

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)	Case No. 14-1693-EL-RDR
Purchase Agreement for Inclusion in the)	
Power Purchase Agreement Rider)	
)	
In the Matter of the Application of Ohio)	
Power Company for Approval of Certain)	Case No. 14-1694-EL-AAM
Accounting Authority)	

DIRECT TESTIMONY
OF
KENNETH ROSE, Ph.D.

On Behalf of
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SEPTEMBER 11, 2015

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. PURPOSE OF TESTIMONY	2
III. RECOMMENDATIONS AND ANALYSIS	3

ATTACHMENT

Attachment KR-1

*Direct Testimony of Kenneth Rose, Ph.D.
On Behalf of the Office of the Ohio Consumers' Counsel
PUCO Case No. 14-1297-EL-SSO, et al.*

1 **I. INTRODUCTION**

2

3 ***Q1. PLEASE STATE YOUR NAME AND AFFILIATION.***

4 ***A1.*** My name is Kenneth Rose, an independent consultant based in Chicago, Illinois.

5 I have been retained by the Office of the Ohio Consumers' Counsel for purposes
6 of this proceeding.

7

8 ***Q2. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND***
9 ***PROFESSIONAL EXPERIENCE.***

10 ***A2.*** I received my B.S., M.A., and Ph.D. in economics from the University of Illinois
11 at Chicago. I have been an independent consultant since 2002. Previously, I was
12 a Senior Institute Economist at the National Regulatory Research Institute
13 ("NRRRI") at The Ohio State University from 1989 to 2002, and was an economist
14 in the Energy and Environmental Systems Division at Argonne National
15 Laboratory from 1984 to 1989. I have also been a lecturer for the School of
16 Public Policy and Management (1998 to 2002) and the John Glenn School of
17 Public Affairs (2009 to 2011) at The Ohio State University. I have been a Senior
18 Fellow with the Institute of Public Utilities at Michigan State University since
19 2002.

1 ***Q3. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY OR TESTIFIED***
2 ***BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO OR OTHER***
3 ***AGENCIES?***

4 ***A3.*** Yes, I have submitted testimony before the Public Utilities Commission of Ohio
5 ("PUCO" or "Commission") in the Dayton Power and Light Electric Security
6 Plan ("ESP") case (Case Nos. 12-426-EL-SSO, et al.), the Duke Energy Ohio,
7 Inc., cases in 2012 and 2013 for certain tariff and accounting changes (Case Nos.
8 12-2400-EL-UNC, 12-2401-EL-AAM, and 12-2402-EL-ATA), and Ohio Edison
9 Company, The Cleveland Electric Illuminating Company and The Toledo Edison
10 Company ESP case (Case No. 14-1297-EL-SSO). I have also testified before
11 Ohio legislative committees and before other state commissions and legislative
12 bodies. They are listed in Attachment KR-1 to my testimony.

13
14 I have also worked with the Ohio Legislative Service Commission ("LSC") on the
15 drafting of legislation that became Senate Bill 3 ("S.B. 3"), which is explained in
16 more detail later in my testimony.

17
18 ***II. PURPOSE OF TESTIMONY***
19

20 ***Q4. WHAT IS THE PURPOSE OF YOUR TESTIMONY?***

21 ***A4.*** The purpose of my testimony is to provide my analysis and recommendations
22 regarding Ohio Power Company's ("AEP Ohio" or "Utility") proposal to use a
23 Power Purchase Agreement Rider ("PPA Rider").

1 The PPA Rider would be a non-bypassable charge to customers when wholesale
2 market prices remain at what AEP Ohio describes as current “low” levels and
3 below the formula contract price between AEP Ohio and AEP Generation
4 Resources, Inc., (“AEPGR”). If wholesale market prices increase and are above
5 the formula contract price between AEP Ohio and AEPGR, the PPA Rider would
6 be a net credit to customers according to the Utility. Utility witness Allen
7 describes how the Rider would work.

8
9 **III. RECOMMENDATIONS AND ANALYSIS**

10
11 ***Q5. PLEASE SUMMARIZE YOUR CONCLUSION.***

12 ***A5.*** Based on my review and analysis, I conclude as follows.

13
14 First, the customers of AEP Ohio should not be required to pay additional money
15 in the form of the PPA Rider to protect AEPGR, an unregulated power producer,
16 against any losses that may occur in a competitive wholesale generation market.

17
18 Second, any regulatory actions at this time that allow collection of generating
19 costs from customers in excess of market prices would be giving the generator or
20 supplier unfair advantages (subsidies).

21
22 Third, the proposed PPA Rider, if approved, will harm customers by undermining
23 the State’s Retail Electric Service Policies. In particular, the state’s policy to

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PUCO Case No. 14-1297-EL-SSO, et al.*

1 avoid anticompetitive subsidies flowing from a noncompetitive retail electric
2 service to a competitive retail service (R.C. 4928.02(H)).

3
4 I conclude that the PPA Rider and its associated Power Purchase Agreements
5 between AEP Ohio and its unregulated affiliate, AEPGR (“Affiliate PPA”) are not
6 in the public interest and will not benefit the customers of AEP Ohio. Therefore,
7 a PPA Rider greater than zero should be denied by the PUCO.

8
9 ***Q6. WHAT IS THE MAIN FEATURE OF THE PROPOSED PPA RIDER?***

10 ***A6.*** In his direct testimony, Utility witness Vegas lists 20 generating units that would
11 be part of the PPA Rider calculation. This includes 9 units of AEPGR and 11
12 OVEC units. According to Mr. Vegas, the “Affiliated PPA” is an agreement
13 between AEP and AEPGR. Under that agreement, AEP Ohio will receive output
14 (specifically, capacity, energy, and ancillary services) from the units owned by
15 AEPGR and AEP Ohio will pay (that is, their customers will pay through AEP
16 Ohio) AEPGR its costs of owning and operating the generation units. Mr. Vegas
17 also states that AEP Ohio has an entitlement to OVEC units in Ohio and Indiana.
18 The revenues and costs associated with the OVEC units will also be included in
19 the PPA Rider.

20
21 What is clear from the Utility’s description is that the costs and revenues
22 associated with these units are generation costs of units that are owned by an

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PUCO Case No. 14-1297-EL-SSO, et al.*

1 unregulated affiliate of AEP and are operating in the wholesale PJM
2 Interconnection L.L.C. ("PJM") market.

3
4 ***Q7. WHAT IS THE PROPOSED PPA RIDER IN THE ESP?***

5 ***A7.*** In summary, the proposed PPA Rider would be a non-bypassable generation
6 charge (credit) that would be collected from all captive distribution customers of
7 AEP Ohio. The charge (credit) would be calculated as the difference between the
8 wholesale market revenues from sales of energy, capacity, and ancillary services
9 from specified power sources and AEPGR's cost of owning and operating the
10 generating units. It would also include the net impacts of the Utility's contractual
11 entitlement to a share of the electrical output of generating units owned by
12 OVEC. The "PPA Rider Units" are listed in Table 2 of Utility witness Vegas
13 Direct Testimony (May 15, 2015). There would also be an annual update and
14 reconciliation of charges/credits to customers.

