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TESTIMONY - SCHNITZER

FILE

**BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of)	
Columbus Southern Power Company and)	
Ohio Power Company for Authority to)	Case No. 11-346-EL-SSO
Establish a Standard Service Offer)	Case No. 11-348-EL-SSO
Pursuant to § 4928.143, Ohio Rev. Code,)	
in the Form of an Electric Security Plan.)	

In the Matter of the Application of)	
Columbus Southern Power Company and)	Case No. 11-349-EL-AAM
Ohio Power Company for Approval of)	Case No. 11-350-EL-AAM
Certain Accounting Authority.)	

DIRECT TESTIMONY OF
MICHAEL M. SCHNITZER
ON BEHALF OF
FIRSTENERGY SOLUTIONS CORP.

PUBLIC VERSION

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1 **I. BACKGROUND AND QUALIFICATIONS**

2 **Q. PLEASE STATE YOUR NAME.**

3 A. Michael M. Schnitzer.

4 **Q. WHAT IS YOUR BUSINESS ADDRESS?**

5 A. My business address is 30 Monument Square, Concord MA 01742.

6 **Q. MR. SCHNITZER, BY WHOM ARE YOU EMPLOYED AND IN WHAT**
7 **POSITION?**

8 A. I am a Director of The NorthBridge Group, Inc. ("NorthBridge"). NorthBridge is a
9 consulting firm that provides economic and strategic advice to the electric and natural gas
10 industries.

11 **Q. MR. SCHNITZER, PLEASE SUMMARIZE YOUR RELEVANT EXPERIENCE IN**
12 **THE ELECTRIC ENERGY INDUSTRY.**

13 A. In 1992, I co-founded NorthBridge. Before that, I was a Managing Director of Putnam,
14 Hayes & Bartlett, which I joined in 1979. I have focused throughout this time on advising
15 energy companies about strategic issues, particularly those relating to finance and market
16 structure issues. In so doing, I have experience working with private sector clients in the
17 electric utility, natural gas, private power, and steel industries, as well as with public and
18 nonprofit agencies.

19 I have testified before the Federal Energy Regulatory Commission ("FERC") and a
20 number of state commissions and departments on issues relating to competitive

1 restructuring and wholesale market design, including Locational Marginal Pricing
2 (“LMP”) and Financial Transmission Rights, Regional Transmission Organizations
3 (“RTO”), standard market design, resource adequacy, and transmission expansion pricing.
4 On several occasions I have been invited by FERC staff to participate as a panelist in
5 technical conferences on these subjects. I have also testified before several state
6 commissions and departments on the subject of provision of default service to retail
7 customers, *including evaluation of competitive procurement proposals.*

8 **Q. MR. SCHNITZER, PLEASE SUMMARIZE YOUR EDUCATIONAL**
9 **BACKGROUND.**

10 A. I hold a Master of Science degree in Management from the Sloan School of Management,
11 of the Massachusetts Institute of Technology, which I received in 1979. My concentration
12 was in finance. I also received a Bachelor of Arts degree in chemistry, with honors, from
13 Harvard College in 1975. My resume is attached as Exhibit MMS-1 to this testimony.

14 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY TO THE PUBLIC**
15 **UTILITIES COMMISSION OF OHIO (“COMMISSION” OR “PUCO”)?**

16 A. Yes. I testified on behalf of Ohio Edison Company, the Cleveland Electric Illuminating
17 Company, and the Toledo Edison Company, in Case No. 09-906-EL-SSO, on behalf of
18 Constellation New Energy and Constellation Energy Commodities Group, Inc. in Case
19 No. 08-0935-EL-SSO, and on behalf of Cinergy Gas & Electric in Docket No. 95-656-
20 GA-AIR.

1 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?**

2 A. I am testifying on behalf of FirstEnergy Solutions Corp. ("FES").

3 **II. PURPOSE OF TESTIMONY AND CONCLUSIONS**

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 A. AEP Ohio's Electric Security Plan ("ESP") proposal comes at a critical time for Ohio and
6 AEP Ohio's customers.¹ The Company's proposed ESP would set Standard Service Offer
7 ("SSO") rates through May 2014 at levels far higher than those in effect today, and far
8 higher than those that would result from a competitive procurement process. The
9 proposed ESP includes eleven new generation-related riders, and would modify three
10 other existing generation-related riders. Despite the fact that these riders would obligate
11 AEP Ohio's customers to bear the considerable costs and risks related to AEP Ohio's
12 generation investment decisions for many years into the future, AEP Ohio has not
13 included the potential costs to be incurred under these riders when comparing its proposed
14 ESP to the results expected in a Market Rate Offer ("MRO") plan.

15 Against this backdrop, the principal purpose of my testimony is to provide an
16 assessment of AEP Ohio's ESP proposal. First, I rebut AEP Ohio's analysis purporting to
17 show that its proposed ESP price is more favorable than the expected price under an
18 MRO. I also quantify, to the extent possible given the available information, the
19 significant rate increase that would result during the January 2012 through May 2014 ESP
20 period. Second, I assess whether, in a broader perspective, the proposed ESP would

¹ Columbus Southern Power Company ("CSP") and Ohio Power Company ("OPCo") are the AEP Ohio Companies, and also comprise "AEP Ohio" or the "Company" as referenced in this testimony.

1 benefit customers, the development of competitive markets, or the Ohio economy, and
2 whether it would advance the other policy goals described in section 4928.02 of the Ohio
3 Revised Code during the proposed ESP period and beyond.

4 In addition, I present for the Commission's consideration alternatives to AEP
5 Ohio's proposal and explain how these alternatives would benefit customers and promote
6 competition.

7 **Q. COULD YOU PLEASE SUMMARIZE YOUR CONCLUSIONS?**

8 A. Yes. First, I conclude that the price of AEP Ohio's proposed ESP is not more favorable
9 than the expected price under an MRO, which would use a blend of the total generation
10 service price and the price from a competitive procurement process to establish the SSO
11 price. Section 4928.143(C)(1) of the Ohio Revised Code requires that AEP Ohio
12 demonstrates that any proposed ESP is more favorable in the aggregate than the results
13 expected under an MRO. Comparing the price under the proposed ESP and under an
14 MRO is a key component of the "more favorable in the aggregate" test. As I discuss in
15 greater detail later, there are a number of reasons why the price of AEP Ohio's proposed
16 ESP is not more favorable than the expected price under an MRO:

17 1. The Proposed ESP is more expensive for customers. There are numerous errors in
18 AEP Ohio's calculations -- errors that overstate the MRO price and errors and
19 omissions that understate the proposed ESP price.

20 ➤ When these errors are corrected, AEP Ohio's proposed ESP price is about
21 \$7 to \$9 per MWH higher than the alternative MRO price. Over its

1 proposed term, AEP Ohio's ESP would cost its SSO customers \$700
2 million to \$1.0 billion more than an MRO.

3 **The Corrected Proposed ESP Price is More Expensive**
4 **than the Price Under an MRO**
5 (January 2012 – May 2014)

	Low _a/	High _b/
Corrected Proposed ESP Price Premium	\$7/MWH	\$9/MWH
Excess Costs Paid by Customers	\$0.7 billion	\$1.0 billion
<small>_a/ Based on NorthBridge corrections (Low case). _a/ Based on NorthBridge corrections (High case).</small>		

- 6
- 7 ➤ In addition, the proposed ESP can be expected to result in a significant rate
- 8 increase over current rates – an average total rate increase of 18% to 23%,
- 9 even if transmission and distribution rates are held constant at 2011 levels
- 10 throughout the ESP period. This rate increase will result in approximately
- 11 \$1.6 to \$2.0 billion in additional costs to customers as compared to current
- 12 rates.

**The Proposed ESP Will Result
in an 18% to 23% Average Total Rate Increase**

	Average Total Rate (¢/kWh)	Percent Rate Increase	Additional Costs to Customers (in \$Billions)
Current 2011 Rate	8.27		
Proposed ESP Price _a/	9.06	10%	0.8
Corrected Proposed ESP Price (Low) _b/	9.79	18%	1.6
Corrected Proposed ESP Price (High) _c/	10.14	23%	2.0
_a/ Based on AEP Ohio estimates. _b/ Based on NorthBridge corrections (Low case) _c/ Based on NorthBridge corrections (High case)			

2. In addition to being more expensive, the proposed ESP is riskier for customers. The proposed ESP contains numerous riders that allow rates to be adjusted upward and the proposed ESP, therefore, does not provide the fixed price protection for customers that AEP Ohio claims.
3. Thus, Mr. Hamrock's conclusion that "AEP Ohio's 2012-2014 ESP best serves the public interest by offering a price that is more favorable in the aggregate than the expected results under an MRO" is simply incorrect.² AEP Ohio's proposed ESP price is significantly higher than the expected price under an MRO – by \$700 million to \$1.0 billion over the term of the proposed ESP period. AEP Ohio has not quantified any significant benefits associated with the other elements of its plan, and has certainly not provided any evidence to suggest that any such benefits could overcome a \$700 million to \$1.0 billion pricing deficit. Absent such a showing, AEP Ohio has not established that the proposed ESP is more favorable in the aggregate than the expected results of an MRO.

² Direct Testimony of Joseph Hamrock on Behalf of CSP and OPCo, at 26, lines 22-23.

1 Second, I conclude that the proposed ESP would also harm customers and
2 undermine public policy in other ways.

3 1. The proposed ESP would stymie retail competition in the AEP Ohio service area.

4 Retail suppliers would be unable to compete with AEP Ohio's SSO offering – not
5 because of any shortcoming on the suppliers' part, but because the deck would be
6 “stacked” against them. AEP Ohio would be allowed to impose a litany of non-
7 bypassable riders for the recovery of generation costs (*e.g.*, environmental retrofit,
8 plant closure, new build, etc.). These riders would be collected from all shopping
9 and non-shopping customers regardless of their supplier. Thus, when an SSO
10 customer switches to an alternative retail supplier, that customer would pay its new
11 supplier's generation costs and would also still need to pay a portion of AEP
12 Ohio's generation costs. Thus, customers would be forced to *pay twice* for these
13 costs if they shop. Furthermore, the capacity price which AEP Ohio proposes to
14 charge competitive retail suppliers and is included in the MRO test is far too high.
15 In its approach to calculating this proposed capacity price, AEP Ohio failed to
16 account for the revenue that the Company's generation would derive from market
17 energy and other sources of revenue available to the Company (*i.e.*, costs that AEP
18 Ohio could otherwise recover when a customer shops). These revenues should be
19 an offset to the capacity price. The result of AEP Ohio's failure to credit these
20 revenues is that the proposed capacity price would significantly overcompensate
21 AEP Ohio. In fact, AEP Ohio's proposed capacity price is over nine times greater
22 than the market clearing price for capacity in PJM's Reliability Pricing Model
23 (“RPM”) during the proposed ESP period. The combination of the proposed non-

1 bypassable generation charges imposed on all customers and the proposed above-
2 market capacity price for competitive retail electric service (“CRES”) providers
3 would deprive AEP Ohio’s customers of any meaningful opportunity to shop and
4 save money with other suppliers, all but ending retail competition in AEP Ohio’s
5 service area.

6 2. AEP Ohio’s proposed ESP structure also could result in serious harm to customers
7 beyond the term of the ESP. The subsidies that the ESP proposal would grant to
8 AEP Ohio, in the form of the non-bypassable cost recovery mechanisms, would
9 give the Company an incentive to make uneconomic investments in generation that
10 customers would be forced to bear for years. For example, the proposed ESP
11 would require customers to pay for environmental and new capacity investments
12 that may not be economic, without the ability to avoid these above-market costs by
13 switching suppliers. At the same time, AEP Ohio would continue to retain off-
14 system sales energy margins. Taken together, these features of the proposed ESP
15 would provide AEP Ohio with an incentive to make costly generation investments
16 even when cheaper resource alternatives exist in the market. Such uneconomic
17 investments would increase costs for all of AEP Ohio’s distribution customers far
18 beyond the proposed 29-month ESP period.

19 3. The proposed ESP’s non-bypassable riders for the recovery of generation-related
20 costs would also harm wholesale competition by providing subsidies to AEP
21 Ohio’s generation business. In contrast, competitive generation suppliers are not

1 entitled to these types of ratepayer-backed cost recovery guarantees.³ These non-
2 bypassable charges would grant AEP Ohio a competitive advantage over other
3 generators because AEP Ohio could force its customers to bear the risks associated
4 with the uncertain and significant costs of AEP Ohio's generating assets and
5 decisions, while competitive owners of generation must bear these risks
6 themselves.

7 **Q. GIVEN YOUR CONCLUSIONS, WHAT DO YOU RECOMMEND?**

8 A. I support the following recommendations:

- 9 1. The Commission should reject AEP Ohio's proposed ESP and instead adopt a
10 modified ESP based on procurement of SSO supply through competitive
11 solicitations of fixed-price full requirements products. This type of ESP default
12 service procurement, which has been approved by the Commission for the
13 FirstEnergy Ohio Utilities,⁴ can be expected to result in \$16 to \$19 per MWH
14 lower prices than AEP Ohio's proposed ESP price over the term of the ESP.⁵ As
15 shown in the table below, the 18% to 23% rate increase that would result from
16 AEP Ohio's ESP proposal could be avoided by adopting such a modified ESP
17 based on procurement of SSO supply through competitive solicitations of fixed-

³ In addition, AEP Ohio's fuel cost volatility is mitigated through an adjustable Fuel Adjustment Clause ("FAC"), another advantage not available to competitive suppliers.

⁴ FirstEnergy Ohio Utilities include The Cleveland Electric Illuminating Company, Ohio Edison Company and The Toledo Edison Company.

⁵ It should be noted that the recommended modified ESP, which is based on procurement of SSO supply through competitive solicitations of fixed-price full requirements products, is different from an MRO. For example, the SSO price under an MRO represents a blend of the competitive procurement price and the total generation service price, while the recommended modified ESP would not incorporate a blending with the total generation service price.

price full requirements products. As a result, SSO customers could save \$1.6 to \$2.0 billion over the 29-month ESP period, as compared to the proposed ESP.

The Significant Rate Increases Could Be Avoided Under a Modified ESP

	Average Total Rate (¢/kWh)	Percent Rate Increase	Modified ESP Provides Significant Savings Relative to the Proposed ESP	
			(\$/MWH)	(\$Billions)
Current 2011 Rate _a/	8.27			
Corrected Proposed ESP Price (Low) _b/	9.79	18%	16	1.6
Corrected Proposed ESP Price (High) _c/	10.14	23%	19	2.0
Modified ESP (Competitive Solicitations) _d/	8.22	-1%	--	--
_a/ From Roush Workpaper: "AEP Ohio Summary of Previous and Proposed ESP Rate Increases excluding Market Transition Rider." _b/ Based on NorthBridge corrections (Low case) _c/ Based on NorthBridge corrections (High case) _d/ Based on NorthBridge corrections (Commission-approved capacity charge for CRES suppliers)				

This recommendation, if adopted, could completely mitigate the proposed average total rate increase associated with AEP Ohio's proposal, and even result in a total rate decrease. Furthermore, this competitive solicitation model is by far the most prevalent form of default service procurement in other restructured jurisdictions, particularly for smaller customers, because it is an effective way to provide customers with the benefits of wholesale competition.

