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**Comments of the
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**Panel Discussion #2
*Challenges and Opportunities in an Uncertain Regulatory Environment***

Introduction

APPA is the national service organization representing the interests of the more than 1,000 not-for-profit, publicly-owned electric utilities throughout the United States that collectively serve more than 45 million consumers. Public power systems provide over 15 percent of all kilowatt-hour (kWh) sales to ultimate customers, and provide service in every state except Hawaii. APPA member utilities are owned by the communities they serve, operate on a not-for-profit basis, and have retained the legal obligation to provide retail electric service to their customers. Since they are owned by the customers they serve and have no outside shareholders, all costs are passed through directly to the customer. Public power systems own approximately 10 percent of the nation's electric generating capacity, but purchase nearly 70 percent of the power used to serve their ultimate consumers from the wholesale market. APPA's members therefore have an abiding interest in well-functioning wholesale power-supply markets.

In response to growing concerns among our members in RTO regions with the fundamental changes that had been made to the wholesale electricity markets, in March 2006, APPA initiated the Electric Market Reform Initiative (EMRI). There are two central components of EMRI: 1) an investigation of the restructured wholesale electricity markets; and 2) the development of reforms to those markets to remedy the problems identified by our members and in the investigative studies.

The EMRI studies and the real-world experience of consumers demonstrate that the deregulated wholesale markets produced both higher prices and higher profits than one would expect in a competitive market. These additional dollars, however, have not resulted in substantive new generation investments.

One of EMRI's investigative studies, *Raising the Stakes on Capacity Incentives: PJM's Reliability Pricing Model (RPM)*, by James Wilson ("Wilson Study") provides a detailed

analysis of the initial years of RPM.¹ The primary findings of this study were that RPM greatly increased capacity costs in PJM, provided opportunities for possible physical and economic withholding, has entailed a transfer of revenues primarily to existing owners of generation, produced volatile locational prices, understated revenues earned from other PJM markets, and suffered from a lack of incorporation of state energy policies, as well as limited data availability.

Building upon the findings of the initial investigative studies of EMRI, in February 2009, APPA released its Competitive Market Plan (“CMP” or “the Plan”), which proposed a series of reforms to the wholesale electricity markets.² The goal of these reforms was to achieve just and reasonable rates for consumers, reduce opportunities for the exercise of market power, and meet future load in a reliable manner that takes into account likely carbon restrictions. Many of the market reforms address the issues posed to this panel, and are therefore discussed in the remainder of these comments.

While APPA strongly commends PJM for holding this symposium, we also urge PJM to use this opportunity as a means to consider fundamental reforms to both RPM and other RTO-operated markets. Unfortunately, prior difficulties that have arisen in the markets are frequently met with a new, complicated market and/or pricing incentive. In the face of potential shortfalls in generation capacity, RTOs responded to complaints of generators that they were not earning sufficient revenues in the energy market to recover the fixed or going-forward costs of generating units (the “missing money” problem). Rather than investigate the validity of the missing money argument, PJM and other RTOs instead created a number of secondary markets, such as those for locational capacity, that generate additional revenues without regard to whether such revenues are achieving the needed results, or in their totality overcompensate generators.

APPA therefore asks that PJM as part of this process of assessing long-term capacity market issues work with stakeholders to undertake meaningful market reforms.

Capacity Markets and Uncertainty

The questions posed to the panel note that RPM requires a commitment three years prior to the delivery period at a time of significant change to the regulatory landscape and fluctuating fuel costs and commodity prices. The question goes on to ask: How do all stakeholders ensure that capacity committed three-years forward will deliver?

APPA’s proposed reforms to the wholesale markets approach this problem from a different perspective – the primary concern should not be that regulatory uncertainty makes the three-year commitment under RPM difficult, but rather it is the uncertainty of a steady stream of revenue that makes financing new, cleaner generating technologies more difficult.