15
16 ***Q8. HOW WILL COSTS AND REVENUES ASSOCIATED WITH THE PPA***
17 ***RIDER BE REVIEWED?***

18 ***A8.*** The Company proposes in the Power Purchase and Sale Agreement (Exhibit
19 KDP-1 of Utility witness Pearce) to use an "Operating Committee" that will,
20 according to Utility witness Vegas (pages 27-28),

21 "include a representative from AEP Ohio. This Committee will
22 provide oversight over all major decisions and operation of the
23 PPA Units. Subsequently, AEP Ohio can provide, on a periodic

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PUCO Case No. 14-1297-EL-SSO, et al.*

1 basis as determined by the Commission, summaries and/or details
2 of the Committee's actions. . . . All costs will be reviewed and
3 approved for payment to AEPGR by AEP Ohio's Vice President,
4 Regulatory and Finance."

5
6 This clearly uses a self-regulation mechanism between AEP's own affiliates. This
7 self-regulation creates a conflict of interest between the affiliated companies'
8 interest (AEPGR) and the public's interest that is the result of the companies
9 involved regulating themselves.

10
11 AEP Ohio witness Vegas (page 29) also states that "[t]he Commission will have
12 the ability to audit the accuracy of the costs and revenues included in the PPA
13 Rider as well as a prudence review of actions and decisions undertaken by AEP
14 Ohio or its agents." How this will occur is not clear, given the Operating
15 Committee's role. Also not clear is how the PUCO would review the costs and
16 revenues associated with an affiliate that is unregulated by, and cannot be
17 regulated by, the PUCO without legislative change. This limitation of the
18 PUCO's ability to regulate the price of generation is explained in more detail
19 below.

20
21 An arrangement of the sort proposed by AEP Ohio is basically a return to cost-
22 based regulation—but without the historic review process that the PUCO and

1 other commissions used to ensure that customers do not pay for unreasonable
2 costs. This is also discussed in more detail below.

3
4 ***Q9. WHY HAS THE UTILITY PROPOSED THE PPA RIDER AND ITS***
5 ***ASSOCIATED POWER PURCHASE AGREEMENT IN THE ESP?***

6 ***A9.*** It appears that AEP would like to reduce the risk they face in the wholesale
7 market and have guaranteed cost recovery and return on equity through the PPA
8 for its generation resources. Utility witness Vegas, on p. 11 of his direct
9 testimony, states:

10 The Affiliated PPA will provide the PPA Units with a known
11 revenue stream commensurate with the actual costs associated with
12 providing this generating capability. The PPA Units will be less
13 reliant on the volatile capacity market prices to support their
14 continued operation, allowing those assets to be managed based on
15 well-informed long term investment decisions with a more certain
16 and transparent view of how they will ultimately recover their
17 expenditures . . .

18
19 This type of assurance, as Utility witness Vegas (page 24) says in his direct
20 testimony, is consistent with states that remain regulated:

21 Ohio's neighbors – Indiana, Michigan, Virginia, West Virginia,
22 and Kentucky all provide regulated recovery of generation
23 investments providing investors more clarity regarding the return

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PUCO Case No. 14-1297-EL-SSO, et al.*

1 on such large investments. Virginia not only provides regulated
2 cost recovery, but also employs rate incentives and accelerated cost
3 recovery mechanisms to encourage new generation investments to
4 serve native load.

5
6 Clearly that's what AEP Ohio seeks—an assurance of cost recovery that usually
7 accompanies a cost-based regulated environment.

8
9 ***Q10. DO YOU CONCUR WITH THE AEP OHIO'S RATIONALE FOR***
10 ***PROPOSING THE PPA RIDER?***

11 ***A10.*** No. Essentially, the proposed PPA Rider, if approved, would amount to a bail-out
12 funded by the customers of AEP Ohio for unregulated generation plants that
13 operate in the wholesale market.

14
15 However, after the market development period, utilities are required under Ohio
16 law to be fully on their own in the competitive market (R.C. 4928.38). The
17 market development period for AEP Ohio ended on December 31, 2005. Being
18 on your own in the competitive market means that AEPGR (AEP Ohio's
19 unregulated generation affiliate) cannot be aided by a subsidy—especially one
20 paid for by AEP Ohio's distribution customers.

1 ***Q11. DO YOU AGREE THAT AEP OHIO SHOULD BE ALLOWED TO COLLECT***
2 ***AND TRANSFER TO AEPGR (AN UNREGULATED AFFILIATE OF AEP***
3 ***OHIO) THE COMPENSATION FOR THE DEREGULATED GENERATION***
4 ***ASSETS COVERED UNDER THE PROPOSED PPA RIDER?***

5 ***A11.*** No, I do not believe that AEP Ohio should be allowed to collect the above-market
6 “costs” for those plants owned by AEPGR from their customers and transfer the
7 collected revenue to AEPGR through a bilateral contract (where the price is not
8 regulated by the Federal Energy Regulatory Commission (“FERC”) or the
9 PUCO).

10
11 It should also be noted that AEP Ohio does not own any generation plants at this
12 time except the entitlement to OVEC. The power plants to be included in the
13 PPA Rider (except OVEC) are owned and operated by AEPGR, an unregulated
14 affiliate of AEP Ohio. I do not believe that the AEP Ohio should be allowed to
15 collect above-market generation costs from customers and transfer the collected
16 revenues to its unregulated affiliates.

17
18 My opinion is based on my knowledge of established and sound regulatory policy
19 as a regulatory economist and on my understanding of Ohio laws that limit
20 charges to customers for competitive generation market losses by electric utilities.

1 ***Q12. DO YOU AGREE THAT THE COMPANY SHOULD BE ALLOWED TO***
2 ***COLLECT FROM CUSTOMERS ITS SHARE OF COSTS OF THE OVEC***
3 ***GENERATION UNITS?***

4 ***A12.*** No. I do not believe that the Company should be allowed to collect the above-
5 market “costs” for OVEC units and then transfer the collected revenue to OVEC
6 through a bilateral contract not price regulated by the FERC or the PUCO. Again,
7 these generation costs are to be recovered in the generation market, not through a
8 rider mechanism charged to captive retail customers.

9

10 ***Q13. IS THE UTILITY’S PPA RIDER PROPOSAL CONSISTENT WITH OHIO***
11 ***POLICIES, AS OUTLINED IN THE LAWS THAT GOVERN THE***
12 ***PROVISION OF ELECTRIC GENERATION IN OHIO?***

13 ***A13.*** No.

14

15 ***Q14. PLEASE DESCRIBE YOUR UNDERSTANDING OF THE OHIO LAWS***
16 ***THAT YOU REFERENCE IN YOUR PRECEDING ANSWER.***

17 ***A14.*** In the late 1990s, while I was employed at NRRI at The Ohio State University, I
18 worked for the Ohio Legislative Service Commission (“LSC”) directly assisting
19 the legislators tasked with drafting what became S.B. 3. In particular, my work
20 was directly related to the drafting of language (statutes) regarding “transition
21 costs” or “stranded cost” recovery and the methods for determining the standard

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PUCO Case No. 14-1297-EL-SSO, et al.*

1 service offer rate. S.B. 3 became the law in Ohio in 1999¹ and the specific
2 provisions pertaining to stranded investment, R.C. 4928.38 and 4928.39, remain
3 applicable today.

