposed that the RTOs would continue to establish resource adequacy standards that the load-serving entities would adhere to, subject to penalties for non-compliance. The RTOs could work with the states and local regulatory authorities (represented by public power and cooperative utilities) to establish these standards.

As for procurement of capacity by restructured utilities, the states are already taking on that task, and it is the growth of these actions that led to the technical conference in the first

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[12] *See*, *e.g.*, Comments of Cliff Hamal, filed in Docket No. AD17-11 on April 25, 2017 at p. 2-3 ("Sometimes there is a presumption that anything outside of the RTO markets is not a market, or perhaps disparaged as "out-of-market" compensation. While from a legal and jurisdictional perspective these are bright lines, from an economic perspective, they are not. Customers pay all costs, suppliers consider all income and everyone responds to all incentives.").

[13] Comments of Chairman Cheryl LaFleur, Transcript of RTO Conference, at 5643, ll. 19-20, in Docket No. AD17-11 on May 2, 2017.

place. Under a voluntary residual capacity market paradigm, states would continue to procure or retain specific resources. Any capacity not procured through state actions would be purchased through the residual auctions. If states choose to expand the scope of state-sponsored procurement, then the residual market would shrink with merchant generators facing expanded opportunities in the bilateral market.

APPA recognizes that the resource procurement conundrum facing restructured utilities and alternative suppliers is the lack of a predictable long-term customer base. One option could be to require the distribution utilities to take on the payments for capacity procurement or retention, regardless of whether their customers switch to an alternative supplier.[14] This approach is already commonly used in state procurement programs, and could continue to be used where states choose to sponsor additional resources. This is not an issue for public power and cooperative utilities who have a steady customer base.[15]

APPA urges FERC to support a shift away from a reliance on capacity markets and in the direction of long-term contracting and ownership of resources. As Robert Erwin, General Counsel for the Maryland Public Service Commission stated:

> In lieu of placing additional emphasis on capacity markets, the Maryland Commission also urges FERC to maintain or enhance the use of long-term contracting. The original purpose of capacity markets was a "backstop" mechanism, or a residual market, for generation that had not entered into power purchase agreements. The Maryland Commission continues to see value in bilateral long-term agreements, including with

[14] *See* "Solving the Electric Capacity Market Puzzle: The BiCap Approach," by Cliff Hamal, Navigant Consulting, http://media.navigantconsulting.com/emarketing/Documents/ECON/ECON_ElectricCapacityMarket_TL_0713.pdf, Mr. Hamal proposes to transfer "the obligation for purchasing capacity from the LSEs to the DP [Distribution Provider]," explaining that "[w]ith this simple, albeit dramatic change, the obligation for capacity is transferred from entities inherently on the short term and caught in the cross-fire of competition, to entities with a long-term planning horizon and the ability to deal with capacity issues in a much more predictable and cost-effective manner."

[15] APPA is not in these comments discussing how the increased use of distributed energy resources complicates the procurement of capacity, but would note that this issue would be mitigated by giving more flexibility to states, public power utilities and cooperatives in setting their own optimal procurement strategy.

state entities, and sees the eclipsing of such agreements by wholesale auctions for short-term commitments as ill-advised.[16]

It is from this same perspective that APPA will comment specifically on the five pathways.

Path 1 – Limited or No Minimum Offer Price Rule: Within the context of APPA's proposal for a voluntary residual capacity market, there is no need for a MOPR because load-serving entities could arrange to self supply the lion's share of their capacity requirements. If a mandatory market is retained, however, APPA continues to urge for the removal of a MOPR but recognizes that such a MOPR-free mandatory market is unlikely. In that case, APPA strongly recommends a greatly limited MOPR that provides full exemptions for self-supply and state-sponsored resources, or the ability to remove such resources from the capacity market clearing process altogether.

Path 2 – Accommodation of State Actions: APPA supports efforts to accommodate state actions, assuming such accommodation also covers resources procured by public power and cooperative utilities.[17] Such an accommodation should be designed broadly so that there is no determination by the RTO of what constitutes "legitimate" state policies.[18] All state policies are

[16] Comments of the Maryland Public Service Commission at 4, filed in Docket No. AD17-11 on May 1, 2017.