2. Alternatively, if the Commission does not adopt this recommendation, it should, at a minimum, require the following modifications to the proposed ESP to mitigate the harm that AEP Ohio's plan would impose on customers:

- Before allowing recovery through a cost-based rider, subject any otherwise eligible significant investment in generation, whether new, retrofit, or environmental control, to an open and transparent market test;

- 1 ➤ Ensure that AEP Ohio's proposed capacity price applicable to competitive
2 retail suppliers is priced at market (RPM), or at least, no higher than a
3 "maximum above-market"⁶ rate; and,
- 4 ➤ Eliminate all non-bypassable riders for future generation investment and
5 operating costs, or else convert them to bypassable riders that do not
6 impose costs on the customers of competitive suppliers.

7 My conclusions and recommendations are described further in the pages that
8 follow.

9 **III. THE PRICE OF AEP OHIO'S PROPOSED ESP IS NOT MORE FAVORABLE**
10 **THAN THE EXPECTED PRICE UNDER AN MRO**

11 **Q. DOES AEP OHIO ATTEMPT TO SHOW THAT THE PROPOSED ESP**
12 **SATISFIES THE STATUTORY TEST THAT IT BE MORE FAVORABLE IN**
13 **THE AGGREGATE THAN THE EXPECTED RESULTS OF AN MRO?**

14 A. In part. While I am not an attorney, it is my understanding that this statutory language
15 requires AEP Ohio to show that its proposed ESP is more favorable in the aggregate,
16 including all of its terms and conditions, than the results expected under an MRO.
17 Comparing the price under the proposed ESP and under an MRO is a key component of
18 the "more favorable in the aggregate" test. AEP Ohio attempts to make this price
19 comparison through the testimony of Ms. Laura Thomas, which comparison is incorrect
20 and incomplete for a myriad of reasons that I will explain below. Once Ms. Thomas's

⁶ The "maximum above-market" concept will be discussed later in my testimony.

1 analysis is corrected, it becomes clear that the price imposed by the ESP would be more
2 expensive for AEP Ohio's ratepayers – AEP Ohio's customers would be subject to prices
3 that are \$700 million to \$1.0 billion more than the expected prices under an MRO over the
4 term of the ESP. Mr. Hamrock also suggests that the proposed ESP provides other non-
5 price benefits, but AEP Ohio has not quantified any significant benefits associated with
6 the other elements of its plan. In order to make the proposed ESP more favorable in the
7 aggregate, it is my understanding that AEP Ohio would need to show that those other
8 “benefits” outweigh the \$700 million to \$1.0 billion price premium associated with the
9 proposed ESP relative to the expected results of an MRO. I have not seen any such
10 analysis from AEP Ohio.

11 **Q. WHAT EVIDENCE DOES AEP OHIO USE TO SHOW THAT THE PRICE OF**
12 **THE PROPOSED ESP IS MORE FAVORABLE IN THE AGGREGATE THAN**
13 **THE EXPECTED RESULTS OF AN MRO?**

14 A. AEP Ohio presents the testimony of Ms. Thomas, which purports to compare the proposed
15 ESP price to the price that she expects would be realized under an MRO.⁷ Specifically,
16 her Exhibit LJT-2 compares an “MRO Annual Price” that she calculates to the Company's
17 “Proposed ESP Price,” which she testifies is AEP Ohio's proposed ESP generation price.⁸
18 The MRO Annual Price that Ms. Thomas calculates is a blended price consisting partly of
19 a “Competitive Benchmark Price” and partly of a “Total Generation Service Price.”⁹ The
20 Competitive Benchmark Price purports to reflect the market price at which a competitive

⁷ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 2-13, Exhibit LJT-1, and Exhibit LJT-2.

⁸ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 3, lines 1-3 and 16-18, and at 11, lines 13-16.


⁹ In Ms. Thomas' Exhibit LJT-2, the Competitive Benchmark Price is also referred to as the Expected Bid Price.

supplier would offer to provide SSO generation supply.¹⁰ The Total Generation Service Price is a function of generation pricing from AEP Ohio's 2009-2011 ESP adjusted for certain generation-related items.¹¹ The MRO Annual Price calculated for the ESP period is a blend of these two prices because the Ohio Revised Code requires that an MRO offered by an EDU that owns generation phase in an increasing percentage of the necessary default service supply from the market over time.¹²

Q. WHAT DOES MS. THOMAS' ANALYSIS IN EXHIBIT LJT-2 SHOW?

A. A simplified representation of Ms. Thomas' results is shown below:

AEP Ohio ESP MRO Test (Uncorrected \$/MWH)
(January 2012 – May 2014)

Total Generation Service Price	}	\$56.86		<div>\$61.23</div> "Blended" MRO Annual Price
Competitive Benchmark Price (or Expected Bid Price)		\$80.83		
vs.				
				<div>\$59.82</div> Proposed ESP Price
ESP Price Benefit				
				\$ 1.41 MRO Price - Proposed ESP Price

¹⁰ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 4, lines 1-8, and at 5, lines 3-16. See also sections 4928.142 and 4928.143(C)(1) of the Ohio Revised Code.

¹¹ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 4, lines 3-5; and at 9 (line 16) through 11 (line 4).

¹² Ohio Revised Code, Section 4928.142(D) states, "The first application filed under this section by an electric distribution utility that, as of July 31, 2008, directly owns, in whole or in part, operating electric generating facilities that had been used and useful in this state shall require that a portion of that utility's standard service offer load for the first five years of the market rate offer be competitively bid under division (A) of this section as follows: ten per cent of the load in year one, not more than twenty per cent in year two, thirty per cent in year three, forty per cent in year four, and fifty per cent in year five. Consistent with those percentages, the commission shall determine the actual percentages for each year of years one through five. The standard service offer price for retail electric generation service under this first application shall be a proportionate blend of the bid price and the generation service price for the remaining standard service offer load, which latter price shall be equal to the electric distribution utility's most recent standard service offer price, adjusted upward or downward as the commission determines reasonable, relative to the jurisdictional portion of any known and measurable changes from the level of any one or more of the following costs as reflected in that most recent standard service offer price..."

1 As shown on Exhibit LJT-2, Ms. Thomas concludes that, over the duration of the
2 proposed ESP, the MRO Annual Price would be \$61.23 and that the Proposed ESP Price
3 would be \$59.82, so the net benefit of the proposed ESP is \$1.41 per MWH.¹³ In her
4 Supplemental Direct Testimony, Ms. Thomas presents an alternative ESP-MRO price
5 comparison in Exhibit LJT-4, which shows the net benefit decreasing from \$1.41 to \$1.10
6 per MWH when AEP Ohio's proposed POLR charge is included in her analysis. Using
7 such price comparisons, Ms. Thomas thus purports to demonstrate that the proposed ESP
8 price is more favorable than the expected price under an MRO. It should be noted that
9 Ms. Thomas's price comparison is wholly without regard to the other adverse effects on
10 competition and investment decisions that the proposed ESP is likely to have.

11 **Q. DO YOU AGREE WITH MS. THOMAS' CONCLUSION?**

12 A. No. Ms. Thomas' conclusion should be disregarded because her analysis contains material
13 flaws that bias her results. First, Ms. Thomas significantly overstates the Competitive
14 Benchmark Price. Even with an offsetting upward adjustment to the Total Generation
15 Service Price, this overstatement results in a blended MRO Annual Price that is
16 unrealistically high. Second, she compounds this error by significantly understating the
17 Proposed ESP Price. Her analysis unrealistically underestimates or ignores the range of
18 costs and risks that customers would face under the proposed ESP. Both of these errors
19 render Ms. Thomas' conclusions meaningless.

¹³ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at Exhibit LJT-2 and at 12, lines 5-10.

1 **Q. PLEASE EXPLAIN FURTHER MS. THOMAS' OVERSTATEMENT OF THE**
2 **COMPETITIVE BENCHMARK PRICE.**

3 A. With respect to the Competitive Benchmark Price, Ms. Thomas overstates the costs
4 associated with:

- 5 • Capacity (overstated by \$20 per MWH),¹⁴
- 6 • Energy (overstated by \$4 per MWH), and
- 7 • Other related cost components (overstated by \$3 per MWH).

8 Corrections for these flaws reduce the Competitive Benchmark Price by almost \$27 per
9 MWH from \$80.83 to \$54.28 per MWH. My corrections are summarized in the following
10 table:

11 **AEP Ohio Overstates the Competitive Benchmark Price**
12 (Jan. 2012 – May 2014)

Cost Components (\$/MWH)	AEP Ohio Estimate (a)	Corrected Estimate (b)	Corrections (b)-(a)
Simple Swap	43.21	39.35	(3.86)
Basis Adjustment	0.58	0.58	0.00
Load Following/Shaping Adjustment	4.18	2.58	(1.60)
Capacity	21.95	2.36	(19.59)
Ancillary Services	0.60	0.60	0.00
Alternative Energy Requirement	0.69	0.69	0.00
ARR Credit	-1.12	-1.12	0.00
Losses	1.89	1.66	(0.23)
Transaction Risk Adder	3.85	2.58	(1.26)
Retail Administration	<u>5.00</u>	<u>5.00</u>	<u>0.00</u>
Competitive Benchmark Price	80.83	54.28	(26.55)

13

¹⁴ This one correction for capacity by itself eliminates all of the claimed price advantage of the proposed ESP, even if the Commission were to accept all of Ms. Thomas' other assumptions which as I explain, it should not.

1 **Q. PLEASE EXPLAIN FURTHER MS. THOMAS' UNDERESTIMATE OF THE**
2 **PROPOSED ESP PRICE.**

3 A. Ms. Thomas' Proposed ESP Price is far too low because it significantly understates the
4 range of costs and risks that customers would face under the proposed ESP. In particular,
5 she either understates or fails to include the costs to customers of the riders that AEP Ohio
6 proposes, as follows:

- 7 • Fuel (understated by [REDACTED] [RESTRICTED ACCESS
8 CONFIDENTIAL])
- 9 • Environmental Investment Carrying Cost Rider (understated by [REDACTED]
10 [REDACTED]),
- 11 • POLR Charge Rider (omitted \$3 per MWH in Exhibit LJT-2),¹⁵ and
- 12 • The costs associated with other proposed riders (*i.e.*, Facilities Closure Cost
13 Recovery Rider, Generation Resource Rider, Pool Termination or Modification
14 Provision, and Carbon Capture and Sequestration Rider) that have been omitted
15 from Ms. Thomas' comparison (understated by [REDACTED]).¹⁶

16 Adding the costs associated with these proposed generation-related riders increases AEP
17 Ohio's Proposed ESP Price by \$10 to \$14 per MWH – from \$59.82 per MWH to a range
18 between \$69.89 and \$73.49 per MWH, as set forth in the following table:

¹⁵ In her Supplemental Direct Testimony Exhibit LJT-4, Ms. Thomas adds "POLR Cost" to the Total Generation Service Price and the Proposed ESP Price, but it is unclear whether Exhibit LJT-4 is intended as a correction to Exhibit LJT-2 or whether it is being filed for informational purposes only.

¹⁶ Ms. Thomas does not include in her analysis the expected costs associated with many of the riders that AEP Ohio is proposing in its ESP. It is unclear how the Commission can make a decision on the record that the proposed ESP is more favorable in the aggregate than an MRO without such cost estimates.

AEP Ohio Understates the Proposed ESP Price
(Jan 2012 – May 2014)
[Contains RESTRICTED ACCESS CONFIDENTIAL Information]

Corrected Proposed ESP Price (\$/MWH)	Corrections	
	Low	High
AEP Ohio Proposed ESP Price _a/	59.82	59.82
Less:		
2011 Full Fuel	32.86	32.86
2011 Environmental Compliance Costs	<u>0.90</u>	<u>0.90</u>
Market Comparable Base "g" Price	26.06	26.06
Plus: (Jan 2012- May 2014)		
Full Fuel _b/		
Pool Termination or Modification _c/		
Environmental Investment (EICCR) _d/		
Facilities Closure Cost Recovery Rider (FCCR) _e/		
Carbon Capture and Sequestration Rider (CCSR) _f/		
Generation Resource Rider (GRR) _g/		
POLR Charge (POLR) _h/	2.84	2.84
NERC Compliance Cost Rider (NERCR)	*	*
Subtotal, Total Adjustments	43.83	47.43
Corrected Proposed ESP Price _i/	69.89	73.49
Total Correction to Proposed ESP Price	10.07	13.67

_a/ This price is used in Ms. Thomas' MRO price comparison shown in Exhibit LJT-2. Company witness Roush claims at p. 10 of his Direct Testimony that the Proposed ESP Price is "comparable to market generation prices;" however, this figure includes 2011 fuel and environmental costs held constant and is compared to estimated increasing market prices for the January 2012 through May 2014 delivery period.

_b/ Based on information contained in AEP Ohio Interrogatory Response, FES, Set 1, Attachment 1, RESTRICTED ACCESS CONFIDENTIAL.

_c/ Low case assumes that the financial impact of pool termination or modification does not occur during this ESP period. High case assumes that the financial impact of pool termination or modification begins January 1, 2014.

_d/ Low case is based on AEP Ohio's estimated environmental capital expenditures for 2012-2014. High case is based on accelerated retrofit schedule to comply with proposed EPA regulations.

_e/ Based on recovery of estimated closure costs for potential retirement candidates identified by AEP Ohio.

_f/ Based on Company's estimate of FEED study costs. Assumes CCS plant costs are not recovered during this ESP time period.

_g/ Based on the estimated cost of the proposed Turning Point Solar Project, but assumes that capacity replacement costs (e.g., for "fully exposed" coal generation fleet) does not occur during the proposed ESP period.

_h/ AEP Ohio's estimate.

_i/ I have not included the impact of the Distribution Investment Rider in my analysis. To the extent that this rider would result in additional costs beyond what AEP Ohio could recover under an MRO, this would further increase the costs of the proposed ESP.

* Not yet estimated.

These corrections are described in more detail later in my testimony.

1 **Q. DID YOU ALSO MAKE ANY ADJUSTMENTS TO THE TOTAL GENERATION**
2 **SERVICE PRICE THAT IS BLENDED WITH THE COMPETITIVE**
3 **BENCHMARK PRICE TO DERIVE THE MRO ANNUAL PRICE?**

4 A. Yes. For purposes of this comparison, the Total Generation Service Price (based on
5 current ESP rates) that is used to calculate the blended MRO Annual Price was also
6 adjusted upward for projected increases in fuel (FAC) and environmental investment
7 (EICCR) costs under the riders currently in place over the ESP period.¹⁷ Also, for
8 purposes of comparison, I adjusted the Total Generation Service Price upward to include
9 the Company's proposed POLR charge.¹⁸ The adjustments to the Total Generation
10 Service Price are described later in my testimony and are shown in Exhibit MMS-2
11 [RESTRICTED ACCESS CONFIDENTIAL].

12 **Q. DID YOU CORRECT THE ESP-MRO PRICE COMPARISON SHOWN IN**
13 **EXHIBIT LJT-2?**

14 A. Yes. I used the same methodology as Ms. Thomas to blend the corrected Competitive
15 Benchmark Price and the Total Generation Service Price to derive a Corrected MRO
16 Annual Price of about \$63 to \$64 per MWH. This was then compared with the Corrected
17 Proposed ESP Price that ranges between \$70 and \$73 per MWH. Based on my analysis,

¹⁷ If I were to use the same 2011 fuel (\$32.86) and environmental compliance (\$0.90) costs that Ms. Thomas used to adjust her Total Generation Service Price in Exhibit LJT-2 throughout the proposed ESP period, this would reduce the Total Generation Service Price and, in turn, lower the blended MRO price. As a result, using these same costs would make the MRO price appear even more attractive than the Proposed ESP Price, as compared to my current analysis.