4
5 It is my understanding, as confirmed by counsel, that the legislative goals of S.B.
6 3 were to deregulate the generation market and end the use of cost-based rates for
7 pricing generation services in the state of Ohio.² Cost-based regulation was to be
8 replaced by market competition as a means to determine the wholesale and retail
9 generation price for all electricity customers. Consequently, after the enactment
10 of S.B. 3, market forces are to determine which power plants should be operated
11 and which power plants should be retired if they are inefficient and uneconomic.

12
13 However, there is an important analytic point to be made in that regard. The test
14 for economic viability of the PPA Units is whether PJM market prices are
15 sufficiently high to cover the supplier's average variable costs, i.e., costs that vary
16 with output.

17
18 But under the Utility's proposal, customers will be charged the full embedded
19 costs of generation plants including a return on and a return of legacy capital.

20 Thus, it is entirely possible that the PPA Rider would "produce" a "loss" that
21 customers pay for (meaning full cost of service exceeds PJM revenue from the

¹ As Passed by the Ohio 123rd General Assembly, 1999.

² Legislative Service Commission, Final Analysis, Am. Sub. S.B. 3, 123rd General Assembly, 1999.

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PUCO Case No. 14-1297-EL-SSO, et al.*

1 generation) even though the PJM market prices are still high enough to cover
2 average variable costs. Thus, the fact that the PPA Rider produces a loss for
3 customers does not mean that absent that rider the PPA Units would or should be
4 retired.

5
6 ***Q15. IS THE UTILITY'S PPA RIDER PROPOSAL CONSISTENT WITH S.B. 3?***

7 ***A15.*** No. The fundamental idea behind this deregulation of the generation business
8 (S.B. 3) is that retail customers should not now be asked to protect Ohio electric
9 utilities from competitive generation market risks or losses.

10
11 A market development period was provided under S.B. 3. The intent of the
12 market development period was to provide electric utilities in Ohio time to
13 prepare for a competitive environment. That market development period has
14 elapsed. It is no longer the AEP Ohio's customers' obligation to cover the
15 operating generating costs and guarantee a return on equity for AEP Ohio's
16 unregulated affiliate. The Company is now "wholly responsible" for whether it is
17 in a competitive position in the generation market. Captive retail customers
18 should not be asked to guarantee the profitability of the Company's deregulated
19 affiliate-owned generation units.

**Q16. WHY IS THE PROPOSED PPA RIDER CONTRADICTING THE
LEGISLATIVE INTENT AND THE POLICY GOALS OF ELECTRICITY
DEREGULATION IN OHIO, IN PARTICULAR S.B. 3?**

A16 From a policy perspective, the Utility's proposed PPA Rider is based on a mistaken premise. That premise is that captive retail customers should make up the potential losses of certain generation assets owned and operated by unregulated affiliate, AEPGR, and ultimately, AEP Ohio's parent company, AEP; and to the OVEC owners, for those units' output. This is contrary to Ohio's policy direction since 1999. The proposed PPA charge is an attempt to re-introduce revenue guarantees for the specified unregulated (and currently uneconomic) generation assets.

What the Company has proposed regarding the PPA Rider can be viewed as either (1) a continuation of transition or "stranded" cost recovery for those power plants, which as explained below should no longer be permitted, or (2) a loosely-designed cost-based regulation that incorporates a revenue guarantee for those generation plants. This is problematic because the "cost" (or PPA contract price) of the specific generation assets is determined through bilateral contracts between affiliated companies, and the "cost" (or contract price) are not set by FERC or the PUCO. As noted, this is essentially self-regulation and creates a conflict of interest between the AEP affiliates and the public (and in particular the consumers') interest.

1 ***Q17. DO YOU HAVE CONCERNS FOR CUSTOMERS REGARDING THE***
2 ***UTILITY'S ATTEMPT TO RE-INTRODUCE A REVENUE GUARANTEE***
3 ***INTO THEIR UNREGULATED BUSINESS?***

4 ***A17.*** Yes, I do. This approach is a loosely based attempt at “re-regulation” (or more
5 precisely the re-introduction of revenue guarantee through unregulated bilateral
6 contracts between affiliated entities. This type of re-regulation is even *better*,
7 from AEP’s perspective, than cost-based regulation. AEP Ohio’s proposal is an
8 attempt to “re-regulate” the very service (competitive generation) that has been
9 the focus of attempts to deregulate, at both the federal and state levels.

10
11 However, the proposed PPA Rider is considerably inferior to the traditional cost-
12 based regulation because it is actually a revenue guarantee masked as partial cost-
13 based regulation. As discussed above, AEP Ohio’s proposal lacks the important
14 checks and balances that usually accompany traditional or cost-based regulation,
15 such as a review by the PUCO of costs incurred.

16
17 Under the proposed PPA Rider, in a broader sense, the AEP parent company
18 would be collecting additional revenues (that are above market price) from
19 captive retail customers of its regulated distribution subsidiaries, AEP Ohio. And
20 then the revenues would be transferred to the unregulated subsidiary AEPGR (the
21 entity that actually owned generation assets that are no longer price-regulated by
22 the State of Ohio). By doing so, the AEP parent company will receive a
23 guaranteed return on some of its generation capital investments. These revenues

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PUCO Case No. 14-1297-EL-SSO, et al.*

1 would provide the AEP parent company, or its unregulated subsidiary AEP Ohio,
2 additional dollars that it allegedly otherwise cannot collect by selling generation
3 services in the wholesale or retail market.

4
5 This scheme is contrary to the legislative intent of S.B. 3 to create a competitive
6 generation market in the state. If the proposed PPA Rider were granted by the
7 Commission, some of AEPGR's generation plants would receive this additional
8 revenue in the form of a guaranteed return. But other unregulated electric
9 suppliers, who are in direct competition with AEPGR, would not receive any
10 similar guaranteed return. The approval of the PPA Rider and its associated
11 power purchase agreement will place generators other than AEP at a competitive
12 disadvantage in the market. And the PPA Rider will impair the operation of a
13 competitive market that is intended to provide reasonably priced generation
14 service for Ohio electric customers.

15
16 ***Q18. SIXTEEN YEARS AFTER SENATE BILL 3'S ENACTMENT, SHOULD THE***
17 ***COMPANY'S TRANSITION TO COMPETITION BE DONE?***

18 ***A18.*** Yes. The Company should no longer charge customers a PUCO regulated price,
19 especially one that includes a guaranteed return, for generation service.