[17] This is recognized in ISO New England's Competitive Auctions for Subsidized Policy Resources (CASPR). *See Competitive Auctions for Subsidized Policy Resources, ISO Discussion Paper*, at 21 ("The substitution auction design may help market participants that self-supply in the FCM, if those participants subsidize new self-supply resources that do not clear in the FCM due to the MOPR. Stated differently, supply participation in the substitution auction would not be limited to resources subsidized through state-directed mechanisms, but would accommodate on equal terms a resource subsidized by another subsidy provider (such as a municipality, for example)."), https://www.iso-ne.com/static-assets/documents/2017/04/caspr_discussion_paper_april_14_2017.pdf (footnote omitted).

[18] For example, David Patton, President, Potomac Economics stated that "[i]t may be justifiable to distinguish between state intervention that can be justified by legitimate public policy interests versus intervention that is not justified on this basis." Comments of David H. Patton, Ph. D at 2, filed in Docket No. AD17-11 on April 24, 2017.

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either implemented through a state commission or legislature, and therefore are decisions that are reached through appropriate political bodies and should not be judged as legitimate or not.

APPA's views of an equitable and cost-effective accommodation approach would at a minimum provide a complete exemption from any MOPR for self-supply or state-sponsored resources. The accommodate approaches proposed however by ISO-NE and PJM are highly complex and contain significant scaffolding to prop up prices for the merchant resources. For example, in ISO-NE's proposal, Competitive Auctions for Subsidized Policy Resources (CASPR), would retain the MOPR for all new resources in the first tier and remove it only for the substitution auction. The substitution auction would then produce "severance payments" to the retiring resources (or "cash for clunkers"). The retention of the MOPR, combined with the additional payments to retiring resources, both would raise capacity costs. Moreover, state or public power-sponsored resources that did not clear the first tier, would be dependent upon the actions of existing generators in the substitution auction.

PJM's proposed "Capacity Market Repricing Proposal" similarly provides for a two-tier auction, in which quantities are set in the first tier without the use of a MOPR and prices are set in the second tier with the application of a MOPR to all resources, including existing resources (which are not currently subject to the MOPR). PJM also proposes two settlement options, with Settlement Option 1 providing the elevated second tier price to all resources, including "subsidized" resources. Settlement Option 2, pays the "subsidized" resources the lower price produced in the first tier. APPA's understanding of these approaches is that the ISO-NE's CASPR protects against an over-procurement, while PJM's approach would by its design over-procure capacity resources, further increasing costs to consumers.

APPA appreciates the efforts of the RTOs to accommodate state resources, but thus far the RTO proposals also entail an effort to "accommodate" merchant generation by ensuring prices are higher – a tool that would prevent consumers from seeing any of the benefits from competition.

Path 3 – Status Quo: No participants expressed support for this option at the technical conference, and APPA agrees. As stated earlier, the lack of support for the status quo has persisted throughout the history of the capacity markets, and must be recognized in determining future paths.

Path 4 – Pricing State Policy Choices: This approach, if done correctly, could in theory lead to an efficient means of achieving environmental or other policy goals if it were limited to a single price adjustment, such as a carbon tax or adder. But APPA only supports an "achieve" approach if it were done *along with* and not as a replacement to an accommodation of state policies or a move to a voluntary residual capacity market. Moreover, such pricing tools should not be implemented by the RTOs or the Commission. As pointed out at the technical conference,[19] the Regional Greenhouse Gas Initiative was implemented by the states and not the RTOs. Given the difficulties in reaching agreement on contentious issues within the stakeholder process, and the lack of RTO prioritization of cost minimization, APPA prefers that such polices not be subject to RTO control.

APPA is concerned, however, that this pathway could entail proposals to price multiple attributes within a market. For example, there could be price adders for flexible resources and another adder for baseload attributes, both on top of a carbon adder. It is possible that this collection of price adjustments could cancel each other out and result in no specific policies

[19] *See, e.g.,* Cliff Hamal, transcript at 512.

being reflected in the markets. Moreover, state policies are more complex and nuanced than can be reflected in a single price adder. Scott Weiner of the New York State Department of Public Service noted that: "Incorporating a single policy into the wholesale market may frustrate the multilayered approach designed by the State and reflects a misunderstanding and oversimplification of a State's multi-faceted policy framework:"[20]

Moreover, achieving an optimal balance of baseload, renewable, and flexible resources requires more careful planning than simply pricing energy and/or capacity. Not all policy choices can be resolved through the market. There is still a need for long-term planning and resource decisions to be made by states, public power and cooperative utilities, based on a balancing of various policy preferences and goals.