¹⁸ I included the Company's proposed POLR charge in the Total Generation Service Price for purposes of comparison because I included the same POLR charge in the Proposed ESP Price. Excluding the POLR charge from the Total Generation Service Price would result in the blended MRO price appearing even more attractive than what I show in my analysis.

the blended MRO Annual Price is \$7 to \$9 per MWH lower than AEP Ohio's Proposed ESP Price. My corrections are summarized below under a range of low and high adjustments to the Proposed ESP Price.

When Corrected, the MRO Price is Lower than the ESP Price (\$/MWH)
(Low Adjustments to the Proposed ESP Price)
 (January 2012 – May 2014)

Total Generation Service Price	}	\$ 64.81	➔	\$ 62.92	Corrected "Blended" MRO Annual Price
Competitive Benchmark Price (or Expected Bid Price)		\$ 54.28			
				vs.	
				\$ 69.89	Corrected Proposed ESP Price
Corrected MRO Price Less Corrected Proposed ESP Price				\$	(6.97)

When Corrected, the MRO Price is Lower than the ESP Price (\$/MWH)
(High Adjustments to the Proposed ESP Price)
 (January 2012 – May 2014)

Total Generation Service Price	}	\$ 66.28	→	\$ 64.05	Corrected "Blended" MRO Annual Price
Competitive Benchmark Price (or Expected Bid Price)		\$ 54.28			
					vs.
				\$ 73.49	Corrected Proposed ESP Price
Corrected MRO Price Less Corrected Proposed ESP Price				\$	(9.44)

Thus, correcting for Ms. Thomas' errors leads to the opposite of her conclusion: AEP Ohio's Proposed ESP Price is not more favorable than the expected price under an MRO – in fact, the Proposed ESP Price is significantly higher than the expected price under an

1 MRO. In dollar terms the proposed ESP is about \$700 million to \$1.0 billion more
2 expensive than the expected results of an MRO over the ESP period.¹⁹

3 **IV. THE PROPOSED ESP WILL RESULT IN AN 18% TO 23% AVERAGE TOTAL**
4 **RATE INCREASE RELATIVE TO CURRENT RATES**

5 **Q. MR. SCHNITZER, DID AEP OHIO CALCULATE THE AVERAGE TOTAL**
6 **RATE INCREASE RELATIVE TO CURRENT RATES FOR THEIR PROPOSED**
7 **ESP?**

8 A. No. AEP Ohio witness Roush, in Exhibit DMR-1, provides a summary of the ESP rate
9 increases relative to a 2012 rate (assuming the full 2011 FAC and Environmental
10 Investment Carrying Cost Rider and assuming implementation of the Phase-In Rider
11 costs). AEP Ohio does not calculate the proposed rate increases relative to current rates.

12 **Q. DID YOU CALCULATE THE AVERAGE TOTAL RATE INCREASE RELATIVE**
13 **TO CURRENT RATES FOR CUSTOMERS UNDER THE PROPOSED ESP?**

14 A. Yes, I did. First, I calculated the average total rate increase relying on Company estimates
15 found in Mr. Roush's workpapers, and then I calculated the average total rate increase
16 based on my corrections to the Proposed ESP Price. Using AEP Ohio's uncorrected
17 proposed ESP rate, and assuming that transmission and distribution rates are held constant
18 at 2011 levels throughout the ESP period, the average total rate increase is 10% above the
19 2011 current rate. However, based on my corrections to the Proposed ESP Price taking

¹⁹ It should be noted again that an MRO is different from the modified (competitive-solicitation-based) ESP that is recommended elsewhere in this testimony. For example, the SSO price under an MRO represents a blend of a Competitive Benchmark Price and a Total Generation Service Price, while the recommended modified ESP would not incorporate a blending with the Total Generation Service Price. As discussed elsewhere in this testimony, the expected savings under the recommended modified ESP are even greater than the expected savings under the MRO.

into account the non-zero costs of the various generation-related riders, the proposed ESP can be expected to result in an average total rate increase of 18% to 23% relative to current rates,²⁰ as shown below:

The Proposed ESP Total Average Rate Increase Is Substantial
(in ¢/kWh)

AEP Ohio 2011	AEP Ohio Proposed ESP Period	Corrected Proposed ESP - Low	Corrected Proposed ESP - High
	Jan 2012- May 2014	Jan 2012- May 2014	Jan 2012- May 2014
<u>2011 _a/</u>	Proposed ESP Price 5.98 _b/ Less Trans. Adjust. -0.21 _c/	Proposed ESP Price 6.71 _d/ Less Trans. Adjust. -0.21 _c/	Proposed ESP Price 7.06 _d/ Less Trans. Adjust. -0.21 _c/
Total Gen. 5.23	Total Gen. 5.77	Total Gen. 6.49	Total Gen. 6.85
Current Trans. 0.68	Current Trans. 0.68	Current Trans. 0.68	Current Trans. 0.68
Current Dist. 2.05	Current Dist. 2.05	Current Dist. 2.05	Current Dist. 2.05
POLR 0.31	POLR 0.28	POLR 0.28	POLR 0.28
	Phase-In Rider 0.28	Phase-In Rider 0.28	Phase-In Rider 0.28
Total 8.27	Total 9.06	Total 9.79	Total 10.14
Rate Increase versus 2011 (%):	10%	18%	23%
Rate Increase versus 2011 (\$/B):	\$0.8	\$1.6	\$2.0
Note: These total rate increases assume that transmission and distribution rates are frozen at 2011 levels. _a/ From Roush Workpaper: "AEP Ohio Summary of Previous and Proposed ESP Rate Increases excluding Market Transition Rider." _b/ From Exhibit UJT-2 (line 12). _c/ From Roush Workpaper: "Market Comparable Generation Prices"; this component is assumed to be included in the current transmission rate. _d/ From my testimony, as described later, less the POLR Charge.			

Moreover, the POLR charge and certain EICCR charges included in the 2011 rates are currently subject to refund depending on the outcome of a current proceeding. If these charges were not included in the 2011 current rate the average total rate increase would be higher, ranging between 23 and 27 percent.

Q. HAS AEP MADE ANY PUBLIC STATEMENTS CONSISTENT WITH YOUR ESTIMATES OF SUBSTANTIAL RATE INCREASES UNDER THEIR PROPOSED ESP?

A. Yes. AEP president Nick Akins has stated that "[t]he costs of complying with the new [environmental] rules would hit Ohio customers in their monthly bills, with electricity

costs rising by 10 percent to 15 percent over the next few years, in addition to other rate increases that would happen anyway.”²¹ Therefore, using AEP Ohio’s own publicly stated estimates, the proposed ESP, which allows recovery of environmental and other costs, will result in rate increases that can be expected to be substantial.

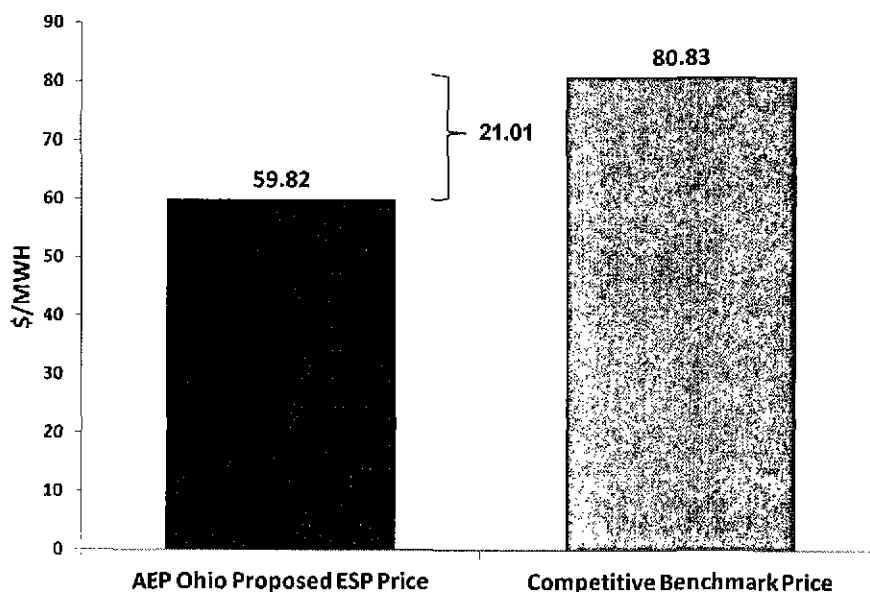
V. A MODIFIED ESP THAT RELIES FULLY ON COMPETITIVE SOLICITATIONS FOR SSO SUPPLY COULD RESULT IN CUSTOMER SAVINGS OF \$1.6 TO \$2.0 BILLION OVER THE ESP PERIOD AND MITIGATE AEP OHIO’S PROPOSED RATE INCREASES

Q. ACCORDING TO AEP OHIO, WHAT IS THE DIFFERENCE BETWEEN THE PROPOSED ESP PRICE AND AEP OHIO’S ESTIMATES OF THE COMPETITIVE BENCHMARK PRICE THAT WOULD RESULT FROM A COMPETITIVE BID SOLICITATION FOR A FIXED-PRICE FULL REQUIREMENTS SUPPLY PRODUCT?

A. According to Ms. Thomas’ figures, AEP Ohio’s Proposed ESP Price is about \$21 per MWH lower than her estimate of the Competitive Benchmark Price without any blending with the Total Generation Service Price.

²¹ Columbus Dispatch, “AEP lays out power-plant closings to meet proposed EPA rules - Utility would shut some coal-burning sites, warns of higher bills,” June 10, 2011.

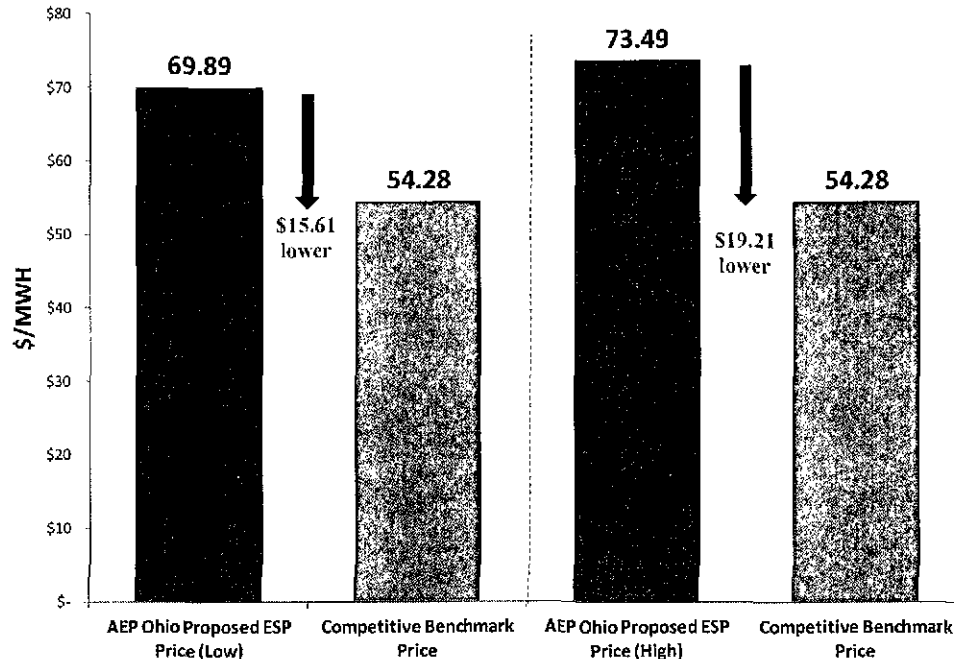
**AEP Ohio's Comparison Between the Proposed ESP Price and
the Competitive Benchmark Price (Uncorrected)**
(January 2012 – May 2014)



**Q. BASED ON YOUR CORRECTIONS TO THE PROPOSED ESP PRICE AND THE
COMPETITIVE BENCHMARK PRICE SUMMARIZED ABOVE, HOW DOES
THIS COMPARISON CHANGE?**

A. Correcting the significant flaws in Ms. Thomas' analysis described earlier reveals a dramatically different result. The Competitive Benchmark Price (without any blending with the 2011 Total Generation Service Price) is actually \$16 to \$19 per MWH lower than the Company's Proposed ESP Price.

1 **A Corrected Comparison Indicates that the**
2 **Proposed ESP Price Is Higher Than the Competitive Benchmark Price**
3 **(January 2012 – May 2014)**



4
5 This suggests that a modified ESP that relies fully on competitive solicitations for SSO
6 supply could save SSO customers about \$1.6 to \$2.0 billion over the proposed 29-month
7 ESP period, as compared to the Company's proposal.

8 **Q. IF THE COMMISSION WERE TO ADOPT A MODIFIED ESP BASED**
9 **ENTIRELY ON COMPETITIVE SOLICITATIONS, HAVE YOU ESTIMATED**
10 **THE AVERAGE TOTAL RATE IMPACT ON CUSTOMERS RELATIVE TO**
11 **CURRENT RATES?**

12 **A.** Yes. Based on my corrections to the Competitive Benchmark Price that I describe later, if
13 the Commission were to adopt a modified ESP based on procurement of SSO supply
14 through competitive solicitations of fixed-price full requirements products, this method of

SSO supply can be expected to significantly mitigate the Company's proposed rate increase. In fact, if capacity were priced at market, average total rates could decrease by 1% relative to current rates over the proposed ESP time period:

**A Modified ESP Based on Competitive Solicitations
Could Result in a Rate Decrease**

	Average Total Rate (¢/kWh)	Percent Rate Increase	Modified ESP Provides Significant Savings Relative to the Proposed ESP	
			(\$/MWH)	(\$Billions)
Current 2011 Rate _a/	8.27			
Corrected Proposed ESP Price (Low) _b/	9.79	18%	16	1.6
Corrected Proposed ESP Price (High) _c/	10.14	23%	19	2.0
Modified ESP (Competitive Solicitations) _d/	8.22	-1%	--	--
_a/ From Roush Workpaper: "AEP Ohio Summary of Previous and Proposed ESP Rate Increases excluding Market Transition Rider." _b/ Based on NorthBridge corrections (Low case) _c/ Based on NorthBridge corrections (High case) _d/ Based on NorthBridge corrections (Commission-approved capacity charge for CRES suppliers)				

The next two sections of my testimony address my corrections in detail. I first explain the corrections I made to the Competitive Benchmark Price, and then describe the corrections I made to the Proposed ESP Price.

VI. AEP OHIO SIGNIFICANTLY OVERSTATES THE COMPETITIVE BENCHMARK PRICE

Q. LET US START WITH THE CORRECTIONS TO THE COMPETITIVE BENCHMARK PRICE. ARE THERE MATERIAL FLAWS IN MS. THOMAS' ESTIMATE OF THE COMPETITIVE BENCHMARK PRICE?

A. Yes. There are errors in both the capacity and the energy price components of Ms. Thomas' Competitive Benchmark Price estimate. First, she wrongly assumes that AEP Ohio can require CRES suppliers to pay above-market capacity prices that have not been

1 approved by the Commission or FERC. Second, she adopts an incorrect approach to
2 estimate the expected cost of energy (which Ms. Thomas refers to as the “simple swap”
3 cost component). As a result of these problems in her analysis, Ms. Thomas significantly
4 overstates the Competitive Benchmark Price.