1 ***Q19. DOES OHIO LAW PROVIDE THE COMPANY WITH AN ADDITIONAL***
2 ***TRANSITION PERIOD?***

3 ***A19.*** No. My understanding of S.B. 3, confirmed by counsel, is that Ohio law prohibits
4 utilities from collecting from customers stranded costs or transition costs or
5 “equivalent revenues” beyond the “market development period.” That time
6 period expired on December 31, 2005.

7
8 Specifically, Section 4928.38 of the Revised Code, as adopted on October 5,
9 1999, provides that an electric utility may receive transition revenues from the
10 starting date of competitive retail electric service through the end of the market
11 development period. Further, that section of the Revised Code provides that once
12 the utility’s market development period ends, it “shall be fully on its own in the
13 competitive market.” Being fully on its own in the competitive market means that
14 the utility (and its affiliate) are not charging captive retail customers of regulated
15 services for revenues to support power plants.

16
17 ***Q20. WHAT TYPE OF COSTS IS AEP OHIO TRYING TO COLLECT FROM***
18 ***CUSTOMERS THROUGH THE PROPOSED PPA RIDER AND ITS***
19 ***ASSOCIATED PPA?***

20 ***A20.*** Specifically, the Utility is seeking to charge customers for above-market
21 generation costs of its unregulated affiliate, AEPGR, and for the OVEC
22 generation units.

1 ***Q21. IS THE COMPANY ATTEMPTING TO COLLECT TRANSITION***
2 ***COSTS OR ITS EQUIVALENT, ABOVE MARKET GENERATION***
3 ***COSTS?***

4 ***A21.*** Yes. Section 4928.39 of the Revised Code defines transition costs. It clearly
5 states that the costs unrecoverable in a competitive environment are considered a
6 part of the transition costs. At this time in 2015, the Utility is claiming that
7 revenue derived from a competitive marketplace is insufficient to cover the cost
8 of operating the plants. That the cost of generation plants exceeds the market
9 price is essentially the very definition of transition cost. The Company should not
10 now be allowed to collect these costs ten years after the transition period ended.

11
12 ***Q22. DID SB 221 (PASSED IN 2008) CHANGE OHIO LAW WITH RESPECT TO***
13 ***PROVIDING THE COMPANY ANY ADDITIONAL TIME FOR THE***
14 ***TRANSITION PERIOD?***

15 ***A22.*** No, SB 221 did not invalidate or repeal the relevant sections of SB 3 on recovery
16 of transition costs. Nor did it provide any additional time for collecting transition
17 costs.

1 ***Q23. WOULD IT BE PROPER FOR THE COMPANY TO NOW CHARGE***
2 ***CUSTOMERS FOR GENERATION-RELATED TRANSITION COSTS, OR***
3 ***ABOVE MARKET GENERATION COSTS, AND TRANSFER THOSE***
4 ***COLLECTED REVENUES TO THEIR OWNERS IN ORDER TO KEEP THE***
5 ***UNREGULATED POWER PLANTS IN OPERATION?***

6 ***A23.*** No. The law is very clear that “[w]ith the termination of that approved revenue
7 source, the utility shall be fully on its own in the competitive market” (R.C.
8 4928.38) and that the commission “shall not authorize the receipt of transition
9 revenues or any equivalent revenues” (R.C. 4928.38) after the termination of the
10 market development period. This means that AEP Ohio cannot charge customers
11 of the regulated distribution business dollars that subsidize AEP’s non-regulated
12 generation service. But that’s just what the Company has proposed to do.

13
14 In addition, the Company has not demonstrated that it is in the best interests of the
15 customers or the state of Ohio, at this time in 2015, to support those power plants
16 covered under the proposed PPA Rider through hundreds of millions or even
17 billions of dollars in subsidies. Those power plants should compete in the market
18 with other power plants, on their own without customer-provided subsidies.
19 Therefore, the Company’s proposal violates Ohio’s retail electric service policy
20 and Ohio law. AEP Ohio’s proposal should be rejected by the PUCO.

1 ***Q24. IS THE PROPOSED PPA RIDER CONSISTENT WITH THE STATE OF***
2 ***OHIO'S ELECTRIC SERVICE POLICY OF AVOIDING***
3 ***ANTICOMPETITIVE SUBSIDIES FLOWING FROM A***
4 ***NONCOMPETITIVE RETAIL ELECTRIC SERVICE TO A COMPETITIVE***
5 ***RETAIL SERVICE?***

6 **A24.** No, it is not. R.C. 4928.02(H) states that the state's policy is to "[e]nsure
7 effective competition in the provision of retail electric service by avoiding
8 anticompetitive subsidies flowing from a noncompetitive retail electric service to
9 a competitive retail electric service or to a product or service other than retail
10 electric service, and vice versa, including by prohibiting the recovery of any
11 generation-related costs through distribution or transmission rates."

12
13 This is often referred to as cross-subsidization, which includes, for example,
14 having non-competitive services (such as distribution) subsidize competitive
15 services (such as generation). Because the PPA Rider is a non-bypassable
16 generation charge assessed through the distribution company, AEP Ohio, and
17 collected from all captive retail distribution customers, it is an example of cross-
18 subsidization of generation service by distribution customers.

19
20 An approval of the PPA Rider is a violation of this state policy. The non-
21 bypassable charge collected through PPA Rider only benefits one supplier, and
22 provides additional revenue to that supplier, that other suppliers in the market do
23 not receive.

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1 **Q25. DO YOU HAVE ANY COMMENT ON THE COMMISSION'S AEP OHIO ORDER?**

2 **A25.** Yes. In the February 26, 2015 Opinion and Order issued in Case No. 13-2385-EL-SSO,
3 the Commission identified it would consider to approve cost recovery under the PPA
4 Rider effective only during the three year ESP period. The Commission authorized AEP
5 Ohio to establish a "placeholder" PPA Rider, however the Commission set it at zero.

6

7 The Commission also identified several factors that AEP Ohio should address and the
8 Commission will consider when deciding whether to approve the request for cost
9 recovery from the utility. These are enumerated below.³

- 10 1) "financial need of the generating plant;"
- 11 2) "necessity of the generating facility, in light of future
12 reliability concerns, including supply diversity;"
- 13 3) "description of how the generating plant is compliant with
14 all pertinent environmental regulations and its plan for
15 compliance with pending environmental regulations; and"
- 16 4) "the impact that a closure of the generating plant would
17 have on electric prices and the resulting effect on economic
18 development within the state."

19

20 If the Commission decides to use these factors, it is important that the Commission also
21 consider the impact on the competitive retail market that these considerations will have if
22 they set a non-zero PPA Rider.

³ AEP Ohio Order (February 25, 2015), p. 25, numbers added.

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1 ***Q26. SHOULD THE PUCO CONSIDER THE FIRST FACTOR FROM THE AEP***
2 ***ORDER, WHICH REQUIRES A UTILITY TO ADDRESS WHETHER THE***
3 ***GENERATING PLANTS HAVE A FINANCIAL NEED?***

4 ***A26.*** No. The first factor clearly suggests that generators in the state would be able to recover
5 their costs based on “financial need.”