Path 5 – Expanded Minimum Offer Price Rule: This is the worst possible outcome, and results in an overly administered non-competitive market that would frustrate resource development pursuant to policy decisions. This would greatly benefit the pure merchant facilities, leading to a significant decline in resource diversity, a higher cost of capital, and a lack of any type of planning or optimization of resources. Because the states will likely continue to seek to procure or retain resources based on policy preferences, an expanded MOPR also increases the risk of overbuilding and double-payment for capacity.

VII Responses to FERC Questions

Question 1: Principles and Objectives

[20] Comments of Scott Weiner, New York State Public Service Commission, at 4, filed in Docket No. AD17-11 on April 25, 2017.

APPA agrees with the principles stated in the pre-technical conference comments of Michael Cocco of Old Dominion Electric Cooperative,[21] and by Brian Forshaw.[22] APPA agrees that achieving just and reasonable rates and minimizing cost to consumers is an important principle. Another principle to guide the selection of a path forward is a recognition that not all megawatts are the same and may need different types and duration of financing, and that legitimate policy choices can prefer one megawatt over another.

In the absence of any clear analysis of their benefits, capacity markets should not be considered sacrosanct and taken as a "given" in these paths forward.

These principles can only be met by a less restrictive capacity market and limited or no use of a MOPR. Moving toward such a market will entail a transition period and a gradual unwinding of commitments over time. This is manageable in a market that prices and commits to capacity in twelve-month increments. However, because the capacity markets only provide one year of revenue and the prices and rules are highly volatile, the merchant plants have no claim on any specific revenue stream.

Question 2: The Degree of Urgency and Need for Transition

Given pending litigation, state legislative requirements, Circuit Court cases and pending complaints at the Commission to expand the MOPR to existing units,[23] commitments by governors and mayors to adhere to the Paris accord, and continued retirements of coal plants, it is crucial that these issues be resolved as soon as possible. See responses to #1 regarding the transition.

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[21] Comments of Michael Cocco at 2-3, filed in Docket No. AD17-11on April 25, 2017.

[22] Comments of Brian Forshaw at 1, filed in Docket No. AD17-11on April 26, 2017.

[23] *Complaint Requesting Fast Track Processing* filed by Calpine et al., on March 21, 2016, and *Request to Leave to Amend, and Amend Complaint*, filed by EPSA and Indicated Complainants, on January 9, 2017, in Docket EL16-49.

Question 3: Long-term Expectations Regarding the Roles of Energy and Capacity Markets

APPA does not see the capacity markets as having a primary role in the future determination of resources, and instead the state policies will likely play a stronger role.

APPA has participated in all of the price formation dockets to date, and does not yet see a significant role for energy markets at this time in shaping the composition of resources. The major changes to price formation thus far – easier shortage pricing triggers, shorter settlement periods, increases in the offer cap rules – will likely provide for short-term price spikes that are unlikely to incent resource developments.[24] The primary role of the energy markets is to provide a more efficient dispatch rather than incent or determine the development or retention of resources. Were an RTO-wide carbon tax or carbon adder to be developed, such a policy could potentially change the resource mix, depending upon its magnitude.

Question 4: Commission Steps to Reconcile the Competitive Markets with State Actions

APPA strongly recommends the Commission avoid approval of new market rules that directly impede state support or preferences for specific resources. APPA also encourages the Commission to carefully review any accommodation rules and protect consumers from any anti-competitive provisions in those rules that would lead to prices that are not just and reasonable and/or an over-procurement of resources.

Moreover, while each RTO is likely to follow its own path, the Commission should consider a statement of principles to guide those paths. APPA is also supportive of regional technical conferences, with the states, public power and cooperative utilities as participants, that would provide an opportunity for the Commission to assist the RTOs in the determination of the best path forward.

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[24] Post Technical Conference Comments, filed by the American Public Power Association and Rural Electric Cooperative Association in Docket No. AD14-14 on March 5, 2015, at 21-25.

VIII Conclusion

APPA greatly appreciates the Commissioners' and staff's efforts in convening this technical conference and inviting comments on this important topic. But it is time to recognize that the capacity constructs are not competitive and not true markets, and that not every megawatt is the same. Encouraging true competition and allowing public power and cooperative utilities, and the states to develop and retain an optimal mix of resources will entail looking outside of the capacity market box for solutions. An optimal path forward will minimize the role of the capacity constructs and move towards a truly competitive bilateral market for capacity that allows for state and local policy preferences to be implemented.

Respectfully submitted,

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Dated: June 22, 2017

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of June, 2017, I have caused a copy of the foregoing to be served upon each party designated on the Official Service list in this proceeding.

/s/ Jillian Allen