5 **Q. BEFORE YOU DISCUSS THE SPECIFIC PROBLEMS WITH MS. THOMAS’**
6 **COST ASSUMPTIONS, IS THERE ANY MARKET EVIDENCE THAT**
7 **DEMONSTRATES THAT MS. THOMAS SIGNIFICANTLY OVERSTATES THE**
8 **COMPETITIVE BENCHMARK PRICE?**

9 A. Yes. Perhaps the most obvious evidence of Ms. Thomas’ erroneous estimate of the
10 Competitive Benchmark Price is the results of the FirstEnergy Ohio Utilities’ recent
11 competitive solicitations for fixed-price full requirements SSO supply.²² The clearing
12 prices for the FirstEnergy Ohio Utilities’ solicitation held in October 2010 ranged between
13 \$54.10 per MWH and \$56.58 per MWH,²³ and the clearing prices for the solicitation held
14 in January 2011 ranged between \$54.92 per MWH and \$57.47 per MWH.²⁴ In other
15 words, the *actual* clearing prices that the FirstEnergy Ohio Utilities obtained in their
16 competitive solicitations are \$23 to \$27 per MWH lower than Ms. Thomas’ *estimate* of
17 the price that AEP Ohio would obtain in a competitive solicitation.²⁵

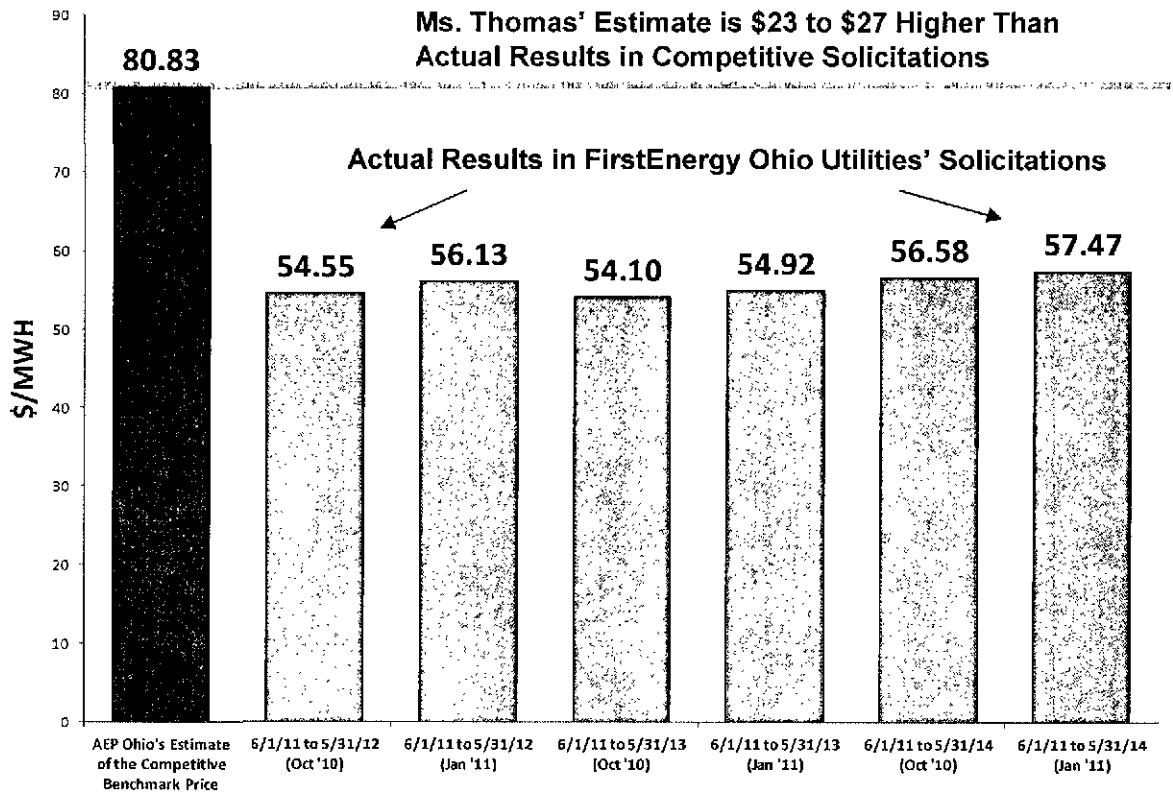
²² These solicitations were for products with delivery periods spanning June 2011 – May 2012, June 2011 – May 2013, and June 2011 – May 2014.

²³ PUCO Case No. 08-935-EL-SSO, Letter from Bradley A. Miller, Vice-President, CRA International, Inc., to James W. Burk, FirstEnergy Corp., dated November 12, 2010.

²⁴ PUCO Case No. 10-1284-EL-UNC, Letter from Bradley A. Miller, Vice-President, CRA International, Inc., to James W. Burk, FirstEnergy Corp., dated February 16, 2011.

²⁵ As shown in Exhibit LJT-2, Ms. Thomas’ estimate for AEP Ohio is \$80.83 per MWH. However, this price estimate includes the cost of certain line losses, while the quoted clearing prices in the FirstEnergy Ohio Utilities

**Ms. Thomas' Estimate of the Competitive Benchmark Price Is Well Above
the Actual Results of FirstEnergy Ohio Utilities' Solicitations**



The comparison is relevant because the energy prices in the FirstEnergy Ohio Utilities' region have been close to those in AEP Ohio's region (with a historical basis difference of only about \$3 per MWH).²⁶ Therefore, the FirstEnergy Ohio Utilities' results serve as a reasonable proxy for competitive market prices in AEP Ohio's region.

solicitations do not. Based on figures in Exhibit LJT-2, adjusting the \$80.83 per MWH estimate to net off the cost of line losses results in an estimated price of about \$79 per MWH.

²⁶ During 2009 and 2010, the day-ahead around-the-clock LMPs at the FE Hub were on average \$2.97 per MWH lower than those at the AEP zone.

1 Q. WAS AEP OHIO, OR ANY OF ITS AFFILIATES, A WINNING BIDDER IN THE
2 FIRSTENERGY OHIO UTILITIES' COMPETITIVE SOLICITATIONS FOR SSO
3 SUPPLY?

4 A. Yes. In both the October 2010 solicitation and the January 2011 solicitation, American
5 Electric Power Service Corporation ("AEPSC"),²⁷ an affiliate of AEP Ohio, was a
6 winning bidder.²⁸ AEPSC won a total of 24 tranches between the two auctions and
7 therefore will be serving 24% of the non-shopping SSO load beginning June 2011.
8 AEPSC won tranches for all three fixed-price full requirements products with delivery
9 periods spanning June 2011 – May 2012, June 2011 – May 2013, and June 2011 – May
10 2014. In sum, AEPSC (as well as other winning suppliers) recently agreed to supply
11 similar fixed-price full requirements products for over \$20 per MWH less than the \$80.83
12 per MWH figure presented in Ms. Thomas' testimony.

13 A. The Capacity Price AEP Ohio Uses in its Analysis Is Above Market and Has Not
14 Been Approved by the Commission or FERC

15 Q. WHAT CAPACITY PRICE IS USED IN AEP OHIO'S ANALYSIS?

16 A. AEP Ohio's analysis is based on a capacity price of \$347.97 per MW-day.²⁹ As Ms.
17 Thomas acknowledges, this value represents a capacity price that AEP Ohio proposed in
18 comments to the Commission on January 7, 2011 in pending litigation.³⁰ Ms. Thomas

²⁷ AEPSC is a service company subsidiary of American Electric Power Company, Inc.

²⁸ PUCO Case No. 08-935-EL-SSO, Letter from Bradley A. Miller, Vice-President, CRA International, Inc., to James W. Burk, FirstEnergy Corporation, dated November 12, 2010; PUCO Case No. 10-1284-EL-UNC, Letter from Bradley A. Miller, Vice-President, CRA International, Inc., to James W. Burk, FirstEnergy Corporation, dated February 16, 2011.

²⁹ AEP Ohio Interrogatory Response, Industrial Energy Users ("IEU"), Set 2, INT-092, Attachment 1. The proceeding in question is Case No. 10-2929-EL-UNC.

³⁰ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 7, lines 14-16.

1 relied on AEPSC's proposal to FERC and to the Commission that seeks approval to
2 change the basis of the calculation of the capacity price to be paid to AEP Ohio by
3 *alternative retail load serving entities ("LSEs")*.³¹ FES witness Dr. Shanker describes the
4 FERC and the Commission litigation regarding capacity prices in more detail in his
5 testimony.³²

6 **Q. HOW DOES AEP OHIO'S ASSUMED CAPACITY PRICE COMPARE WITH**
7 **THE CAPACITY VALUES APPROVED BY THE COMMISSION?**

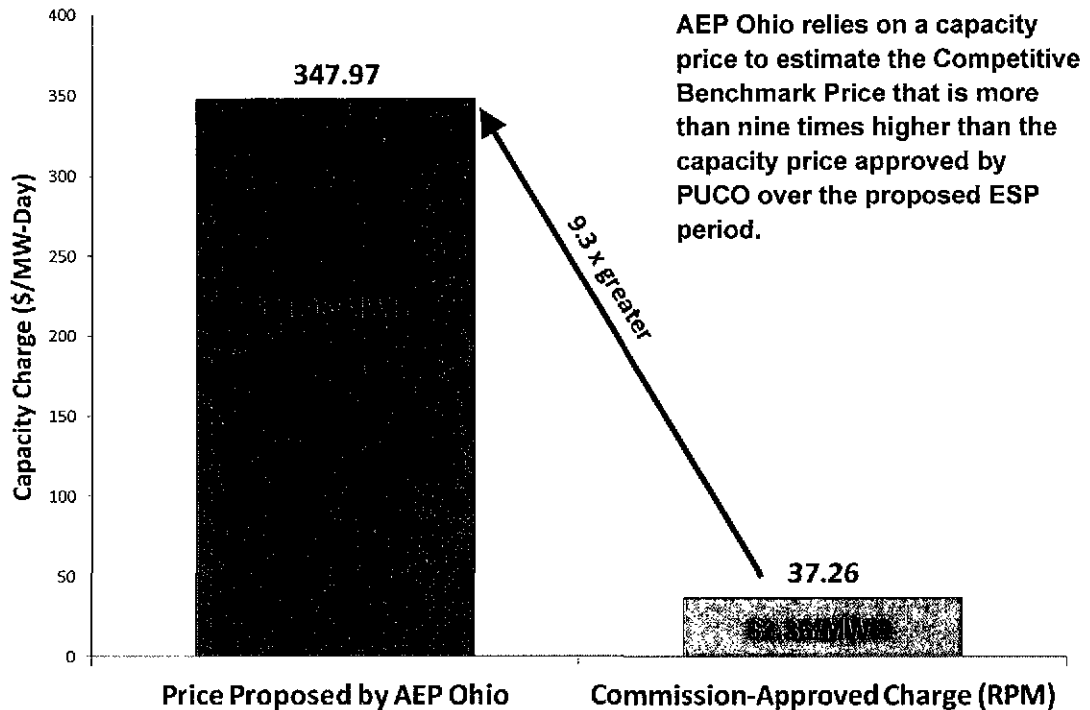
8 A. The Commission has expressly adopted the capacity prices established by PJM's RPM
9 forward capacity auction as the prices that AEP Ohio may charge CRES suppliers for
10 capacity.³³ These RPM auction clearing prices are \$110.04 per MW-day for June 2011 –
11 May 2012, \$16.46 per MW-day for June 2012 – May 2013, and \$27.73 per MW-day for
12 June 2013 – May 2014, which equates to an average price of \$37.26 per MW-day during
13 the proposed ESP period. In comparison, Ms. Thomas' assumed capacity price of
14 \$347.97 per MW-day is over nine times higher than the capacity price approved by the
15 Commission.

³¹ See November 24, 2010 American Electric Power Service Corporation proposal to the FERC in Case No. ER11-2183-000.

³² See Direct Testimony of FES witness Dr. Roy Shanker, discussion of "FERC/PUCO Litigation Regarding Capacity Charges."

³³ Dr. Shanker also describes the PJM Capacity Market design in his Direct Testimony.

1 **The Capacity Price Proposed by AEP Ohio is More Than Nine Times the**
2 **Commission-Approved Capacity Price**
3 (January 2012 – May 2014)



4

5 Based on Ms. Thomas' method of converting the capacity prices from \$/MW-day

6 terms to \$/MWH terms,³⁴ Ms. Thomas' assumed capacity price is almost \$20 per MWH

7 higher than the RPM capacity prices that the Commission approved for CRES providers

8 serving retail customers. In sum, the capacity price AEP Ohio uses in its analysis is

9 significantly above market and has not been approved by the Commission or FERC. This

10 one correction for capacity by itself eliminates all of the claimed price advantage of the

11 proposed ESP, even if the Commission were to accept all of Ms. Thomas' other

12 assumptions.

³⁴ AEP Ohio Interrogatory Response, IEU, Set 2, INT-092, Attachment 1, and refer to Direct Testimony of Laura J. Thomas on Behalf of CSP and OPCo, at Exhibit LJT-1.

1 **Q. DOES MS. THOMAS ADMIT THAT THE CAPACITY COST COMPONENT IN**
2 **HER ESTIMATE OF THE COMPETITIVE BENCHMARK PRICE SHOULD BE**
3 **BASED ON THE CAPACITY COST THAT A CRES SUPPLIER WOULD INCUR**
4 **TO SERVE A RETAIL CUSTOMER?**

5 **A.** Yes, when describing the capacity cost component on page 7 of her direct testimony, she
6 states that the capacity item “includes the capacity cost that a CRES (competitive electric
7 retail service) provider would incur to serve a retail customer in AEP Ohio’s service
8 territory.”³⁵ Again on page 4 of her direct testimony, Ms. Thomas states that the
9 “Competitive Benchmark price is based on market data and includes the items that would
10 be included by a supplier providing retail electric service to AEP Ohio customers.”
11 Despite these statements, Ms. Thomas’ price comparison is not, in fact, based on the
12 capacity cost that a CRES supplier would have to pay. The costs that a CRES supplier
13 would pay are the Commission-approved RPM clearing prices, not the *proposed* AEP
14 Ohio capacity price filed in Case No. 10-2929-EL-UNC. Even if we assume that the
15 Commission will not adopt the RPM clearing prices for AEP Ohio in that proceeding, I
16 will demonstrate later that the capacity price used in Ms. Thomas’ analysis is still far too
17 high.

18 **Q. IN THE PRIOR ESP FILING MADE BY THE COMPANY, DID AEP OHIO RELY**
19 **ON PJM RPM PRICES TO DETERMINE THE CAPACITY COST COMPONENT**
20 **OF THE COMPETITIVE BENCHMARK PRICE?**

³⁵ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 7, lines 12-14.

1 A. Yes. Contrary to Ms. Thomas's proposal in this ESP, AEP Ohio used PJM's RPM prices
2 for capacity cost in its filing for its 2009-2011 ESP. In this prior ESP proceeding,
3 Company witness Baker described the capacity cost component as follows:

4 "PJM Capacity Obligations - This component reflects the cost of PJM's
5 required capacity obligations for load serving entities and was derived
6 from the PJM Reliability Pricing Model (PJM Capacity Auction)
7 results for the relevant time period."³⁶

8 Thus, AEP Ohio clearly relied on PJM's RPM capacity price to derive the capacity cost
9 component of the Competitive Benchmark Price.