6
7 This is more consistent with a policy of cost-based regulation of generation than a
8 restructured retail market that aims to foster a competitive retail generation market. The
9 term “financial need” is undefined by the Commission. But in competitive markets if a
10 generating unit cannot clear its output in the wholesale market (PJM), by producing a
11 price-competitive product, then it will be replaced by lower offers for generation in the
12 wholesale market.

13
14 Moreover, financial need is a subjective factor that should only be evaluated by the
15 generation owner based on whether costs are being met. Financial need of a generation
16 plant should not be a consideration for the Commission to evaluate in a deregulated
17 market-based generation environment. By considering the financial need of a generating
18 plant, the PUCO leads the state in a direction that is contrary to the direction Ohio has
19 been moving since 1999—that is, toward competitive retail markets, as required by
20 current Ohio law.

21
22 ***Q27. ARE THERE ANY OTHER REASONS WHY THE FIRST FACTOR IS NOT A***
23 ***GOOD METRIC BY WHICH TO MEASURE A PPA RIDER?***

24 ***A27.*** Yes. As previously mentioned, the PUCO does not define what they mean by the phrase
25 “financial need.” In the competitive market, “financial need” is determined by the

*Direct Testimony of Kenneth Rose, Ph.D.
On Behalf of the Office of the Ohio Consumers' Counsel
PUCO Case No. 14-1297-EL-SSO, et al.*

1 unregulated owner of the generation unit. While some may argue that there is no
2 financial need as long as the revenues exceed the variable costs of the plant, the owners
3 of the plants, especially when seeking a subsidy with a guaranteed return, would argue
4 that there is financial need as long as the guaranteed return is not achieved. Again, this is
5 a consideration that would be expected in a regulated environment, not a market-based
6 environment.

7
8 ***Q28. SHOULD THE PUCO CONSIDER THE SECOND FACTOR FROM THE AEP***
9 ***ORDER, WHICH REQUIRES UTILITIES TO ADDRESS THE NEED FOR THE***
10 ***GENERATING PLANTS?***

11 ***A28.*** No. The second factor, “necessity of the generating facility, in light of future reliability
12 concerns, including supply diversity,” is an important issue but not an appropriate
13 consideration for the operation of a competitive market. Subsidizing one supplier and not
14 others may discourage new entry rather than encouraging new entrants, thereby harming
15 reliability in the long run. Creating such a barrier to new entry will also result in a more
16 concentrated market (fewer suppliers with larger market shares), which makes it more
17 likely that suppliers (for example, AEP) would be able to raise prices above competitive
18 levels.

19
20 The need for generating units in a Regional Transmission Organization (“RTO”), such as
21 PJM, is determined by the RTO’s procedures for meeting reliability to ensure there is
22 enough capacity to fill the customer demand. This is not an issue to be determined by the
23 PUCO on a plant-by-plant basis; rather, it is a determination for the RTO based on
24 market forces for the entire region.

1 ***Q29. SHOULD THE PUCO CONSIDER THE THIRD FACTOR FROM THE AEP***
2 ***ORDER, WHICH REQUIRES THE UTILITIES TO ADDRESS HOW THE***
3 ***GENERATING UNITS ARE COMPLIANT WITH ALL PERTINENT AND***
4 ***PENDING ENVIRONMENTAL REGULATIONS?***

5 ***A29.*** No. The third factor, “description of how the generating plant is compliant with all
6 pertinent environmental regulations and its plan for compliance with pending
7 environmental regulations” is an issue faced industry-wide and by nearly every state.
8 The state of Ohio, like all states, needs to address this issue comprehensively at a state-
9 wide level, not by one utility at a time and certainly not one plant at a time. Subsidies for
10 existing fossil plants may encourage them to remain operating and delay retirement.
11 Whether a unit or plant should remain operating or retire should be based on the
12 economic decisions of the owner considering price signals from the competitive market,
13 in compliance with state and federal environmental regulation. This is further explained
14 in OCC Witness Jackson’s testimony.

15
16 ***Q30. SHOULD THE PUCO CONSIDER THE FOURTH FACTOR FROM THE AEP***
17 ***ORDER, WHICH REQUIRES THE UTILITIES TO ADDRESS THE IMPACT THAT***
18 ***CLOSURE OF THE GENERATING PLANTS WOULD HAVE ON ELECTRIC***
19 ***PRICES AND ECONOMIC DEVELOPMENT IN THE STATE?***

20 ***A30.*** No. The fourth factor, “the impact that a closure of the generating plant would have on
21 electric prices and the resulting effect on economic development within the state” gets
22 back to why the restructuring efforts began in the first place – to moderate prices to
23 customers and retain and attract new businesses to the state. The best way to do this is to
24 keep prices relatively low and maintain existing reliability. By allowing a special class of
25 generation owners to pass their above-market costs through to captive retail customers

*Direct Testimony of Kenneth Rose, Ph.D.
On Behalf of the Office of the Ohio Consumers' Counsel
PUCO Case No. 14-1297-EL-SSO, et al.*

1 will simply increase prices within the state, discourage entry by other suppliers, and not
2 help develop a functioning retail market that would benefit the state in the long run.

3
4 The Commission cannot unilaterally, even by public rulemaking, revert back to previous
5 regulations, institute a different regulatory regime of its own, or insert mechanisms that
6 were not intended by or are contrary to current law.

7
8 ***Q31. PLEASE SUMMARIZE YOUR CONCLUSION AND RECOMMENDATION***
9 ***REGARDING THE PROPOSED PPA RIDER IN THE PROPOSED ESP.***

10 ***A31.*** My primary recommendation is that the PUCO should reject the proposed PPA
11 Rider. AEP Ohio should not be allowed to collect above-market generation costs
12 (or contract rates), through the PPA Rider, from the customers for the electricity
13 produced by the generation units. And the Company should not be allowed to
14 then transfer the collected revenues to their unregulated affiliate, AEPGR, or the
15 OVEC owners.

16
17 As discussed before, the above-market generation costs (or contract rates),
18 charged to the customers of the Company, are inconsistent with the legislative
19 intent of a deregulated generation market in the state of Ohio. The imposition of
20 the PPA Rider on the customers amounts to providing an unjust subsidy to the
21 generator owners (AEPGR and OVEC). The approval of PPA Rider will distort a
22 competitive generation market. The approval of PPA Rider will likely impose
23 substantial and additional costs on the captive retail customers of AEP Ohio. And

*Direct Testimony of Kenneth Rose, Ph.D.
On Behalf of the Office of the Ohio Consumers' Counsel
PUCO Case No. 14-1297-EL-SSO, et al.*

1 the PUCO will have almost no recourse to undo the damages to customers and the
2 competitive generation market if the difference between generation costs and
3 market prices persists well into the future.

4
5 The four factors on which the PUCO focuses in the AEP Ohio Order ignore the anti-
6 competitive nature of the PPA Rider; instead focusing on the individual needs of the
7 deregulated generation facilities. Approval of the PPA Rider would distort the retail
8 generation market and will likely impose substantial and additional costs to the customers
9 of the Company.

