

**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

**DIRECT TESTIMONY OF JOSEPH E. BOWRING**  
**ON BEHALF OF THE INDEPENDENT MARKET MONITOR FOR PJM**

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

2    **A     My name is Joseph E. Bowring. I am the Market Monitor for PJM. I am the President of**  
3       **Monitoring Analytics, LLC. Monitoring Analytics serves as the Independent Market**  
4       **Monitor for PJM, also known as the Market Monitoring Unit. Since March 8, 1999, I have**  
5       **been responsible for all the market monitoring activities of PJM, first as the head of the**  
6       **internal PJM Market Monitoring Unit and, since August 1, 2008, as President of**  
7       **Monitoring Analytics. The market monitoring activities of PJM are defined in the PJM**  
8       **Market Monitoring Plan, Attachment M and Attachment M-Appendix to PJM Open**  
9       **Access Transmission Tariff. I am a Ph.D. economist and have substantial experience in**  
10      **applied energy and regulatory economics. I have taught economics as a member of**  
11      **faculty at Bucknell University and at Villanova University. I have served as a senior staff**  
12      **economist for the New Jersey Board of Public Utilities and as Chief Economist for the**  
13      **New Jersey Department of the Public Advocate’s Division of Rate Counsel. I have**  
14      **worked as an independent consulting economist.**

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

16   **A     Ohio Power Company (AEP) is requesting Commission approval of its new affiliate**  
17      **power purchase agreement (PPA) between AEP and AEP Generation Resources, Inc.**  
18      **(AEPGR) for inclusion in the PPA Rider and approval for including the responsibility**  
19      **for AEP’s partial ownership of the Ohio Valley Electric Corporation (“OVEC”) plants in**  
20      **the PPA Rider. The purpose of my testimony is to explain why inclusion of these costs in**

1 the proposed PPA Rider would constitute a subsidy which is inconsistent with  
2 competition in the PJM wholesale power market.

3 **Q PLEASE BRIEFLY SUMMARIZE THE PROPOSED PPA RIDER.**

4 The proposed PPA Rider would transfer, from AEP (AEPGR) to the ratepayers of AEP  
5 on a non bypassable basis, all responsibility for paying to AEP all costs associated with  
6 the PPA Units through the retirement dates of each and any post-retirement period for  
7 each, including paying retirement costs and any residual value. The PPA units are coal-  
8 fired units: Cardinal Plant Unit 1; Conesville Plant Units 5 and 6, which are 100 percent  
9 owned by AEPGR; and the AEPGR share of Conesville Plant 4; Stuart Plant Units 1 – 4;  
10 and Zimmer Plant Unit 1. In addition, the proposed PPA Rider would transfer, from  
11 AEP (AEPGR) to the ratepayers of AEP, all responsibility for paying for AEP’s share of  
12 the two generating plants owned and operated by the Ohio Valley Electric Corporation  
13 (“OVEC”). The OVEC plants are the Kyger Creek Plant in Cheshire, Ohio and the Clifty  
14 Creek Plant in Madison, Indiana.

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

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

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

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

31 The purpose of the PPA Rider is to transfer the costs and market risks associated with  
32 the PPA Rider Units from AEP’s shareholders to AEP’s ratepayers. AEP has not

1 demonstrated and cannot demonstrate why customers should bear these costs and take  
2 these risks, if a well informed generation owner is not willing to do so.

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

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

8 PJM has run a Base Residual Auction for Delivery Year 2018/2019, a Transition Auction  
9 for Delivery Year 2016/2017 and a Transition Auction for Delivery Year 2017/2018 under  
10 the Capacity Performance design. The result was a significant increase in capacity prices  
11 for all capacity resources in PJM and particularly for capacity resources in the western  
12 part of PJM, including Ohio. AEP has not incorporated the most current capacity market  
13 revenues in its evaluation of the economic status of the assets at issue in the PPA.

14 One of the most significant elements of the new capacity market design is to increase the  
15 performance incentives for capacity resources. If units do not perform as required, units  
16 will pay substantial penalties. Those penalties would be paid to units that did perform  
17 when called. While AEP has not explicitly addressed these issues because PJM's  
18 Capacity Performance filing was approved after AEP's filing, PJM's filing raises issues  
19 relevant to AEP's proposed PPA Rider. If AEP's proposal remains internally consistent, I  
20 would expect that the proposed PPA Rider would require ratepayers to pay any  
21 performance penalties associated with the assets included in the PPA Rider. I would also  
22 expect that AEP would retain any performance payments at other AEP units, not  
23 included in the PPA Rider, even if paid for in part by these ratepayer penalties.

24 This highlights the incentive issues that arise when the responsibility for operating  
25 plants and the financial consequences of that operation are separated, as would occur  
26 under the proposed PPA Rider. This is another reason to reject the PPA Rider.

27 **Q IS THE PROPOSED PPA RIDER CONSISTENT WITH COMPETITION IN THE PJM**  
28 **WHOLESALE POWER MARKET?**

29 A No. The proposed PPA Rider is not consistent with competition in the PJM wholesale  
30 power market. The proposed PPA Rider would constitute a subsidy analogous to the

1 subsidies previously proposed in New Jersey and Maryland, both of which were found  
2 to be inconsistent with competition in the wholesale power markets.<sup>1</sup>

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

7 The proposed PPA Rider would require that the ratepayers of AEP subsidize the costs of  
8 the plants to the benefit of AEP. The logical offer price for these resources in the PJM  
9 capacity market, under these conditions, would be zero. A zero offer would be rational  
10 because this would maximize the revenue offset to the customers who would be  
11 required to pay 100 percent of the costs of this capacity. This would have an anti-  
12 competitive, price suppressive effect on the PJM capacity markets.

13 This type of subsidy is inconsistent with competition in the wholesale power markets  
14 because of its price suppressive effects. Such effects would make it difficult or  
15 impossible for generating units without subsidies to compete in the market. Competition  
16 depends on units making competitive offers that reflect their costs and on recovering  
17 revenues only from the markets and not from subsidies. Such subsidies would  
18 negatively affect the incentives to build new generation and would likely result in a  
19 situation where only subsidized units would ever be built.

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

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

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

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

11 I believe that the market paradigm is the preferred alternative and that AEP's proposal  
12 is not consistent with the market paradigm. Whatever the decision, it is essential at a  
13 minimum that the choices about incentives and regulatory approaches be made with an  
14 explicit understanding of the short run and long run implications of these choices for the  
15 design of wholesale power markets and the interaction between wholesale power  
16 markets and retail markets.

17 Q **PLEASE SUMMARIZE YOUR RECOMMENDATION.**

18 A The proposed PPA Rider would constitute a subsidy which is inconsistent with  
19 competition in the PJM wholesale power markets. The proposed PPA Rider should be  
20 rejected for that reason.

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

22 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 11<sup>th</sup> day of September, 2015.

/s/ Jeffrey W. Mayes

Jeffrey W. Mayes

General Counsel

PHV #5676-2015

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**Exhibit No. 1**

BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

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

**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.



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Joseph E. Bowring