BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider.	)	Case No. 14-1693-EL-RDR
In the Matter of the Application of Ohio Power Company for Approval of Certain Accounting Authority	)	Case No. 14-1694-EL-AAM

FIRST SUPPLEMENTAL TESTIMONY OF JOSEPH E. BOWRING ON BEHALF OF THE INDEPENDENT MARKET MONITOR FOR PJM

Q **PLEASE STATE YOUR NAME AND POSITION.**

A My name is Joseph E. Bowring. I am the Market Monitor for PJM. I am the President of Monitoring Analytics, LLC. Monitoring Analytics serves as the Independent Market Monitor for PJM, also known as the Market Monitoring Unit. Since March 8, 1999, I have been responsible for all the market monitoring activities of PJM, first as the head of the internal PJM Market Monitoring Unit and, since August 1, 2008, as President of Monitoring Analytics. The market monitoring activities of PJM are defined in the PJM Market Monitoring Plan, Attachment M and Attachment M-Appendix to PJM Open Access Transmission Tariff.

Q **ARE YOU THE SAME JOSEPH BOWRING WHO PREVIOUSLY PROVIDED TESTIMONY IN THIS PROCEEDING?**

A Yes. I provided Direct Testimony on September 11, 2015.

Q **WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY IN THIS PROCEEDING?**

A The purpose of my testimony is to oppose the Joint Stipulation and Recommendation filed in this proceeding on December 14, 2015 (December 14th Stipulation). The December 14th Stipulation modifies the AEP proposal in this proceeding that was the basis for my prior testimony. Ohio Power Company (AEP) is requesting Commission approval of its new affiliate power purchase agreement (PPA) between AEP and AEP Generation Resources, Inc. (AEPGR) for inclusion in the PPA Rider and approval for including the responsibility for AEP's partial ownership of the Ohio Valley Electric Corporation ("OVEC") plants in the PPA Rider. The purpose of my testimony is to explain why the terms and conditions included in the December 14th Stipulation modifying the initially filed PPA are not cause for any change to my prior testimony that inclusion of these costs in the proposed PPA would constitute a subsidy which is inconsistent with competition in the PJM wholesale power market.

Q **PLEASE BRIEFLY SUMMARIZE THE SALIENT FEATURES OF THE PROPOSED PPA RIDER AS MODIFIED BY THE DECEMBER 14TH STIPULATION.**

A The proposed PPA Rider would transfer, from AEP (AEPGR) to the ratepayers of AEP on a non bypassable basis, all responsibility for paying to AEP all costs associated with the PPA Units through May 31, 2024 (approximately eight and a half years) with the option to extend or modify the PPA Rider. The initial filing would have covered the entire period through the retirement dates of each and any post-retirement period for each, including paying retirement costs and any residual value. The PPA units are coal-fired units: Cardinal Plant Unit 1; Conesville Plant Units 5 and 6, which are 100 percent owned by AEPGR; and the AEPGR share of Conesville Plant 4; Stuart Plant Units 1 – 4; and Zimmer Plant Unit 1. In addition, the proposed PPA Rider would transfer, from AEP (AEPGR) to the ratepayers of AEP, all responsibility for paying for AEP's share of the two generating plants owned and operated by the Ohio Valley Electric Corporation ("OVEC"). The OVEC plants are the Kyger Creek Plant in Cheshire, Ohio and the Clifty Creek Plant in Madison, Indiana.

Under the proposed PPA Rider, AEP would offer the energy, ancillary services and capacity from the assets into the PJM markets. The proposed PPA Rider would credit the market revenues against the costs and charge the net costs to the ratepayers of the Company.

The proposed PPA Rider would also include a reduced rate of return on equity and the provision for a modest amount of potential credits during the last four years of the PPA Rider.

The December 14th Stipulation does not fundamentally change the nature or purpose of the PPA Rider which is to shift costs and risks from shareholders to customers, to remove the incentives to make competitive offers in the PJM Capacity Market and to provide incentives to make offers below the competitive level in the PJM Capacity Market.

Q **DOES AEP BELIEVE THAT AEPGR'S PLANTS ARE A GOOD INVESTMENT?**

A No. AEP does not believe that the units are profitable and does not appear to believe that current and expected market conditions will make the units profitable.

As stated by witness Vegas (P 7) in the initial filing: “Unfortunately for Ohio’s generating assets, these market reforms could come too late to keep assets from retiring prematurely.” Witness Vegas also stated (P16): “The PPA Units are now on the economic ‘bubble,’ where low short-term capacity and energy market prices have increased the risk of premature retirement.” Witness Vegas (P14) stated that market conditions mean a greater risk of unit retirements and the likely sale of these assets by AEP. Witness Thomas stated (P11) in the initial filing: “The Affiliated PPA units are on the economic ’bubble’, meaning the market conditions, as described by Company witness Pearce, are not providing the necessary economic signals for incremental investment in these units.”