10
11 ***Q32. DOES THIS CONCLUDE YOUR TESTIMONY?***

12 ***A32.*** Yes. However, I reserve the right to incorporate new information that may
13 subsequently become available through outstanding discovery or otherwise.

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Direct Testimony of Kenneth Rose, Ph.D. on Behalf of the Office of the Ohio Consumers' Counsel*, was served via electronic transmission to the persons listed below on this 11th day of September 2015.

/s/ William J. Michael

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Illinois Commerce Commission, "Proposed tariff establishing a market value methodology pursuant to Section 16-112(a) of the Public Utilities Act to be effective post-2006 and related revisions to Rider PPO and other tariffs," No. 05-0159, Commonwealth Edison Company, On behalf of the People of the State of Illinois (the Illinois Attorney General), Direct Testimony June 8, 2005 and Rebuttal Testimony August 3, 2005.

Illinois Commerce Commission, "Proposal to implement a competitive procurement process by establishing Rider BGS, Rider BGS-L, Rider RTP, Rider RTP-L, Rider D, and Rider MV," Nos. 05-0160, 05-0161, and 05-0162, Central Illinois Light Company, Central Illinois Public Service Company, and Illinois Power Company, On behalf of the People of the State of Illinois (the Illinois Attorney General), Direct Testimony June 15, 2005 and Rebuttal Testimony August 10, 2005.

Before the Federal Energy Regulatory Commission, Public Utilities Commission of The State of California v. Sellers of Long Term Contracts to the California Department of Water Resources, California Electricity Oversight Board v. Sellers of Energy and Capacity Under Long-Term Contracts With the California Department of Water Resources, Docket No. EL02-60-003 and No. EL02-62-003 (Consolidated), Prepared Direct Testimony on Behalf of The California Electricity Oversight Board and The California Public Utilities Commission, Exhibit CAL-3 (filed October 2002).

Public Service Commission of West Virginia, Case No. 98-0452-E-GI, "General Investigation to determine whether West Virginia should adopt a plan for open access to the electric supply market and for the development of a deregulation plan," (testimony on behalf of the Staff of the West Virginia Public Service Commission, addressing June 15, 1999 Initial Positions, filed July 15, 1999; Direct testimony, "Market Power in Electric Power Industry," August 20, 1999).

The Public Utilities Commission of Nevada, "In Re Investigation of Issues To Be Considered As a Result of Restructuring of Electric Industry" (pursuant to NRS 704.965

to 704.990, inclusive) proposed Regulation of the Public Utilities Commission of Nevada, October 19, 1998. (Comment on “Provider of Last Resort Service,” in PUCN Docket No. 97-8001).

The Arizona Corporation Commission, “In the Matter of the Competition in the Provisions of Electric Services Throughout the State of Arizona,” submitted January 21, 1998; cross examination, February 23, 1998. (Direct Testimony in Docket No. U-0000-94-165.)

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The Public Service Commission of the State of Mississippi, “Benefits to Mississippi from Competition and Treatment of Utility Uneconomic Cost,” April 14, 1997. (Comments addressed at Docket No. 96-UA-389.)

Testimony and Presentations Before Legislatures

Electric Markets, Price Trends, and Electric Choice, before the Michigan House Energy and Technology Committee, March 12, 2013.

Performance of Retail Electricity Market, written testimony and presentation before the House Public Utilities Committee, Ohio House of Representatives, February 5, 2008.

Testimony and presentation before the Guam Legislature on Proposed Bill No. 122, January 9, 2008.

Status of State Retail Markets, presentation to the Energy and Technology Committee, Michigan House of Representatives, Lansing, Michigan, April 12, 2007.

“Electric Retail Competition: Is it Working? - The State and National Perspective,” presentation to the Energy and Technology Committee Informational Forum, Hartford, Connecticut, March 8, 2007.

“2004 Performance Review of Electric Power Markets,” presentation to the Commission On Electric Utility Restructuring, Virginia General Assembly, Richmond, Virginia, December 19, 2006.

Status of State Retail Markets, presentation to the Electric Utility Oversight Committee, Illinois House of Representatives, Springfield, Illinois, October 9, 2006.

“Electricity Market Overview,” presentation to the Technology and Energy Committee, Michigan Senate, Lansing, Michigan, April 26, 2006.

“Summary of State Restructuring and Market Activities,” Presentation to the Electric Utility Oversight Committee, Illinois House of Representatives, Springfield, Illinois, May 17, 2005.

“Electric Utility Regulation Issues: An Introduction, Historical Development and Traditional Regulatory System” and “Status of Wholesale and Retail Competition,” House Commerce and Labor Committee, Virginia General Assembly, Richmond, Virginia, December 16, 2004.

“2004 Performance Review of Electric Power Markets,” Commission on Electric Utility Restructuring, Virginia General Assembly, Richmond, Virginia, November 23, 2004.

“Developments in Electric Industry Restructuring in the U.S.,” Technology and Energy Committee, Michigan Senate, Lansing, Michigan, February 18, 2004.

“A Review of Electric Power Markets in the U.S.,” Presentation to the Commission on Electric Utility Restructuring, Virginia General Assembly, November 19, 2003.

“Performance Review of Electric Power Markets,” presentation to the Legislative Transition Task Force, Virginia General Assembly, Richmond, Virginia, November 26, 2002.

“Performance of Electric Power Markets,” Presentation to the Kansas State Legislature, Special Committee on Utilities, October 11, 2001.

“Performance Review of Electric Power Markets,” Presentation to the Legislative Transition Task Force, Virginia General Assembly, Richmond, Virginia, September 7, 2001.

“Mandatory Rate Discounts: Lessons Learned from Other States,” House Public Utilities Committee, Ohio General Assembly, Columbus, Ohio, May 12, 1999.

U.S. House of Representatives Committee on Commerce, Subcommittee on Energy and Power, “Electricity Competition: Market Power, Mergers, and PUHCA,” May 6, 1999.

“Who Should Supply Non-Choosing Customers?” Nevada Senate, Committee on Commerce and Labor, Carson City, Nevada, March 17, 1999.

“Who Should Supply Non-Choosing Customers?” Nevada Assembly, Committee on Government Affairs, Carson City, Nevada, March 16, 1999.

“New Electric Supply Market Structure,” Special Task Force on Electricity Restructuring, Kentucky General Assembly, Frankfort, Kentucky, March 8, 1999.

“Ohio’s Proposed Retail Marketing Areas,” Iowa General Assembly, Deregulation and Restructuring of the Electric Utility Industry Study Committee, Des Moines, Iowa,

November 23, 1998.

“Electric Utility Securitization,” presented to State of Vermont House of Representatives, House Electric Utility Regulatory Reform Committee, Montpelier, Vermont, October 1, 1997.

“Performance-Based Ratemaking,” presented to State of Vermont House of Representatives, House Electric Utility Regulatory Reform Committee, Montpelier, Vermont, October 1, 1997.

“Electric Industry Restructuring: Activities and Issues Around the Country,” presented to Indiana General Assembly, Regulatory Flexibility Committee, Indianapolis, Indiana, September 10, 1997.