Given APPA and others’ concerns with high prices and profits in the restructured markets, this interest in ensuring adequate revenue may appear contradictory. But we are as interested in ensuring a stable diverse energy supply as about just and reasonable prices. Central to the CMP

¹ <http://www.appanet.org/files/PDFs/RPMreport2008.pdf>, released in March 2008.

² APPA’s Competitive Market Plan: A Roadmap for Reforming Wholesale Electricity Markets, <http://www.appanet.org/files/PDFs/EMRICompetitiveMarket.pdf>

is the creation of a competitive and equitable marketplace that ensures both goals are achieved. A primary means of creating such a market is to implement market reforms that would create greater opportunities and incentives for long-term bilateral contracts and ownership of generation.

There are two broad categories of generation in the wholesale markets. First are the incumbent-owned previously regulated, largely depreciated generation units which are earning revenues in excess of their costs and are the greatest beneficiaries of centrally operated energy and capacity markets. The bulk of the payments made under RPM continue to be earned by existing resources. In the 2012/13 base residual auction, out of the 136,143 MW of unforced capacity that cleared the auction, 1,894 MW was either new generation or upgrades (1.4%).³ Including demand resources and energy efficiency, the total new resources that cleared the auction is equal to 9,510 MW or 7 percent of the total.⁴ The implication is that 93 percent of the cleared resources are existing units. It therefore is likely that many of the plants that received stranded cost payments as part of state retail access legislation are also receiving capacity market payments.

At the same time, there are new and more efficient generation resources many of which are encountering difficulties securing financing. APPA's Plan seeks to avoid the payment of economic rent⁵ by consumers to this first category of units while providing development opportunities for the second category.

Independent entities seeking to build new renewable and other forms of generation have noted the difficulties created in seeking financing for their units from a market with a short-term focus. At a January 2009 FERC technical conference on credit and capital issues, one IPP representative stated that "current terms available in organized markets, such as five-year PPAs, are simply inadequate to attract the substantial debt and equity necessary to put steel in the ground."⁶ A developer of renewable energy projects, stressed the necessity of long-term (15-year) power purchase contracts to support the financing of renewable projects.⁷ A representative of Morgan-Stanley summed up the dilemma by saying: "I think the challenge that we have is that we're trying to build long-term assets with short-term pricing, and that just doesn't line up."⁸

In July 2009, CPV Maryland filed a request for a 20-year contract for the sale of power from a proposed natural gas plant at actual cost. CPV estimated that such a cost-based long-term

³ 2012/2013 RPM Base Residual Auction Results, PJM, May 2009, <http://www.pjm.com/markets-and-operations/rpm/~media/markets-ops/rpm/rpm-auction-info/2012-13-base-residual-auction-report-document-pdf.ashx>

⁴ 2012/2013 RPM Base Residual Auction Results.

⁵ Economic rent is the difference between what a factor of production is paid and how much it would need to be paid to remain in its current use. The existence of economic rent is an indicator of market power and the absence of true competition.

⁶ Testimony of Bruce L. Levy, President, International Power America, Technical Conference, In the Matter of Credit and Capital Issues Affecting the Electric Power Industry, Docket Number AD09-2-000, Jan. 13, 2009. Transcript, p 32. http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20090113-4007

⁷ Testimony of Michael Polsky, President & CEO, Invenergy LLC, FERC Technical Conference, Jan. 13, 2009, Transcript, p. 38.