The purpose of the PPA Rider is to transfer the costs and market risks associated with the PPA Rider Units from AEP’s shareholders to AEP’s ratepayers. AEP has not demonstrated and cannot demonstrate why customers should bear these costs and take these risks, if a well informed generation owner is not willing to do so.

Nothing in the December 14th Stipulation or the supporting testimony of witness Allen indicates that AEP has changed its view of these assets. Witness Allen (P15) states that the December 14th Stipulation will result in an increase in residential customer rates.

The fact that AEP is proposing to transfer the costs, the risks and the asserted net benefits of these units from shareholders to customers is evidence that AEP does not believe that the units are profitable and does not appear to believe that current and expected market conditions will make the units profitable.

Q **WHAT ARE THE IMPLICATIONS OF PJM’S CHANGES TO THE DESIGN OF THE CAPACITY MARKET FOR THE PROPOSED PPA RIDER?**

A On December 12, 2014, PJM filed a proposal to significantly change the design of the PJM Capacity Market. The Capacity Performance proposal was approved by FERC by effective April 1, 2015. (*PJM Interconnection, L.L.C., et al.*, 151 FERC ¶ 61,208 (June 9, 2015).

PJM has run a Base Residual Auction for Delivery Year 2018/2019, a Transition Auction for Delivery Year 2016/2017 and a Transition Auction for Delivery Year 2017/2018 under the Capacity Performance design. The result was a significant increase in capacity prices for all capacity resources in PJM and particularly for capacity resources in the western part of PJM, including Ohio.

One of the most significant elements of the new capacity market design is to increase the performance incentives for capacity resources. If units do not perform as required, units will pay substantial penalties. Those penalties can exceed total capacity market revenue for a generating unit. Those penalties would be paid to units that did perform when called, as bonus payments. AEP has not explicitly addressed these issues. But PJM's filing raises issues relevant to AEP's proposed PPA Rider. If AEP's proposal remains internally consistent, I would expect that the proposed PPA Rider would require ratepayers to pay any performance penalties associated with the assets included in the PPA Rider. I would also expect that AEP would retain any performance payments at other AEP units, not included in the PPA Rider, even if paid for in part by these ratepayer penalties.

This highlights the incentive issues that arise when the responsibility for operating plants and the financial consequences of that operation are separated, as would occur under the proposed PPA Rider. When the penalties are paid by customers, shareholders and management do not have the same incentives to manage the performance of the units for which customers bear the risk as they do at units for which shareholders bear the risk. This is another reason to reject the PPA Rider as inconsistent with competitive outcomes in the PJM wholesale power market.

Q **IS THE PROPOSED PPA RIDER, AS MODIFIED IN THE DECEMBER 14TH STIPULATION, CONSISTENT WITH COMPETITION IN THE PJM WHOLESALE POWER MARKET?**

A No. The proposed PPA Rider is not consistent with competition in the PJM wholesale power market. The proposed PPA Rider would constitute a subsidy analogous to the subsidies previously proposed in New Jersey and Maryland, both of which were found to be inconsistent with competition in the wholesale power markets.[1]

The proposed PPA Rider would shift responsibility from AEP for all costs associated with the PPA assets to the ratepayers of the company. AEP is requesting that the plants and the contracts be returned to a version of the cost of service regulation regime that predated the introduction of competitive wholesale power markets.

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1 *See* PPL EnergyPlus, LLC, et al. v. Nazarian, et al., slip op. no. 13-2419 (4th Cir. June 2, 2014); PPL EnergyPlus, LLC, et al. v. Solomon, et al., slip op. no. 13-4330 (3rd Cir. March 27, 2014).

The proposed PPA Rider would require that the ratepayers of AEP subsidize the costs of the plants to the benefit of AEP. The logical offer price for these resources in the PJM Capacity Market, under these conditions, would be zero. A zero offer would be rational because this would maximize the revenue offset to the customers who would be required to pay 100 percent of the costs of this capacity and bear all of the performance risks. Offers at or near zero would have an anti-competitive, price suppressive effect on the PJM Capacity Market as would any offers at less than the competitive offer level. The proposed PPA Rider would create strong incentives for AEP to offer this capacity as less than the competitive offer level.