“Securitization of ‘Stranded Costs’: Benefits and Risks to Customers,” presented to the Kansas Retail Wheeling Task Force, Topeka, Kansas, September 3, 1997.

“Stranded Costs,” presented to the Kansas Retail Wheeling Task Force, Topeka, Kansas, September 3, 1997.

General Assembly of the State of Ohio, Joint Committee on Electric Utility Deregulation, May 8, 1997. (Comments)

U.S. House of Representatives, Committee on Government Reform and Oversight House of Representatives, Subcommittee on the Postal Service, April 16, 1997. (Prepared statement published in Hearing proceedings for H.R. 22, The Postal Reform Act of 1997.)

U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Energy and Power, “The SO₂ Emissions Trading Program: Events and Lessons So Far,” October 5, 1994. (Written testimony published in *PUR Utility Quarterly, A Special Supplement*, Fourth Quarter, 1994.)

Selected Conference and Other Appearances (2000 to the present; does not include all IPU training and educational programs, such as the annual Regulatory Studies Program (“Camp NARUC”), Advanced Regulatory Studies Program, Grid School, and Michigan Forum)

The 37th Annual National Conference of Regulatory Attorneys, “Session XV,” Columbus, Ohio, June 18, 2014.

The 36th Annual National Conference of Regulatory Attorneys, “Session I – Why Regulation Is Important,” San Francisco, California, June 17, 2013.

The 35th Annual National Conference of Regulatory Attorneys, “Why Regulation Matters IV (and how to improve it),” Indianapolis, Indiana, May 21, 2012.

The 34th Annual National Conference of Regulatory Attorneys, "Why Regulation Matters III (and How to Improve It)," Missoula, Montana, June 6, 2011.

The 33rd Annual National Conference of Regulatory Attorneys, "Why Regulation Matters Today—More than In Decades," June 21, 2010, Charleston, West Virginia.

The 32nd Annual National Conference of Regulatory Attorneys, "Why Regulation Does Not Fail Us (Unless We Fail Regulation)," June 1, 2009, Las Vegas, Nevada.

Cap & Trade Workshop, 2009 Mid-America Regulatory Conference, June 16, 2009, Traverse City, Michigan.

"Procedures for Implementing the 'PURPA Standards' in the Energy Independence and Security Act of 2007," E-Forum, sponsored by American Public Power Association, Edison Electric Institute, National Association of Regulatory Utility Commissioners, and National Rural Electric Cooperative Association, August 21, 2008.

"Status of Retail Electric Supply Competition," Thirty-First Annual National Conference of Regulatory Attorneys, Charleston, South Carolina, June 11, 2008.

"Status of Retail Competition in the U.S. Electric Supply Industry," 12th Annual Ohio Energy Management & Restructuring Conference, Columbus, Ohio, February 27, 2008.

"The Impact of Competition on Electricity Prices: Can We Discern a Pattern?," presented at the Harvard Electricity Policy Group Forty-Ninth Plenary Session, Los Angeles, California, December 6, 2007.

"Independent Market Monitoring of RTOs and ISOs," 30th Annual National Conference of Regulatory Attorneys, Bismarck, North Dakota, June 4, 2007.

State Retail Price Comparisons, Michigan Manufacturers Association CEO Forum, Lansing, Michigan, May 8, 2007.

"Perspective on the National Electricity Marketplace," 11th Annual Ohio Energy Management & Restructuring Conference, Columbus, Ohio, February 28, 2007.

Energy Virginia Conference, "A Greener Energy Pasture for Virginia's Economy," Virginia Military Institute, Lexington, Virginia, October 17, 2006.

"Status of Competition," Michigan Electric Power Conference, Crystal Mountain Resort, Thompsonville, Michigan, July 20, 2006.

"Who's Smiling Now?: A Comparison of Electricity Rates in Restructured and Non-Restructured States," National Association of State Utility Consumer Advocates Mid-Year Meeting, Memphis, Tennessee, June 12, 2006.

"Status of Markets and Market Manipulation Control," 29th Annual National Conference of Regulatory Attorneys, Scottsdale, Arizona, June 13, 2006.

"Electricity Market Overview," Michigan Municipal Electric Association, 2006 Spring Conference, Marshall, Michigan, May 11, 2006.

"Procedures for Implementing the PURPA Standards," E-Forum, sponsored by American Public Power Association, Edison Electric Institute, National Association of Regulatory Utility Commissioners, and National Rural Electric Cooperative Association, May 4, 2006.

"Developments in National Electricity Markets and Policy," 2006 Michigan Forum on Telecommunications and Energy Regulatory Policy, Institute of Public Utilities, Michigan State University, East Lansing, Michigan, January 27, 2006.

37th Annual Regulatory Policy Conference, Institute of Public Utilities, Richmond, Virginia, "Workshop I: From Spectrum to Energy: What Regulators Need to Know About Auctions," December 4, 2005; and "Can We Make Markets Work? Performance and Oversight," December 6, 2005.

"FERC's Market Power Proceeding: The Current State of the Federal Regulatory Landscape," NARUC 117th Annual Convention, Palm Springs, California, November 15, 2005.

47th Annual Regulatory Studies Program, Institute of Public Utilities, Michigan State University, East Lansing, Michigan, "Electricity: Economics, Structure, & Regulation," August 1, 2005; "Electric Transmission Networks and Markets" and "Wholesale Electric Market Design and Performance," August 9, 2005; and "Retail Electric Market Design & Performance," August 10, 2005.

"The Future of Deregulation: Is It Really Dead or Will It Be An Aspect of Our Future?," National Rural Utilities Cooperative Finance Corporation, Forum 2005, Hollywood, Florida, July 29, 2005.

2005 Advanced Regulatory Studies Program, Institute of Public Utilities, Michigan State University, East Lansing, Michigan, "LMP and FTRs" and "Regional Transmission Models," April 26, 2005 and "Market Performance," April 27, 2005.

"The State of Competition in Utility Industries: Why are the Outcomes Different? (Keynote address), Pennsylvania Public Utility Law Conference, Pennsylvania Bar Institute Program, Harrisburg, Pennsylvania, January 26, 2005.

2005 Michigan Forum on Telecommunications and Energy Regulatory Policy, Institute of Public Utilities, January 21, 2005.

Camp NARUC 2004: The 46th Annual NARUC Regulatory Studies Program, "Retail Electric Market Design and Performance" August 11, 2004; "Wholesale Electric Market Design and Performance" August 10, 2004; "Electric Transmission Markets" August 10, 2004; "Electricity: Economics, Structure, and Regulation, August 2, 2004; "Roundtable: The Public Utility Industries Compared, Electricity" August 2, 2004.

"Does Competition Hurt Reliability? An Economist's View On How to Avoid Another Major Blackout" (Keynote address), GasFair Power Summit 2004, 13th Annual North American Natural Gas & Electricity Market Conference & Trade Show, Presented by Canadian Enerdata Ltd., Toronto, Canada, May 18, 2004.

"What Conditions are Necessary for Competition to Provide Benefits to Illinois Customers?" Post 2006 Symposium, Panel: Developing Electric Competition in Illinois, Chicago, Illinois, April 29, 2004.