⁸ Testimony of Anthony Ianno, Managing Director, Morgan Stanley, FERC Technical Conference, Jan. 13, 2009, p. 50.

contract would save ratepayers between \$150 and \$400 million in capacity costs.⁹ In comments before the state’s Public Service Commission in the resulting docket, Governor O’Malley noted that “long-term power purchase agreements or construction contracts for new, renewable generation would help reduce price volatility, expand generation capacity and accelerate the transition to a more diverse and sustainable energy future.”¹⁰

Even companies with located in primarily regulated states are avoiding building generation in the uncertain restructured markets. At a climate conference in December, Jim Rogers the president and CEO of Duke Energy, said the complexity of trying to meet climate change challenges in a deregulated environment has made him re-evaluate his position because a regulated industry allows for more comprehensive planning. He also stated that new generation generally is being built only in regulated states, where generators have assurances that they can recover their costs.¹¹

The problem therefore is not necessarily the commitment to “three years prior to the delivery period” in an uncertain regulatory environment. Rather, the difficulty lies in the absence of a stable market that provides a stream of revenue in an uncertain financial environment. APPA’s Plan is for long-term bilateral power supply agreements between load-serving entities (LSEs) and generators/demand-side providers and LSE-owned resource arrangements to serve as the primary methods of procuring resources.

APPA is not proposing in the CMP to require a specific minimum contract length for LSEs but to reform the overall market environment such that a significant number of long-term power supply arrangements of 10 years or longer would be readily available to buyers and sellers. It is not our expectation that increased reliance on longer-term bilateral contracts and owned generation will immediately produce lower prices. Such arrangements are, however, likely to produce more stable and reasonable prices in the long run.

Recommendations for Wholesale Market Reforms

APPA is recommending that PJM in its examination of ways to improve the capacity market, look holistically at all PJM-operated markets. Similarly, in the CMP, APPA recommended a series of interconnected reforms to the RTO-operated markets, as well as to state procurement processes. The CMP does contain a recommendation for phasing out the RTO-operated capacity markets, and funding of capacity through contract arrangements. Regardless of whether such a phase-out is completed, there are also a number of other changes to the RTO-markets that would support and encourage bilateral contracting, as described below:

⁹ CPV Maryland, LLC - Motion for an Order Requiring Investor-Owned Utilities to Enter into Long-Term Contracts for the Sale of Power and Request for Expedited Treatment. Case No. 9117, July 6, 2009, http://webapp.psc.state.md.us/Intranet/Casenum/NewIndex3_VOpenFile.cfm?ServerFilePath=C:\Casenum\9100-9199\9117\207.pdf

¹⁰ Comments of Governor O’Malley, Maryland PSC Cases 9117 and 9214, December 18, 2009, http://webapp.psc.state.md.us/Intranet/Casenum/submit_new.cfm?DirPath=C:\Casenum\9200-9299\9214\Item_022&CaseN=9214\Item_022

¹¹ *Duke chief: States may need to reregulate, replace RPS with ‘low-carbon’ standards* by Glen Boshart, SNL Energy Electric Utility Report, December 14, 2009. www.snl.com Subscription required.

Reduce opportunities for supra-competitive earnings in the short-term energy market through cost-based bidding. Many LSEs, including a number of APPA members, report that the high prices sellers can obtain in the bid-based RTO-run spot markets discourage the signing of long-term contracts, or result in contract offers directly linked to spot market prices. To address this disincentive to long-term stable priced contracts, APPA is proposing that the offers to sell power into the short-term "optimization" (spot) market be limited to short-run marginal costs. A single clearing price mechanism would remain in use.

Must-offer requirement. Generators would be subject to a must-offer requirement into the optimization market for energy not already committed under bilateral contracts or owned generation arrangements (subject to forced outages, scheduled maintenance, and special rules for limited-run units and intermittent resources). This requirement would limit opportunities for withholding as the Wilson Study found may have occurred in RPM auctions.

Long-term transmission rights. RTOs would also allocate long-term transmission rights (LTTRs) to LSEs to support bilateral contracts or owned resources, with a priority for power supply arrangements of 10 years or longer. These LTTRs would be paired with LSEs' power supply arrangements developed to comply with the RTO's resource adequacy requirements and applicable state resource procurement requirements, both of which are described below. (LTTRs that have already been allocated by RTOs would be preserved.)