10 **Q. DID MS. THOMAS EXPLAIN WHY AEP OHIO USED THE RPM CAPACITY**
11 **COST IN THE EARLIER ESP PROCEEDING BUT NO LONGER RELIES ON**
12 **THE RPM CLEARING PRICES IN THIS PROCEEDING?**

13 A. No, Ms. Thomas offers no explanation for the change. During the 2009 to 2011 current
14 ESP period, the applicable RPM auction clearing prices were \$111.92 per MW-day for
15 June 2008 – May 2009; \$102.04 per MW-day for June 2009 – May 2010; \$174.29 per
16 MW-day for June 2010 – May 2011; and \$110.04 per MW-day for June 2011 – May
17 2012. Taken all together, these clearing prices equate to an average price of \$129.16 per
18 MW-day during the current 2009-2011 ESP period. Therefore, the applicable RPM prices
19 for the current ESP period (averaging \$129.16 per MW-day) are 3.5 times higher than the
20 applicable RPM prices for the new proposed ESP period (averaging \$37.26 per MW-day).
21 Without any explanation as to why it would change a material assumption in the analysis,
22 AEP Ohio relied on the high RPM market capacity price in the prior ESP proceeding and

³⁶ Case No. 08-918-EL-SSO, Direct Testimony of Craig Baker on Behalf of CSP and OPCo, at 11, lines 11-14, (emphasis added).

1 has now changed its assumption to a much higher cost-based capacity price for a delivery
2 period in which the RPM capacity price is much lower.

3 **Q. HAS PUCO ADOPTED THE CAPACITY PRICE PROPOSED BY AEP OHIO?**

4 A. No. The Commission's review of the proposed changes to AEP Ohio's capacity price is
5 currently ongoing. On December 8, 2010, the Commission issued an order finding it
6 necessary to review the proposed changes,³⁷ and expressly adopted the RPM clearing
7 prices as AEP Ohio's allowed compensation mechanism during the review.³⁸ In PUCO
8 Case No. 10-2929-EL-UNC, the Commission confirmed that AEP Ohio's compensation
9 level in retail rates was "[b]ased upon the continuation of the current capacity charges
10 established by the three-year capacity auction conducted by PJM, Inc., under the current
11 fixed resource requirement (FRR) mechanism."³⁹ AEP Ohio's proposed change to its
12 capacity price also remains pending at FERC in Docket No. ER11-2183, after FERC
13 initially "rejected [AEP Ohio's] rate schedules as unauthorized under the RAA."⁴⁰

³⁷ As stated on page 2 of the Order, "As an initial step, the Commission seeks public comment regarding the following issues: (1) what changes to the current state mechanism are appropriate to determine the Companies' FRR capacity charges to Ohio competitive retail electric service (CRES) providers; (2) the degree to which AEP-Ohio's capacity charges are currently being recovered through retail rates approved by the Commission or other capacity charges; and (3) the impact of AEP-Ohio's capacity charges upon CRES providers and retail competition in Ohio."

³⁸ The Public Utilities Commission of Ohio Order, Case No. 10-2929-EL-UNC, December 8, 2010, at 2.

³⁹ The Public Utilities Commission of Ohio Order, Case No. 10-2929-EL-UNC, December 8, 2010, at 4.

⁴⁰ Request for Rehearing of American Electric Power Service Corporation, FERC Docket ER11-2183, 2/22/2011 at 1, quoting *American Electric Power Service Corp.*, 134 FERC ¶ 61,039 (2011) at 1.

1 **Q. IS THERE OTHER EVIDENCE TO SUGGEST THAT AEP OHIO'S PROPOSED**
2 **CAPACITY PRICE IS WELL ABOVE MARKET?**

3 A. Yes. Even if the Commission does not continue to adopt the RPM prices at the
4 termination of Case No. 10-2929-EL-UNC, other evidence shows that the capacity price
5 Ms. Thomas uses in her analysis is significantly above market. AEP Ohio's proposed
6 capacity price is well above the capacity prices obtained in recent capacity auctions for
7 FirstEnergy's Ohio service areas, which were necessary due to the integration of these
8 areas into PJM. These auctions, held in March 2010,⁴¹ solicited capacity for the ATSI
9 Load Zone, which is comprised of the service areas of The Toledo Edison Company, The
10 Cleveland Electric Illuminating Company, Ohio Edison Company, and Pennsylvania
11 Power Company. The first three of these four service areas are in Ohio, and these Ohio
12 service areas represent the overwhelming majority of the load in the ATSI Load Zone.
13 The clearing prices in these auctions were \$108.89 per MW-day for June 2011 – May
14 2012 and \$20.46 per MW-day for June 2012 – May 2013.^{42,43} These capacity prices are
15 almost identical to the RPM auction clearing prices discussed earlier, and are significantly
16 below Ms. Thomas' assumed capacity price of \$347.97 per MW-day.

⁴¹ ATSI Integration RPM Auction Dates.

⁴² 2011/2012 & 2012/2013 ATSI FRR Integration Auction Results, at 1.

⁴³ A special integration auction was not required for June 2013 – May 2014, and the PJM RPM capacity prices are applicable to the ATSI Load Zone for this period.

1 **B. Even if the Commission Were to Approve an Above-Market Capacity Rate, AEP**
2 **Ohio's Proposed Capacity Price Exceeds a "Maximum Above-Market" Rate and**
3 **Improperly Includes Costs that AEP Ohio Could Otherwise Recover When a**
4 **Customer Shops**

5 **Q. EVEN IF THE COMMISSION WERE TO DISREGARD PJM RPM PRICES AND**
6 **RECENT OHIO CAPACITY AUCTION RESULTS, IS AEP OHIO'S PROPOSED**
7 **CAPACITY PRICE APPROPRIATE?**

8 A. No, there is no economic basis for the capacity price proposed by AEP Ohio. First of all, I
9 take no position as to whether, as a legal matter, AEP Ohio is entitled to an above-market
10 capacity price, which would allow it to recover some of its above-market sunk costs.⁴⁴
11 Second, even if the Commission were to approve an above-market capacity price such as
12 that proposed by AEP Ohio, from an economic standpoint, it should not exceed a
13 "maximum above-market" rate, which is lower than AEP Ohio's proposed price. This
14 "maximum above-market" rate, as described further below, would allow AEP Ohio the
15 opportunity to recover its total generation costs, but would only include costs that the
16 utility could not otherwise recover (*i.e.*, market and other sources of revenue available to
17 the Company would be netted from total generation costs) – instead of overcompensating
18 AEP Ohio through double recovery of costs that it recoups elsewhere.

⁴⁴ See the Direct Testimony of FES witness Dr. Lesser for a discussion of this issue and his conclusions that: 1) because AEP Ohio agreed to forego recovery of its stranded generation costs, it should reflect a market price for capacity; 2) AEP Ohio has, in any case, recovered all of its stranded generation costs prior to December 31, 2009; and, 3) even if AEP Ohio could charge a cost-based rate for capacity, such rate should not include double-counting and should only reflect costs associated with pre-transition generating resources (*i.e.* those in service prior to January 2, 2001).

1 **Q. WHY DO YOU CONSIDER THIS THE MAXIMUM RATE FOR CAPACITY?**

2 A. If a customer shops with a CRES supplier, AEP Ohio no longer has to supply energy or
3 ancillary services to that customer. This would then allow AEP Ohio to sell the “freed
4 up” energy and ancillary services in the market, and retain the margin from the market
5 sale. However, failure to credit the energy and ancillary services revenue (and other
6 sources of revenue available to the Company) against the all-in costs of the generation
7 plant output would result in a windfall or double recovery to AEP Ohio, and force its
8 customers to pay more than is necessary. By a “maximum above-market” rate, I mean a
9 capacity rate that results in capacity revenues to AEP Ohio that – when combined with the
10 market revenues associated with the “freed up” energy and ancillary services and other
11 sources of revenue available to the Company – are sufficient to provide it with an
12 opportunity to recover its total fixed and variable generation costs (including a return on
13 its investment). It is important to recognize that a “maximum above-market” rate is not
14 the same as the competitive market price of capacity. Rather, it is based on AEP Ohio’s
15 total generation costs, even if these costs are not competitive with the costs of other
16 generators. Failure to consider all of the revenues that the Company could otherwise
17 recover would overcompensate AEP Ohio and force its customers to pay more than is
18 necessary.

19 This concept of netting other revenues is similar to the calculation of transition
20 costs identified in section 4928.39 of the Ohio Revised Code, which costs utilities were
21 previously authorized to recover from customers. Under that section, transition costs must
22 have been prudently incurred and include costs that the utility could not recover in a
23 competitive market. While I am not an attorney, it is clear from an economic perspective

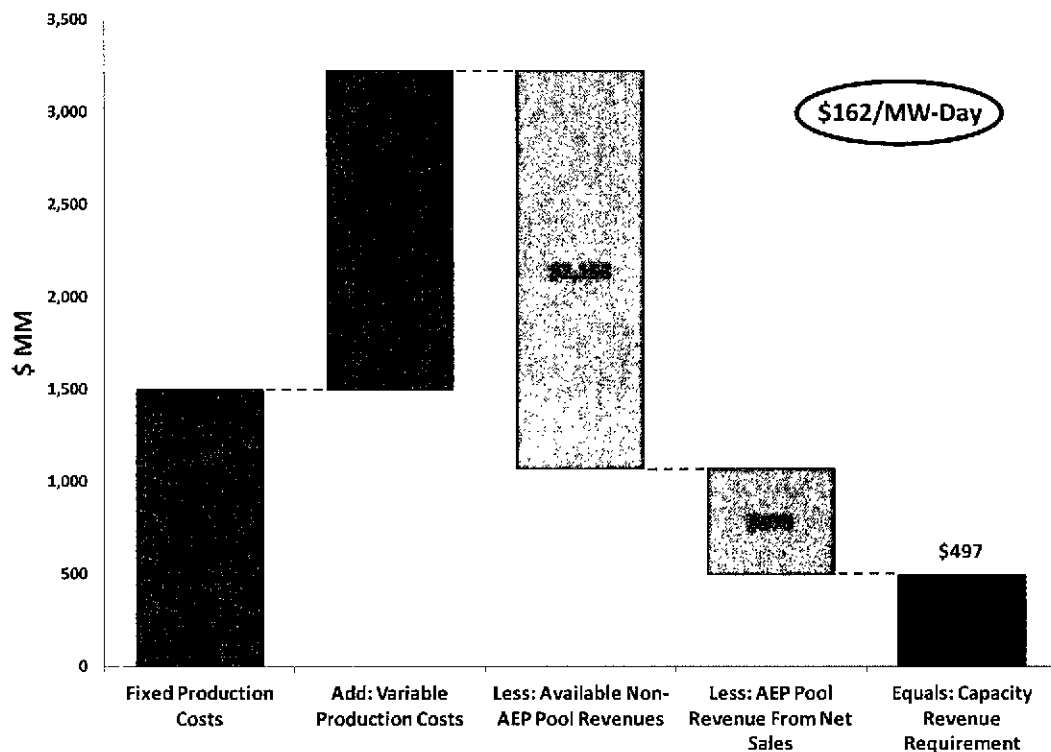
1 that if a customer shops with an alternative supplier, the utility would be able to recover
2 the market value of the “freed up” energy and ancillary services in the competitive market.
3 Therefore, if the Commission does allow AEP Ohio to recover all or some portion of its
4 above-market capacity costs from customers, these market revenues along with other
5 sources of revenue available to the Company should be credited against its total
6 generation costs.

7 **Q. HAVE YOU PERFORMED AN ANALYSIS TO DETERMINE THE “MAXIMUM**
8 **ABOVE-MARKET” CAPACITY RATE?**

9 A. Yes. I have conducted an analysis based upon the formula rate and cost information that
10 AEP Ohio provided in its filings with FERC and the Commission.⁴⁵ The results of my
11 analysis are shown below, and justify a “maximum above-market” capacity rate of \$162
12 per MW-Day based upon a 2010 test year.

⁴⁵ Initial Comments of OPCo and CSP, PUCO Case No. 10-2929-EL-UNC, 1/7/2011. *See also*, Initial Filing of American Electric Power Service Corporation, FERC Docket ER11-2183, 11/24/2010. The calculations for 2008 and 2010 were based on 2009 data when data for 2008 and 2010 was not available.

1 **Method Used to Calculate the**
2 **"Maximum Above-Market" Capacity Rate**



3
4 **Q. PLEASE DESCRIBE THIS ANALYSIS.**

5 A. The analysis shown above establishes the annual capacity revenues that would allow AEP
6 Ohio's generating fleet to recover its total generation costs (including a return on its
7 investment) if customers shopped with CRES suppliers in 2010. I first included all costs
8 associated with owning and operating the generating fleet, based on data provided by AEP
9 Ohio, and then subtracted the revenues available to AEP Ohio.⁴⁶ The components of the
10 analysis are described below:

⁴⁶ For purposes of this analysis, the Lawrenceburg plant is included in AEP Ohio's generating fleet. CSP has contracted through 2017 for all energy, capacity and ancillary services associated with the facility. CSP schedules and dispatches the facility and pays fuel, O&M, and other costs. (AEP, 2010 10-K, at 16.)

1 Total Generation Costs (Additions)

- 2 1. **Fixed Production Costs:** Annual fixed production costs are the costs
3 associated with AEP Ohio's generating fleet that are independent of the level
4 of production.
5 2. **Variable Production Costs:** Variable production costs are the costs
6 associated with AEP Ohio's generating fleet that are dependent on the level
7 of production. This includes annual fuel costs for OPCo and CSP.

8 The sum of the fixed and variable productions costs result in AEP Ohio's total costs for its
9 generating fleet.

10 Available Revenues (Subtractions)

- 11 3. **Non-AEP Pool Sales Revenues:** The largest source of revenue available to
12 AEP Ohio's generating fleet when customers shop comes from the sale of
13 energy and ancillary services in the wholesale market. Energy revenues are
14 calculated by multiplying each generating unit's hourly output by the
15 applicable Day-Ahead LMP in 2010.⁴⁷ Ancillary revenues are available to
16 AEP Ohio as a member of PJM. Revenues associated with net sales of
17 capacity outside of the AEP East Power Pool ("AEP Pool") were also
18 included.⁴⁸
19 4. **AEP Pool Net Sales Revenues:** The final revenue stream available to AEP
20 Ohio's generating fleet results from its membership in the AEP Pool. As a
21 member of the AEP Pool, AEP Ohio is assigned a capacity reservation
22 requirement based upon its Member Load Ratio. Although CSP is a deficit-
23 capacity member of the AEP Pool, AEP Ohio has surplus capacity and has
24 made net sales of capacity to the AEP Pool in 2010.⁴⁹ AEP Ohio also makes
25 net sales of energy to other pool members. These net capacity and energy
26 revenues are available to AEP Ohio as a member of the AEP Pool.

27 The result of subtracting these revenues from AEP Ohio's total generation costs
28 yields a capacity revenue requirement of \$497 million in 2010, or a "maximum above-

⁴⁷ Hourly generation was available from the EPA's Continuous Emission Monitoring System. Day-Ahead LMPs were reported by Ventyx's Energy Velocity.

⁴⁸ These transactions are reported on FERC Form 1, p. 311, col. (h) and p. 327, col. (j).