This type of subsidy is inconsistent with competition in the wholesale power markets because of its price suppressive effects. Such effects would make it difficult or impossible for generating units without subsidies to compete in the market. Competition depends on units making competitive offers that reflect their costs and the risk of paying penalties and/or receiving benefits (e.g. the offer cap for Capacity Performance resources) and on recovering revenues only from the markets and not from subsidies. Such subsidies would negatively affect the incentives to build new generation in Ohio and elsewhere in PJM and if adopted by others would likely result in a situation where only subsidized units would ever be built.

Q **HOW DOES COMPETITION IN THE PJM WHOLESALE POWER MARKET WORK?**

A It is essential that any approach to the PJM markets and the PJM Capacity Market incorporate a consistent view of how the preferred market design is expected to work to provide competitive results in a sustainable market design over the long run. A sustainable market design means a market design that results in appropriate incentives to retire units and to invest in new units over time such that reliability is ensured as a result of the functioning of the market. There are at least two broad paradigms that could result in such an outcome. The market paradigm includes a full set of markets, most importantly the energy market and capacity market, which together ensure that there are adequate revenues to incent new generation when it is needed and to incent retirement of units when appropriate. This approach will result in long term reliability at the lowest possible cost.

The quasi-market paradigm includes an energy market based on LMP but addresses the need for investment incentives via the long-term contract model or the cost of service model. In the quasi-market paradigm, competition to build capacity is limited and does not include the entire PJM footprint. In the quasi-market paradigm, customers absorb the risks associated with investment in and ownership of generation assets through guaranteed payments under either guaranteed long term contracts or the cost of service approach. In the quasi-market paradigm there is no market clearing pricing to incent investment in existing units or new units. In the quasi-market paradigm there is no incentive for entities without cost of service treatment to enter and thus competition is effectively eliminated.

I believe that the market paradigm is the preferred alternative for providing reliable wholesale power at the lowest possible cost and that AEP's proposal is not consistent with the market paradigm. While it is true that there are other exceptions to the market paradigm within PJM, that is not a reason to remove units from the market and further extend the non-market paradigm. The adoption of the non-market paradigm here would move the PJM market farther from a market paradigm and create real risk to the market paradigm. Whatever the decision, it is essential at a minimum that the choices about incentives and regulatory approaches be made with an explicit understanding of the short run and long run implications of these choices for the design of wholesale power markets and the interaction between wholesale power markets and retail markets.

Q **HOW SHOULD THE PJM MARKET RULES BE MODIFIED TO ADDRESS THE PROPOSED SUBSIDIES?**

A PJM rules currently include a Minimum Offer Price Rule (MOPR) designed to address the impact on competitive markets of subsidies to most new gas-fired generating units by requiring that such new units with subsidies offer at a level no lower than the cost of new entry. The actions of AEP in requesting approval for this PPA highlight the fact that the MOPR needs to be expanded to address all cases where subsidies create an incentive to offer capacity into the PJM Capacity Market at less than an unsubsidized, competitive offer. This would include offers from all new and existing units that receive subsidies.

Q **WHAT WOULD BE THE IMPACT ON THIS PPA IF THE MOPR RULE WERE EXPANDED?**

A If the MOPR were expanded to include all new or existing units receiving subsidies, it would require AEP to make competitive offers in the PJM Capacity Market rather than offering at levels below the competitive offer level including offers at or close to zero. If AEP were required to offer the units at the competitive level and the units do not clear in the capacity market as a result of a competitive offer, there would be no market revenues and customers would receive no offset to the costs they would be required to pay under the PPA Rider.

In addition to the other costs and risks, the proposed AEP PPA Rider would shift this significant regulatory risk of an improved MOPR from shareholders to customers.

Q **PLEASE SUMMARIZE YOUR RECOMMENDATION.**

A The proposed PPA Rider would constitute a subsidy which provides incentives for non-competitive offers and is inconsistent with competition in the PJM wholesale power markets. The proposed PPA Rider should be rejected for that reason.

Q **DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

A Yes.

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing Direct Testimony of Joseph E. Bowring on Behalf of Monitoring Analytics, LLC, was served via electronic transmission to the persons listed below on this 28th day of December, 2015.

/s/ *Jeffrey W. Mayes*

Jeffrey W. Mayes

General Counsel
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Exhibit No. 1

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CERTIFICATION

I, JOSEPH E. BOWRING, being duly sworn, depose and state that the testimony to which this certification is attached was prepared by me, acting in my capacity as the Market Monitor, and that the statements contained therein are true and correct to the best of my knowledge and belief.

This certification is made under the penalty of perjury.

Joseph Bowring

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Joseph E. Bowring