Resource adequacy standards. Overall RTO-established resource adequacy standards applicable to all LSEs are an important feature of the APPA proposal. APPA's proposal would establish a multi-state regional process to develop needed RTO-wide resource adequacy requirements under agreed-upon policy goals.¹² States would then implement procurement processes to ensure that state-regulated investor-owned utility (IOU) LSEs obtain a diversified portfolio of power supply and demand-side resources of varying lengths and terms that will assist in meeting the RTO-wide resource adequacy requirements.¹³ This recommended state procurement process is an important part of the CMP and is described in greater detail in the next section.

State Procurement

A significant part of the RTO wholesale market power exchange are power purchases that incumbent IOU LSEs in retail access states make to support default supply service to retail customers that have not chosen an alternative supplier (often called "standard offer service" or SOS). SOS is typically purchased through state-run auctions for relatively short-term (usually two- to four-year) contracts. The prices in these contracts incorporate generation prices based on the spot prices set in RTO markets with the addition of ancillary, capacity, and transmission costs, plus multiple risk premiums.

¹² Generation adequacy requirements traditionally have been the purview of state utility regulators and Regional Reliability Councils. An increased RTO/federal role would require coordination and cooperation among state regulators, RTOs, and FERC in establishing and approving regional resource adequacy plans.

¹³ Public power utilities in RTO regions, because they have retained their obligation to serve retail customers, already develop and implement such resource adequacy plans, under the supervision of their local governing bodies. APPA's plan would continuation of public power resource procurement under their own plans, unless they choose to opt into a larger state procurement process.

An essential component of APPA's Plan is a strong recommendation that state commissions establish competitive power supply procurement processes to develop diversified resource portfolios for incumbent IOU LSEs, with a significant portion of their power supplies being obtained under longer-term contracts or owned-generation arrangements. This recommendation is critical because such changes could provide much needed price discipline in RTO-run centralized markets, as well as a steady revenue stream to support construction of new generation resources and investment in demand response resources.

As part of such an improved SOS power supply procurement process, retail access states should allow their incumbent IOU LSEs to consider "self-builds" as generation resource options. In many retail choice states, incumbent LSEs are currently prohibited from building new generation (except through an unregulated affiliate), even though they still bear responsibility for providing SOS service. The availability of self-build options brings additional competitive discipline to bear on third-party suppliers submitting generation supply offers in power supply procurements. Such state-implemented measures to provide additional sources of supply would also reduce the impact of tight supply conditions that can drive up prices.

States and LSEs could also agree to pool their LSEs' respective resource needs for procurement purposes, rather than having each individual state or LSE act on its own. Sufficient safeguards also need to be included in the selection process to ensure that third-party suppliers get fair and equitable consideration of their offers and proposed projects.

The use of demand response resources and energy efficiency investments as potentially lower-cost alternatives to generation resource obligations must also be fully considered in these portfolios. Given that utility LSEs already provide retail service to end use customers, the LSE may be the lowest-cost supplier of demand response or efficiency services. But as part of the regional procurement process, third-party demand response providers could bid to provide such services to LSEs.

State requirements and policy preferences for fuel diversity (such as state renewable portfolio standard (RPS) and energy efficiency goals, and state/regional carbon mitigation regimes) should be honored in developing LSE resource portfolios. The RTO would have to ensure, however, that the LSE resource portfolios developed are, taken as a whole, both technically feasible and operationally reliable.

Once the selection of the resources is determined, contractual arrangements with the suppliers or providers of the resources (including arrangements for selected self-build options) would be made. The objective would be for LSEs to have a diversified portfolio of resources, including long-term supply commitments that provide customers electricity at a relatively stable and reasonable price, while assuring suppliers a steady revenue stream that can support financing of new resources.

Conclusion

We greatly appreciate the opportunity to submit these comments as part of the PJM Long-Term Capacity Issues Symposium, and look forward to working with other participants in a discussion

of how capacity and other markets can be reformed to truly benefit consumers, businesses and the environment.

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