⁴⁹ In 2010 AEP Ohio had revenues of \$398 million from net sales of an average 2,493 MW in capacity to the AEP Pool. This equates to a capacity transfer price of \$437 per MW-Day (AEP Ohio Interrogatory Response, OEG, Set 3, INT-3-003, at 3 and FES, Set 6, INT-6-8).

1 market” capacity rate of \$162 per MW-Day in 2010 for generating capacity not sold into
2 the AEP Pool.

3 **Q. WHAT DO YOU CONCLUDE FROM THIS ANALYSIS?**

4 A. Even assuming, both as a matter of policy and law, that AEP Ohio is entitled to recover
5 above-market capacity costs (including sunk costs incurred prior to 2001), the “maximum
6 above-market” capacity rate would be \$162 per MW-Day based on costs and revenues
7 from 2010, and this figure is significantly lower than the \$347.97 per MW-Day capacity
8 price that AEP Ohio currently proposes and relies on in its analysis. Therefore, even if the
9 Commission were to approve an above-market capacity rate, AEP Ohio’s proposed
10 capacity price exceeds a “maximum above-market” rate and improperly includes costs
11 that AEP Ohio could otherwise recover when a customer shops. This calculation also
12 further highlights that the “maximum above-market” capacity rate, which is based on AEP
13 Ohio’s total generation costs, is well above the RPM capacity market prices.

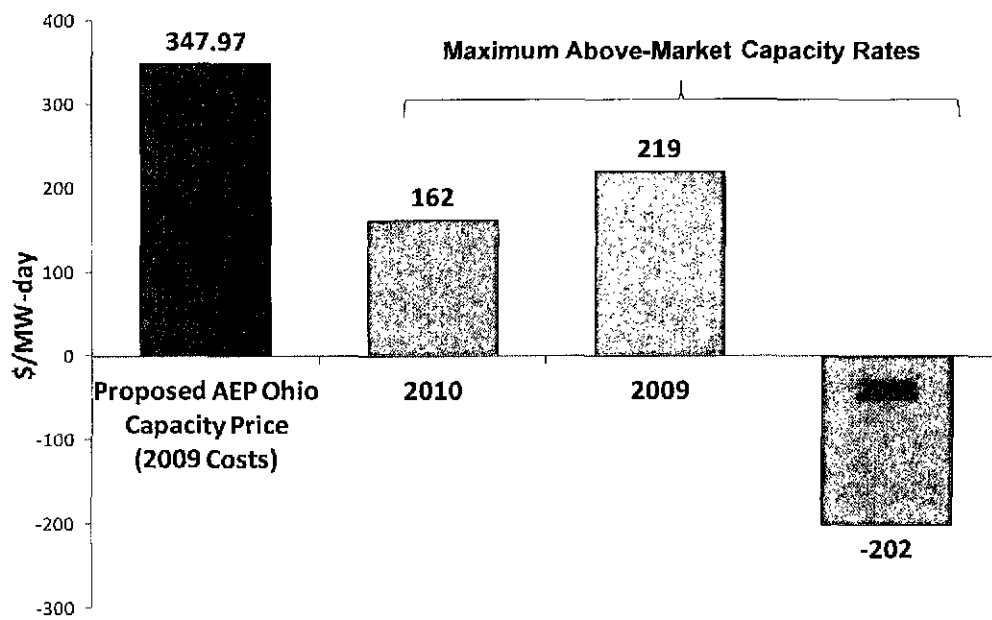
14 **Q. YOU USED A 2010 TEST YEAR, WHILE AEP OHIO USES A TEST YEAR OF**
15 **2009 TO CALCULATE ITS PROPOSED CAPACITY PRICE. HAVE YOU**
16 **PERFORMED ANY SENSITIVITY ANALYSIS USING MARKET ENERGY,**
17 **FUEL AND GENERATION OUTPUT FROM OTHER YEARS?**

18 A. Yes. The “maximum above-market” capacity rate is dependent largely on the net
19 generation revenues – the difference between the market energy revenues less the fuel
20 costs multiplied by the generation output of the AEP Ohio plants. As market prices
21 increase, the difference between market prices and fuel costs tend to increase, as does the

1 generation output from the plants. Therefore, the resulting “maximum above-market”
2 capacity rate would be lower as market prices increase.

3 As a sensitivity analysis, I have calculated this “maximum above-market” capacity
4 rate for 2008, 2009 and 2010, using the formula rates provided by AEP Ohio to estimate
5 total production costs in 2008 and 2010.⁵⁰ The results are shown below:

6 **Sensitivity Analyses of “Maximum Above-Market” Capacity Rates**
7 **Confirm that the Capacity Price Used by AEP Ohio Is Far Too High**



8
9 In 2009, the test year AEP Ohio used in its analysis, the “maximum above-market”
10 capacity rate would have been higher (\$219 per MW-Day) due to lower market energy
11 prices, while in 2008, when market energy prices were significantly higher, the

⁵⁰ Initial Comments of OPCo and CSP, PUCO Case No. 10-2929-EL-UNC, 1/7/2011. *See also*, Initial Filing of American Electric Power Service Corporation, FERC Docket ER11-2183, 11/24/2010. The calculations for 2008 and 2010 were based on 2009 data when data for 2008 and 2010 was not available.

1 “maximum above-market” capacity rate would have been negative (-\$202 per MW-day).

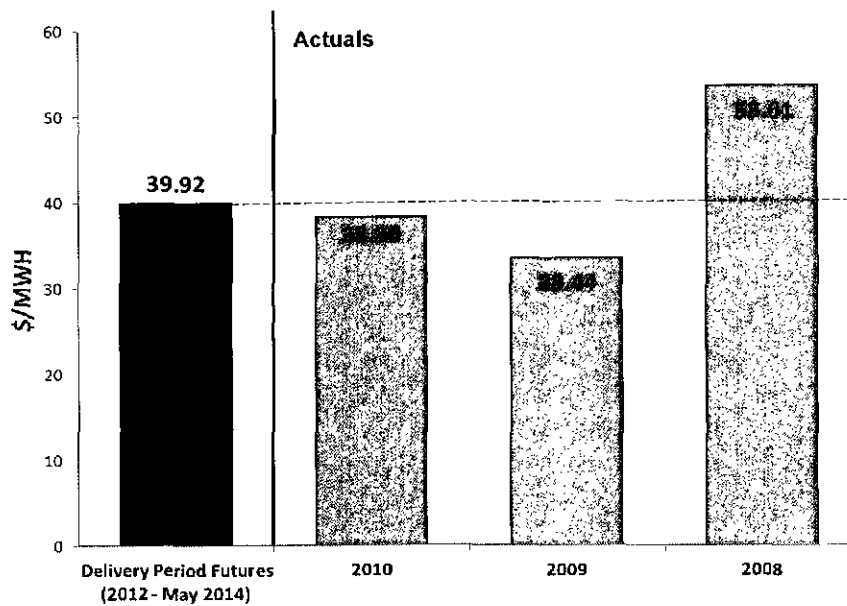
2 This suggests that AEP Ohio actually would have been able to exceed its total generation
3 revenue requirement in 2008 if it had received market energy revenues.

4 **Q. IS THERE REASON TO BELIEVE THAT THE “MAXIMUM ABOVE-MARKET”**
5 **CAPACITY RATE FOR THE PROPOSED ESP PERIOD WOULD BE LOWER**
6 **THAN THE RATE THAT YOU CALCULATED FOR 2009, THE TEST YEAR**
7 **USED BY AEP OHIO?**

8 A. Yes, the average forward energy prices suggest that market energy prices during the SSO
9 delivery period are expected to be higher than in 2009, the test year used by AEP Ohio,
10 and more similar to those experienced in 2010, so the “maximum above market” capacity
11 rate would be expected to be more similar to the 2010 rate, or \$162 per MW-day. As
12 shown below, the around-the-clock energy prices averaged \$53.61 per MWH in 2008,
13 \$33.44 in 2009, and \$38.30 in 2010. Meanwhile, the around-the-clock forward energy
14 price during the January 2012 through May 2014 delivery period of the SSO was \$39.92
15 per MWH as of the date of the Company’s filing, higher than both the 2009 and 2010
16 around-the-clock energy price.⁵¹

⁵¹ AEP Dayton Hub futures settled 1/27/2011 (the date of AEP Ohio’s filing), and include a \$0.58 per MWH basis adder to the AEP Zone. The futures price for the proposed ESP period is based on the information available at the time of the Company’s filing. Energy prices continue to change, and have increased since the Company’s filing date. All other things equal, higher energy prices would result in a lower “maximum above-market” capacity rate, as AEP Ohio would be able to recover more of its costs in the competitive market.

1 **Energy Futures for the ESP Delivery Period Are More Similar to Actual**
2 **Energy Levels Experienced in 2010**



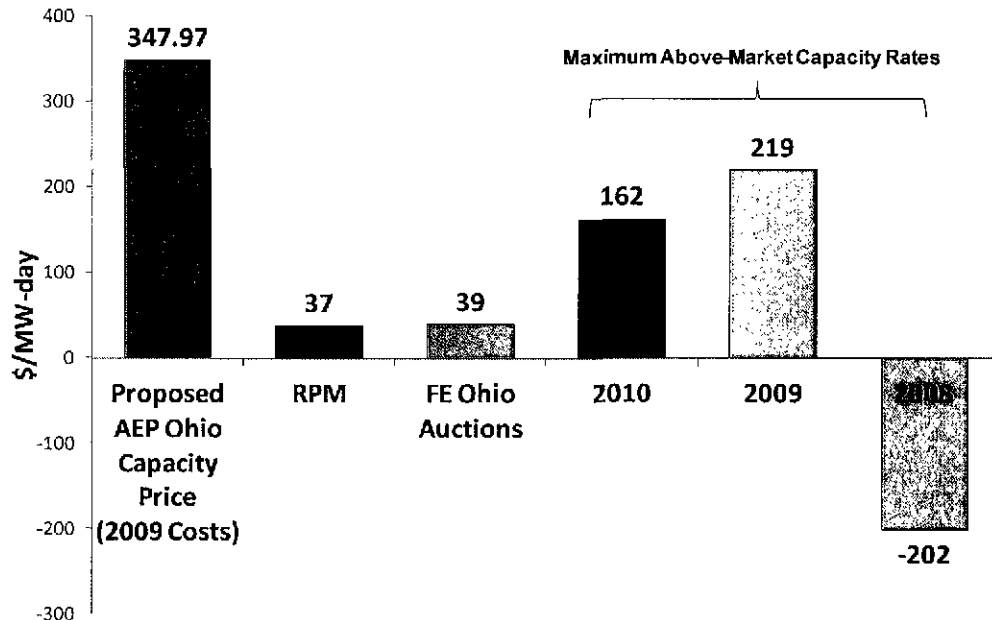
3
4 As shown above, the ESP delivery period futures energy price is closest to the
5 levels experienced in 2010, which is the test year that I used for calculating the “maximum
6 above-market” capacity rate.

7 **Q. PLEASE SUMMARIZE YOUR COMPARISON OF THE CAPACITY PRICE**
8 **THAT MS. THOMAS USED WITH THE OTHER CAPACITY PRICE**
9 **BENCHMARKS THAT YOU HAVE IDENTIFIED.**

10 **A. AEP Ohio has stated that its capacity price is supposed to be based on the cost that a**
11 **CRES provider would incur to serve a retail customer in AEP Ohio’s service territory.**
12 **The Commission has ruled that, at present, this price should be set at RPM levels, yet**
13 **AEP Ohio’s proposed capacity price is more than nine times that of the market**
14 **prices observed in RPM.**

1 Even if the Commission later decides in Case No. 10-2929-EL-UNC to allow AEP
2 Ohio to recover some portion of its above-market costs, this above-market price should be
3 no more than the “maximum above-market” charge discussed above. **AEP Ohio’s**
4 **proposed capacity price is about twice the “maximum above-market” charge that**
5 **would allow AEP Ohio to recover its total generation costs – again, assuming that the**
6 Commission determined that it was both lawful and appropriate to do so.


7 **All of the Alternative Capacity Price Benchmarks Confirm that the**
8 **Capacity Price Used by AEP Ohio in this Case Is Far Too High**




9
10 **Q. WOULD THE CORRECTED MRO PRICE COMPARISON THAT YOU**
11 **SHOWED EARLIER CHANGE IF YOU USED A “MAXIMUM ABOVE-**
12 **MARKET” CAPACITY RATE INSTEAD OF RPM CAPACITY VALUES?**

A. Based on my analysis, even with the “maximum above-market” capacity rate, the blended MRO Annual Price is still about \$5 to \$8 per MWH lower than AEP Ohio’s Proposed ESP Price. The results are summarized below.⁵²

**The Corrected ESP Price is Higher than the MRO Price
Even with a “Maximum Above-Market” Capacity Rate (\$/MWH)
(Low Adjustments to the Proposed ESP Price)
(January 2012 – May 2014)**

Total Generation Service Price	}	\$ 64.81		<div>\$ 64.53</div>	Corrected "Blended" MRO Annual Price	
Competitive Benchmark Price (or Expected Bid Price)		\$ 63.08				
					vs.	
					<div>\$ 69.89</div>	Corrected Proposed ESP Price
Corrected MRO Price Less Corrected Proposed ESP Price					\$ (5.36)	

**The Corrected ESP Price is Higher than the MRO Price
Even with a “Maximum Above-Market” Capacity Rate (\$/MWH)
(High Adjustments to Proposed ESP Price)
(January 2012 – May 2014)**

Total Generation Service Price	}	\$ 66.28		<div>\$ 65.66</div>	Corrected "Blended" MRO Annual Price
Competitive Benchmark Price (or Expected Bid Price)		\$ 63.08			
				vs.	
				<div>\$ 73.49</div>	Corrected Proposed ESP Price
Corrected MRO Price Less Corrected Proposed ESP Price			\$	(7.83)	

Under these conservative assumptions, even if the Commission were to approve the “maximum above-market” capacity rate, AEP Ohio’s Proposed ESP Price would still be significantly higher than the expected prices under an MRO.

⁵² The corrected Proposed ESP Prices are based on an analysis that will be presented below.

1 **C. AEP Ohio Overstated the Energy Costs in its Analysis of the Competitive**
2 **Benchmark Price**

3 **Q. MR. SCHNITZER, YOU PREVIOUSLY TESTIFIED THAT MS. THOMAS ALSO**
4 **OVERSTATED THE EXPECTED ENERGY COST WHEN DETERMINING HER**
5 **COMPETITIVE BENCHMARK PRICE. PLEASE EXPLAIN MS. THOMAS'**
6 **METHOD FOR DERIVING THE ENERGY COST.**

7 A. Ms. Thomas used the AEP-Dayton Hub simple swap price for "around-the-clock" energy
8 as the energy price component in her Competitive Benchmark Prices shown in Exhibit
9 LJT-1. The simple swap price represents the largest price component shown in her
10 exhibit. Ms. Thomas states that this price changes daily and the challenge is to select an
11 appropriate time period to use in selecting the price data. She claims that in order "[t]o
12 avoid the issue of selecting data that produce a pre-determined result" she used an average
13 of the forward prices from the first week of each of the three quarters of 2010 to develop
14 the simple swap component of the Competitive Benchmark Price.⁵³ However, Ms.
15 Thomas later clarified that she relied on the average of the forward prices from the first
16 week of the four quarters of 2010 to reflect that four versus three quarters were used.⁵⁴

17 **Q. IS MS. THOMAS' METHOD FOR DERIVING THE ENERGY COST**
18 **COMPONENT REASONABLE?**

19 A. No. Relying on a past year's forward energy prices is inappropriate, especially since
20 energy prices have generally declined since January 2010. It is unreasonable to assume
21 that a bidder in a competitive solicitation process for future energy products would rely on

⁵³ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 8 (line 19) through at 9 (line 1).