"Developments in U.S. Retail Electric Markets," The Central Research Institute of Electric Power Industry, Tokyo, Japan, March 24, 2004.

"Unbundling Electric Services: U.S. Experience, Options, and Evaluation," Conference at Gakushuin University, Tokyo, Japan, March 22, 2004. (Paper presented also.)

"Updates and Summary of '2003 Performance Review of Electric Power Markets,'" IPU Online Webcast, October 9, 2003.

Camp NARUC 2003: The 45th Annual NARUC Regulatory Studies Program, "Energy Market Performance Monitoring and Assessment," August 12, 2003; "Market Design for Electricity," August 12, 2003; "Electricity: Economics, Structure, and Regulation," August 4, 2003; "Roundtable: The Public Utility Industries Compared," August 4, 2003.

"FERC Standard Market Design," Michigan Electric Power Conference, Gaylord, Michigan, July 11, 2003.

"PJM and Midwest Developments," American Association of Blacks in Energy 2003 Annual Conference, Philadelphia, Pennsylvania, April 23, 2003.

"Congestion Revenue Rights and FERC's Proposed Transmission Incentive Policy Staff," Subcommittee on Electricity, NARUC Winter Committee Meetings, Washington, D.C., February 23, 2003.

"Electric Restructuring Overview," The Michigan Forum 2003 On Telecommunications and Energy Regulatory Policy, East Lansing, Michigan, February 7, 2003.

"Wholesale Market Design -- Where are We and Where are We Headed?" presented at "Energy Markets at the Crossroads," The Institute for Regulatory Policy Studies, Illinois State University, Springfield, Illinois, December 12, 2002.

"The Evolving Regulatory Paradigm," panel: "Back in the Bottle: Is Re-Regulation a Reality?" presented at "Fiscal Fitness -- The Financial Condition of the Utility Industries and the Role of Regulation," Annual Regulatory Policy Conference, Institute of Public Utilities, Michigan State University, Tampa, Florida, December 10, 2002.

"Congestion Revenue Rights Workshop," NARUC 114th Annual Convention, Staff Subcommittee on Electricity, Chicago, Illinois, November 10, 2002.

"Measuring Market Power & Market Monitoring," 44th Annual NARUC Regulatory Studies Program, Michigan State University, East Lansing, Michigan, August 14, 2002.

"Retail Pricing Issues for Electricity," 44th Annual NARUC Regulatory Studies Program Michigan State University, East Lansing, Michigan, August 8, 2002.

"Applied Marginal-Cost Pricing," 44th Annual NARUC Regulatory Studies Program Michigan State University, East Lansing, Michigan, August 8, 2002.

"Overview of Wholesale Standard Market Design," Standard Market Design Workshop, NARUC Summer Committee Meeting, July 28, 2002.

"A Reexamination of the Restructuring of the Electric Supply Industry," presented at the American Association for the Advancement of Science Annual Meeting and Science Innovation Exposition, Boston, Massachusetts, February 17, 2002 (conference paper also).

"Wholesale and Retail Market Overview," NARUC Winter Committee Meetings, Committee on Electricity, Washington, D.C., February 11, 2002.

"Developments in Electricity Policy, The View from the Public Utility Commissions in the Seventh District States," Federal Reserve Bank of Chicago, Electricity Policy in the Midwest, Chicago, Illinois, January 17, 2002 (presented and moderated the panel).

"Properly Structured Incentive Plans," Electric Roundtable Discussion Group, held by the Missouri Public Service Commission, Jefferson City, Missouri, December 17, 2001.

"End of the Road for Retail?" Energy Bar Association, Mid-Year Meeting, November 30, 2001.

"Opportunities for Cogeneration and On-site Generation in a Restructured Environment," Midwest Cogeneration Association, Fifteenth Annual Non-Utility Power Conference, September 25, 2001.

"Evaluating State Competition Retail Performance," Camp NARUC 2001, Institute of Public Utilities, Michigan State University, August 14, 2001.

"Monitoring Power Markets," Camp NARUC 2001, Institute of Public Utilities, Michigan State University, August 13, 2001.

"State of the Market Report to the Committee on Electricity," NARUC Summer Committee Meetings, Seattle, Washington, July 16, 2001.

"What is Market Power and Why Should We Care About It?," NRRI Market Power Conference, Columbus, Ohio, April 10, 2001.

"Competition In Wholesale Power Markets," National Governors Association, Center for Best Practices, Philadelphia, Pennsylvania, April 6, 2001.

"Retail Market Power Issues," 2001 NASUCA Capitol Hill Conference, "California Aftershocks: What Must Be Done to Make Restructuring Work?" Washington, DC, April 5, 2001.

"Electric Restructuring's Impact on Non-Restructuring States," "Current Issues Challenging The Utility Industry," Center for Public Utilities, New Mexico State University, Santa Fe, New Mexico, March 27, 2001.

"Market Monitoring and Detecting Market Power," NARUC Winter Committee Meetings Staff Subcommittee on Electricity, February 25, 2001.

"The California Electric Restructuring Meltdown and the Fallout in Other States," National Conference of State Legislatures, AFI/ASI Joint Winter Meeting, AFI Energy and Transportation Committee, December 13, 2000.

"Current Level of Electric Regulation: Summary of State Retail Access," Wisconsin Public Utility Institute, Fundamental Course: Energy Utility Basics, Madison, Wisconsin November 15, 2000.

"Unbundling Experiences From Around the Country," Functional Unbundling, Infocast Conference, Chicago, Illinois, November 2, 2000.

"Open Access and Retail Choice Markets," Institute of Public Utilities, NARUC Advanced Regulatory Studies Program, Cincinnati, Ohio, October 10, 2000.

"Open Access Retail Models in Electricity," Camp NARUC 2000, NARUC Annual Regulatory Studies Program, August 7, 2000.

"Transmission Pricing Mechanisms and Implications," NARUC Summer Committee Meetings, Subcommittee On Strategic Issues, Los Angeles, July 24, 2000.

"Electric Retail Access: What Have We Learned From the Early States?," Electric Power Industry Special Institute, Sponsored by the Energy & Mineral Law Foundation, Columbus, Ohio, June 22, 2000.

"A MARC Regional Transmission Organization: Your Worst Nightmare?," Mid-America Regulatory Commissioners Meeting, MARC 2000, St. Louis, Missouri, June 12, 2000.

"Market Power and Competition in the Electric Industry: Derailment Ahead?," 2000 NASUCA Capitol Hill Conference, "Retail Competition: Right Train, Wrong Track?" March 20, 2000.

"Reliability Pressure Points of the Barton Bill and FERC Order 2000: Considerations for State Regulators," NARUC Winter Committee Meetings, Washington, D.C., March 6, 2000.

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Summary: Testimony Direct Testimony of Kenneth Rose, Ph.D. on behalf of the Office of the Ohio Consumers' Counsel electronically filed by Ms. Gina L Brigner on behalf of Michael, William J. Mr.