⁵⁴ AEP Ohio's Interrogatory Response to PUCO, Set 44, Int-44-001.

1 “stale” energy price quotes that are over a year old when it develops its bid. Prospective
2 bidders are likely to want to understand their supply costs at the time of the solicitation (if
3 they need to buy energy) or their opportunity costs (if they have excess energy to sell).
4 Looking back to the first week of each quarter of 2010, as Ms. Thomas did, is not an
5 appropriate method for deriving the energy cost component of the Competitive
6 Benchmark Price. As a result, AEP Ohio overstated the energy costs in its analysis of the
7 Competitive Benchmark Price.

8 **Q. WHAT METHOD WOULD HAVE BEEN APPROPRIATE FOR MS. THOMAS**
9 **TO USE TO ESTABLISH THE ENERGY PRICE FOR PURPOSES OF HER MRO**
10 **COMPARISON?**

11 A. Ms. Thomas should have relied on prices available at or near the date of AEP Ohio’s
12 filing.

13 **Q. WHAT IS THE IMPACT OF MS. THOMAS’ INAPPROPRIATE USE OF**
14 **HISTORICAL FORWARD PRICE DATA TO DETERMINE THE SIMPLE SWAP**
15 **ENERGY PRICE COMPONENT?**

16 A. The average of the simple swap historical prices that Ms. Thomas used is approximately
17 \$3.86 per MWH higher than the simple swap price at the time of AEP Ohio’s ESP filing.
18 In fact, the forward energy prices in the first quarter of 2010 used by Ms. Thomas were
19 more than \$8 per MWH higher than the forward energy prices known at the time of the
20 Company’s filing.

1 **Q. MR. SCHNITZER, YOUR ANALYSIS IS BASED ON THE INFORMATION**
2 **THAT MS. THOMAS SHOULD HAVE CONSIDERED AT THE TIME OF THE**
3 **COMPANY'S FILING. HOW HAVE FORWARD ENERGY PRICES FOR THE**
4 **PROPOSED ESP DELIVERY PERIOD CHANGED SINCE THE COMPANY'S**
5 **FILING DATE?**

6 A. Forward prices have increased. This would tend to raise the Competitive Benchmark
7 Price but lower the "maximum above-market" capacity rate that I have calculated. If I
8 updated my analysis to reflect the forward price levels as of July 18, 2011 (just prior to
9 filing this testimony), the corrected Proposed ESP Price would still be about \$6 to \$9 per
10 MWH higher than the alternative MRO price.

11 **D. AEP Ohio Overstates or Does Not Adequately Support Other Costs in its**
12 **Analysis of the Competitive Benchmark Price**

13 **Q. MR. SCHNITZER, USING MS. THOMAS' METHODOLOGY AND INPUTS,**
14 **WERE YOU ABLE TO REPLICATE HER ESTIMATES OF THE COMPETITIVE**
15 **BENCHMARK PRICE SHOWN IN EXHIBIT LJT-1?**

16 A. Yes, I was able to replicate her model results within a few cents per MWH.⁵⁵ During this
17 process, I discovered that several of the cost components that Ms. Thomas identifies are
18 positively correlated. That is, if she assumes higher capacity or energy costs, this
19 "ripples" through her model and increases other cost components (*e.g.*, line losses, load
20 following/shaping adjustments, and the transaction risk adder) as well. Thus, the
21 differences in capacity and energy assumptions discussed above become magnified when

⁵⁵ Some figures did not match exactly due to rounding.

1 calculated in her model, further contributing to her overstatement of the Competitive
2 Benchmark Price.

3 **Q. DO YOU HAVE ANY OTHER CONCERNS WITH THE METHODOLOGY USED**
4 **TO CALCULATE THE COMPETITIVE BENCHMARK PRICE DESCRIBED BY**
5 **MS. THOMAS?**

6 A. Yes. Ms. Thomas' workpapers and discovery responses shed little light on exactly how
7 she picked estimates for the "transaction risk adder" and the "retail administration charge"
8 cost components included in her Competitive Benchmark Price. These figures appear to
9 be arbitrarily chosen with no calculations supporting them. In defense of her transaction
10 risk adder, she cites a series of competitive solicitations, but does not provide the rationale
11 for the particular assumption she used.⁵⁶ Similarly, the retail administration charge is set
12 at \$5 per MWH with little support for this figure.⁵⁷ Therefore, AEP Ohio does not
13 adequately support these other costs in its analysis of the Competitive Benchmark Price.⁵⁸

⁵⁶ No formula is provided for the calculation of the transaction risk adder, but it appears to have been calculated as 5% of the sum of the other cost components. In Ms. Thomas' response to discovery request IEU, Set 2, INT-90, Ms. Thomas states, "The amount of the Transaction Risk Adder identified on page 8 of Company witness Thomas' testimony was based on a review of the experiences of various deregulated states and reflects a reasonable and balanced approach to determining a Competitive Benchmark price." She then cites various studies referenced in Attachment 2 of her response to IEU, Set 2, INT-91 and somehow assumes based on these studies that the value of this adder equals 5%.

⁵⁷ The entire support for the \$5.00 per MWH retail administration charge Ms. Thomas assumes is "As filed in 2008." Presumably this is a reference to AEP Ohio witness Baker's testimony filed in 2008. She offers no factual basis for this estimate, which is now three years old, or any reason to believe that it accurately reflects administrative costs that would be included in the price that would result from competitive solicitations for supply for 2012 through May 2014. See Thomas workpapers, file entitled "A 2010-11 Competitive Benchmark Pricing.xls."

⁵⁸ Despite this concern, I have not developed an independent estimate of the "transaction risk adder" and "retail administration" costs and, for the sake of illustration, have adopted Ms. Thomas' methodology in my analysis.

1 Q. HOW DOES MS. THOMAS' ESTIMATE OF THE COMPETITIVE
2 BENCHMARK PRICE CHANGE WHEN YOU CORRECT THE FLAWS THAT
3 YOU HAVE IDENTIFIED?

4 A. Correcting for the capacity, energy and other related cost components results in a
5 significantly lower Competitive Benchmark Price. Using the Commission-approved RPM
6 capacity price, the Competitive Benchmark Price would be \$27 per MWH lower than Ms.
7 Thomas' estimate. And even if the Commission were to approve a "maximum above-
8 market" capacity rate, the Competitive Benchmark Price would be \$18 per MWH lower
9 than Ms. Thomas' estimate.

10 **AEP Ohio Significantly Overstates the Competitive Benchmark Price**
11 (January 2012 – May 2014)

Cost Components (\$/MWH)	AEP Ohio Estimate	Corrections	
		With RPM Capacity	With Maximum Above-Market Capacity
Simple Swap	43.21	39.35	39.35
Basis Adjustment	0.58	0.58	0.58
Load Following/Shaping Adjustment	4.18	2.58	3.07
Capacity	21.95	2.36	10.22
Ancillary Services	0.60	0.60	0.60
Alternative Energy Requirement	0.69	0.69	0.69
ARR Credit	-1.12	-1.12	-1.12
Losses	1.89	1.66	1.69
Transaction Risk Adder	3.85	2.58	3.00
Retail Administration	5.00	5.00	5.00
Competitive Benchmark Price	80.83	54.28	63.08
Total Corrections		\$ (26.55)	\$ (17.75)

VII. AEP OHIO SIGNIFICANTLY UNDERSTATES ITS PROPOSED ESP PRICE

Q. PLEASE TURN NOW TO THE PROPOSED ESP PRICE THAT MS. THOMAS COMPARES TO THE MRO ANNUAL PRICE. EXPLAIN HOW THIS PRICE WAS DEVELOPED.

A. Ms. Thomas shows a weighted average Proposed ESP Price of \$59.82 per MWH for the ESP period on line 12 of Exhibit LJT-2. Company witness Roush explains in his testimony that he provided Ms. Thomas with proposed ESP generation prices “that are comparable to market generation prices for the comparison of AEP Ohio’s ESP to an MRO.”⁵⁹ Mr. Roush’s workpapers show that he made three adjustments to the proposed base generation prices to arrive at these market comparable generation prices:

Development of AEP Ohio’s Proposed ESP Price

\$/MWH	2012- May 2014
Tariff Generation Price or Proposed Base G rate*	23.92
Plus:	
1) 2011 Full Fuel	32.86
2) 2011 Environmental Compliance Costs	0.90
3) Transmission Adjustment ⁶⁰	<u>2.14</u>
“Market Comparable Generation Price” or “Proposed ESP Price” (shown in Exhibit LJT-2)	59.82

* Source: Mr. Roush workpaper, “Market Comparable Generation Prices.”

⁵⁹ Direct Testimony of David Roush on behalf of CSP and OPCo, at 10, lines 16-18.

⁶⁰ These include PJM administrative, scheduling, and certain ancillary service charges for a 12 month 2010/11 period that represent the types of charges that a competitive supplier would also incur.

1 Mr. Roush added 2011 fuel costs, 2011 environmental compliance costs, and 2010/11
2 transmission-related expenses. These 2011 costs are held constant throughout the entire
3 proposed ESP period from January 2012 through May 2014.

4 **Q. WHAT ARE THE MAIN PROBLEMS WITH MS. THOMAS' ESTIMATE OF**
5 **THE PROPOSED ESP PRICE?**

6 A. There are two main errors in the calculation. First, Ms. Thomas underestimates the fuel
7 and environmental cost components of the Proposed ESP Price (shown on line 12 of
8 Exhibit LJT-2) by using historical 2011 costs. Because these costs are increasing,
9 according to AEP Ohio's own forecasts, the historical costs are not a reliable proxy for
10 future costs. Using the historical costs skews Ms. Thomas' analysis because she compares
11 them with market cost estimates for 2012 through May 2014 embedded in the Competitive
12 Benchmark Price (shown on line 5 of Exhibit LJT-2). On the one hand, her comparison
13 assumes that fuel, environmental and transmission related costs remain flat at 2011 levels
14 in the Company's Proposed ESP Price; while on the other hand, she assumes that
15 Competitive Benchmark cost components increase during the proposed ESP period.

16 The second serious error is that Ms. Thomas' Proposed ESP Price does not include
17 the costs that would be imposed on customers by the numerous generation-related riders
18 that AEP Ohio proposes (*e.g.*, the Facilities Closure Cost Recovery Rider, the Generation
19 Resource Rider, the POLR charge⁶¹ and so forth). In effect, these costs are assumed to be
20 zero in her analysis since they are not included in the Proposed ESP Price.

⁶¹ In her Supplemental Direct Testimony Exhibit LJT-4, Ms. Thomas adds \$3.07 per MWH of estimated POLR costs to the Total Generation Service Price that is blended with the Competitive Benchmark Price and adds \$2.84 per MWH of estimated POLR costs to the Proposed ESP Price.

1 In sum, Ms. Thomas fails to properly account for the numerous generation-related
2 riders included in the ESP proposal, and their effect on rates during the ESP period. In
3 some cases, she provides an estimate for the rider cost which is too low (*e.g.*, with fuel
4 and environmental costs held frozen at 2011 levels). But in most cases she does not
5 include any estimate and implicitly assumes the rider cost will be zero throughout the ESP
6 period. These errors and omissions result in a significant understatement of the Proposed
7 ESP Price.

8 **Q. WHAT RIDERS HAS AEP OHIO PROPOSED?**

9 A. AEP Ohio has proposed a total of 14 generation-related riders, six bypassable and eight
10 non-bypassable riders.

11 **Q. PLEASE DESCRIBE THE KEY BYPASSABLE GENERATION-RELATED**
12 **RIDERS.**

13 A. These include:

14 1. **Fuel Adjustment Clause (FAC)** – The FAC recovers the actual cost of fuel,
15 transportation, purchased power, including capacity and other variable production
16 costs such as environmental variable costs (*e.g.*, chemicals for Selective Catalytic
17 Reduction (“SCR”) and Flue Gas Desulfurization (“FGD”)). The proposed FAC
18 would be bypassable if a customer elects a CRES provider.

19 2. **Alternative Energy Rider (AER)** – AEP Ohio is proposing to begin recovery of
20 Renewable Energy Certificates (“RECs”) expenses via the AER instead of the

1 FAC starting in the proposed ESP.⁶² The AER would be a new, bypassable
2 charge. The energy and capacity costs of renewable energy resources would
3 continue to be recovered through the FAC. Capital carrying costs associated with
4 investment to produce RECs would be included in the AER.

5 **3. Pool Termination or Modification Provision** – AEP Ohio is proposing to
6 recover the costs associated with a significant change in its generating cost
7 resulting from either the elimination of the AEP Pool or from the substitution of a
8 new agreement.⁶³ This would be a new, bypassable rider.

9 **4. Standard Offer Generation Service Rider (GSR)** – This is the former base
10 generation rate.

11 **5. Rate Security Rider (RSR)** – This rider provides a discount for commercial and
12 industrial customers that are willing to commit to SSO service from AEP Ohio for
13 the period January 2012 through May 2017.

14 **6. Green Power Portfolio Rider (GPPR)** – This rider provides a voluntary option
15 for customers that wish to purchase a larger proportion of their electricity from
16 renewable resources than the levels required under S.B. 221.

⁶² A REC is a tradable energy commodity that represents proof that one MWH of electricity was generated from an eligible renewable energy resource. RECs represent the environmental attributes of the power produced from renewable energy projects and are sold separately from commodity electricity.

⁶³ In December 2010, parties to that agreement mutually agreed to terminate the AEP Pool. AEP Ohio will conduct discussions throughout 2011 with the PUCO and other state commissions and stakeholders concerning the termination and whether the AEP Pool should be replaced or modified. AEP Ohio is proposing to recover in this charge any decrease in pool-related capacity revenues that result from the termination or modification of the AEP Pool, in the event that such lost revenues exceed \$35 million per year. Direct Testimony of Philip Nelson on behalf of CSP and OPCo, at 28, lines 5-13 and at 31, lines 7-14.

1 **Q. PLEASE DESCRIBE THE NON-BYPASSABLE GENERATION-RELATED**
2 **RIDERS.**

3 A. AEP Ohio has proposed eight non-bypassable generation-related riders:

4 **1. Environmental Investment Carrying Cost Rider (EICCR)** – AEP Ohio is
5 proposing modifications to the existing EICCR, which was originally intended to
6 recover the incremental environmental capital carrying costs incurred after 2009.
7 The modifications now being proposed include using the EICCR to recover certain
8 O&M expenses associated with environmental equipment, allowing costs to be
9 included on a forecast basis with subsequent true-up, and making the rider a non-
10 bypassable charge rather than a bypassable charge.

11 **2. Facilities Closure Cost Recovery Rider (FCCR)** – AEP Ohio proposes to
12 recover the costs associated with generation plant closure in this new, non-
13 bypassable rider. Closure costs will include the net book value of the affected
14 units, in addition to materials and supplies unique to the facility, environmental
15 liabilities requiring action upon facility closure, mitigation costs required by
16 applicable existing or future environmental regulations, and legacy pension and
17 benefit requirements.⁶⁴

18 **3. Generation Resource Rider (GRR)** – The GRR is designed to collect the costs of
19 AEP Ohio's investment in generating facilities. AEP Ohio has proposed this new,
20 non-bypassable rider to recover the costs of renewable and alternative capacity
21 additions, as well as more traditional capacity constructed or financed by AEP

⁶⁴ Such closure costs would be offset by any salvage or proceeds related to the facilities' assets, materials and supplies, etc.

Ohio and approved by the Commission. The rider will recover O&M and capital carrying costs and lease payments associated with AEP Ohio's investment in facilities dedicated to Ohio retail customers. This rider could also be used to recover any major investments that extend the life or increase the capacity of existing generation, or investments made to replace older, smaller coal fired units with new gas fired capacity.

4. **Carbon Capture and Sequestration Rider (CCSR)** – AEP Ohio is proposing to recover its share of a Phase I front-end engineering and design (FEED) study for a project located in West Virginia through a new, non-bypassable rider. AEP Ohio may later seek to recover through this proposed non-bypassable rider the total costs of additional CCS projects.

5. **Provider of Last Resort Charge (POLR)** – AEP Ohio is proposing to modify its existing, non-bypassable POLR charge for “standing ready” to serve all customers with Standard Offer Generation Service.^{65,66}

6. **Generation NERC Compliance Cost Recovery Rider (NERCR)** – AEP Ohio is proposing this new, non-bypassable rider to recover the costs of NERC compliance

⁶⁵ A customer may avoid this non-bypassable charge by relinquishing its ability to return to SSO service at the SSO rate, and instead agreeing to return at a market rate.

⁶⁶ AEP Ohio is maintaining the current provisions concerning the process by which customers can switch to a CRES provider and return from a CRES provider to the standard offer service. This includes continuing its existing Commission-approved switching rules, switching charges and minimum stay provisions.

1 requirements for establishing and implementing standards to ensure the reliability
2 of the bulk electric system.⁶⁷

3 **7. Phase-In Recovery Rider (PIRR)** – AEP Ohio has proposed to begin recovery of
4 the deferred fuel regulatory asset associated with the original ESP in the form of
5 this new, non-bypassable, “distribution” rider. Due to the rate cap in the previous
6 ESP, AEP Ohio was not able to recover all of its fuel costs in the FAC. Beginning
7 in 2012, AEP Ohio plans to begin recovering the deferred fuel regulatory asset
8 associated with the original ESP's phase-in plan approved by the Commission in
9 Case Nos. 08-917-EL-SSO and 08-918-EL-SSO. The rider is designed to recover
10 the phase-in deferral on a per-KWh basis from all customers. The rider will be
11 effective January 1, 2012 and will continue through December 31, 2018. The
12 recovery period is for seven years, but AEP Ohio may seek securitization with new
13 legislation.⁶⁸

14 **8. Market Transition Rider (MTR)** – This proposed new, non-bypassable
15 “distribution” charge rider is designed to gradually change the allocation of the
16 proposed cost recoveries to a structure that AEP Ohio believes will better reflect
17 the differences in the market costs to serve various customer classes.⁶⁹

⁶⁷ AEP Ohio argues that new standards are constantly being developed and that costs are not a function of load or customers but due to the fact that AEP owns generation.

⁶⁸ AEP Ohio claims that “It may be in the best interest of customers to securitize the phase-in balance and collect the balance over a period longer than seven years, a provision in the current ESP, and to start the collection of the deferred balance at a later time.” Direct Testimony of Philip Nelson on behalf of CSP and OPCo, at 9, lines 4-7.

⁶⁹ This rider is designed to limit the first and second year changes for any customer classes to uniformly transition any above- or below-average changes in three steps. Any revenue shortfall that is produced by limiting the increases for certain customer classes is collected from those classes whose decreases are limited.

1 **Q. FOR WHICH RIDERS DID AEP OHIO ESTIMATE COSTS DURING THE ESP**
2 **PERIOD AND WHICH DID THEY EFFECTIVELY ASSUME THE COST**
3 **WOULD BE ZERO?**

4 **A.** The following table summarizes the information provided by AEP Ohio regarding the
5 estimated costs and risks associated with these riders:

6 **Proposed Riders**

Rider	Cost AEP Ohio Includes in the Proposed ESP Price⁷⁰ (\$/MWH)	AEP Ohio's Cost Discussion
<u>BYPASSABLE RIDERS</u>		
Fuel Adjustment Clause (FAC)	\$32.86 (2011 full fuel)	AEP Ohio's 2011 estimate is \$32.91 per MWH; subject to quarterly reconciliation. ⁷¹ AEP Ohio has not attempted to calculate expected changes in the FAC during 2012, 2013, and 2014. ⁷² Ms. Thomas uses \$32.86, a 2011 estimate, in her MRO-ESP price comparison.
Alternative Energy Rider (AER)	\$0 ⁷³	AEP Ohio has not determined the potential costs associated with this rider. AEP Ohio has not prepared any estimates of the rates to be collected through the AER. ⁷⁴
Pool Termination or Modification Provision	\$0	AEP Ohio has not determined the potential costs associated with this rider. "Since the Company cannot predict the outcome of the discussions and subsequent FERC filings, it is desirable to have the ability to adjust rates for a significant change in the Company's generating cost resulting from either the elimination of the AEP Pool or from the substitution of a new agreement. Therefore, the Company is proposing the provision to recover any

⁷⁰ Cost estimates are those included in the Proposed ESP Price used in the MRO-ESP price comparison. Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, Exhibit LJT-2. See also, David Roush workpaper, "Market Comparable Generation Prices."

⁷¹ Direct Testimony of Phillip Nelson on Behalf of CSP and OPCo, at 11, lines 2-3.

⁷² AEP Interrogatory Response, IEU, Set 3, INT-113.

⁷³ 2011 Full Fuel includes a renewable and energy efficiency adjustment.

⁷⁴ AEP Ohio Interrogatory Response, IEU, Set 1, INT-013.

Rider	Proposed ESP Price (¢/MWH)	AEP Ohio's Cost Discussion
		significant increase in costs if that were to occur during the term of this ESP plan.” ⁷⁵
Standard Offer Generation Service Rider (GSR)	\$23.92	“CSP's and OPCo's last base rate cases were in the early 1990s. Since that time rates have been unbundled into generation, transmission and distribution components and subsequently adjusted based upon percentage adjustments to the then current unbundled rates. As such, the generation rates reflect an amalgamation of very old cost relationships, including any historical levels of cross-subsidization among tariff classes.” ⁷⁶
<u>NON-BYPASSABLE RIDERS</u>		
Environmental Investment Carrying Cost Rider (EICCR)	\$0.90 (2011)	The Company has not calculated the total dollar amount of such environmental compliance costs for the 29-month ESP period. ⁷⁷ Based on a 2009 through 2012 capital expenditure estimate of \$486 million, AEP Ohio shows that the proposed 2012 EICCR would average \$1.52 per MWH across all the rate classes. ⁷⁸ AEP Ohio has announced significant environmental capital expenditures over the proposed ESP period. ⁷⁹ Ms. Thomas uses \$0.90, a 2011 estimate, in her MRO-ESP price comparison.
Facilities Closure Cost Recovery Rider (FCCR)	\$0	AEP Ohio has not determined the potential costs associated with this rider. “Even for facilities that the Company may be able to determine a closure date, the total closure cost of a facility will be affected by the applicable environmental rules and therefore the Company is unable to determine the total cost. If the Company was able to determine the cost at this time, it would be included in the Company's proposed ESP prices.” ⁸⁰

⁷⁵ CSP's and OPCo's Application, at 14-15.

⁷⁶ Direct Testimony of David Roush on behalf of CSP and OPCo, at 9 (line 21) through 10 (line 3).

⁷⁷ AEP Ohio Interrogatory Response, IEU, Set 2, INT-073.

⁷⁸ Direct Testimony of Andrea Moore on Behalf of CSP and OPCo, Exhibit AEM-1, at 2 of 2.

⁷⁹ “AEP Shares Plan For Compliance With Proposed EPA Regulations,” 6/9/2011, (<http://www.aep.com/newsroom/newsreleases/?id=1697>). See also, AEP Ohio Interrogatory Response, FES, Set 10, INT-10-2, Attachments 1 and 2.

⁸⁰ Direct Testimony of Laura Thomas on behalf of CSP and OPCo, at 24-25. See also AEP Ohio Interrogatory Response, IEU, Set 1, INT-023.

Rider	Cost AEP Ohio Includes in the Proposed ESP Price ⁷⁹ (\$/MWH)	AEP Ohio's Cost Discussion
Carbon Capture and Sequestration Rider (CCSR)	\$0	AEP Ohio has not determined the potential costs associated with this rider. AEP Ohio has not prepared any estimates of the rates to be collected through the CCSR. ⁸¹ Until an agreement is entered into between Appalachian Power Company and other operating companies of AEP, AEP Ohio is not able to identify the costs that CSP or OPCo will directly incur to implement this project. ⁸²
Generation Resource Rider (GRR)	\$0	<p>"The proposed rider is nonbypassable and is designed to recover renewable and alternative capacity additions, as well as, more traditional capacity constructed or financed by the Company."⁸³ Ms. Thomas did not include any costs associated with the GRR in her MRO-ESP price comparison.</p> <p>The annual revenue requirements disclosed by Mr. Nelson in his Supplemental Direct testimony result in a proposed Generation Resource Rider of \$0.18 per MWH in 2013.⁸⁴ The Generation Resource Rider would then increase to approximately \$0.26 per MWH in 2014.⁸⁵ These costs include only the estimated cost of the Turning Point Solar Project, not any other generation resources that AEP Ohio might seek to include in this rider.</p>
Provider of Last Resort Charge (POLR)	\$0 ⁸⁶	AEP Ohio developed a preliminary estimate of \$3.20 per MWH assuming unconstrained switching. AEP Ohio adjusted this downward to \$2.84 per MWH to take account of its rules restricting switching. AEP Ohio proposes in this filing to revise the POLR charge once ESP rates, Competitive Benchmark Prices and switching rules become final in this proceeding. Therefore, AEP Ohio proposes that the Commission approve its methodology for determining the POLR charge now but is unable to finalize the charge at this time. ⁸⁷ Ms. Thomas did not include any costs associated with the POLR charge in her MRO-ESP

⁸¹ AEP Ohio Interrogatory Response, IEU, Set 1, INT-034.

⁸² AEP Ohio Interrogatory Response, IEU, Set 2, INT-082.

⁸³ CSP's and OPCo's Application, at 9-10.

⁸⁴ Supplemental Direct Testimony of David M. Roush, Exhibit DMR-8.

⁸⁵ Supplemental Direct Testimony of Philip J. Nelson, Exhibit PJN-4, at 2.

⁸⁶ In her Supplemental Direct Testimony Exhibit LJT-4, Ms. Thomas adds \$3.07 per MWH of estimated POLR costs to the Total Generation Service Price that is blended with the Competitive Benchmark Price and adds \$2.84 per MWH of estimated POLR costs to the Proposed ESP Price.

⁸⁷ Direct Testimony of Laura Thomas on behalf of CSP and OPCo, at 20, lines 18-22 and at 22, lines 18-21.

Rider	Does AEP Ohio Include in the Proposed ESP Price?⁷⁸ (\$/MWH)	AEP Ohio's Cost Discussion
		price comparison in Exhibit LJT-2. In Ms. Thomas' Exhibit LJT-4 she does include estimated "POLR costs" in her MRO-ESP price comparison.
Generation NERC Compliance Cost Recovery Rider (NERCR)	\$0	AEP Ohio has not determined the potential costs associated with this rider. AEP Ohio has not prepared any estimates of the rates to be collected through the NERC compliance costs rider. ⁸⁸ "The Company is unable to determine the exact nature of such costs at this time." ⁸⁹
Phase-In Recovery Rider (PIRR)	\$0	"At the end of 2011, it is estimated that the phase-in deferred fuel balance for OPCo will be \$643 million, including carrying charges. CSP is not expected to have a phase-in deferred fuel balance at the end of 2011." ⁹⁰ AEP Ohio estimates the Phase-In Recovery Rate to be \$2.86 per MWH for the merged company. ⁹¹ Ms. Thomas did not include any costs associated with the PIRR in her MRO-ESP price comparison.
Market Transition Rider (MTR)	\$0	In theory, the rider should be revenue neutral each year, but due to differences in actual usage, this is not the case. AEP Ohio proposes reconciliation of differences in this non-bypassable rider to be recovered in the bypassable quarterly adjusted FAC. ⁹²

As can be seen above, AEP Ohio's calculation of the Proposed ESP Price includes historical 2011 fuel and environmental costs (not expected fuel and environmental costs), and does not take into account any of the costs that will be imposed by the other numerous riders. The failure to include any consideration of these costs renders AEP Ohio's estimate of the Proposed ESP Price inaccurate and misleading.

⁸⁸ AEP Ohio Interrogatory Response, IEU, Set 1, INT-022.

⁸⁹ AEP Ohio Interrogatory Response, IEU, Set 2, INT-100.

⁹⁰ Direct Testimony of Philip Nelson on behalf of CSP and OPCo, at 8, lines 7-9.

⁹¹ Direct Testimony of Philip Nelson on behalf of CSP and OPCo, at 11, lines 2-3.

⁹² Direct Testimony of David Roush on behalf of CSP and OPCo, at 11, lines 17-23.

1 **Q. DOES AEP OHIO’S FILING PROVIDE SUFFICIENT INFORMATION FOR THE**
2 **COMMISSION TO PROPERLY COMPARE THE COMPANY’S PROPOSED ESP**
3 **PRICE WITH THE EXPECTED PRICE OF AN MRO?**

4 A. No. The Company fails to make a fair “apples-to-apples” comparison. The Company
5 compares pro forma Competitive Benchmark Prices to its Proposed ESP Prices assuming
6 no change in historical 2011 cost components, most importantly, fuel and environmental
7 costs. The Company’s discovery responses and public statements suggest that fuel and
8 environmental costs can be expected to increase over the proposed ESP period, but Ms.
9 Thomas does not quantify and take this information into account when making her MRO-
10 ESP price comparison. Likewise, Ms. Thomas does not include in her analysis the
11 expected costs associated with many of the riders that AEP Ohio is proposing in its ESP.
12 It is unclear how the Commission can make a decision on the record that the proposed
13 ESP is more favorable in the aggregate than an MRO without pro forma cost estimates of
14 the riders that the Company proposes.

15 **A. AEP Ohio Underestimates Fuel and Environmental Costs in its Proposed ESP**
16 **Price**

17 **Q. ARE THERE SYSTEMIC PROBLEMS WITH AEP OHIO’S COMPARISON OF**
18 **THE COMPETITIVE BENCHMARK PRICE TO ITS PROPOSED ESP PRICE?**

19 A. Yes. AEP Ohio’s comparison is inherently distorted because it used historical (and lesser)
20 costs in calculating the Proposed ESP Price, while using future (and higher) costs in
21 calculating the Competitive Benchmark Price. For example, Ms. Thomas’ testimony and
22 supporting exhibits include a fuel cost that is held constant at the 2011 level. When asked
23 in discovery if the Company attempted to calculate the ESP based on expected changes in

1 the FAC for 2012, 2013, and 2014, Ms. Thomas replied, “No, the Company has prepared
2 no such calculation.”⁹³ Similarly, AEP Ohio keeps the environmental compliance cost
3 component in the Proposed ESP Price fixed at the 2011 level throughout the entire
4 proposed ESP period, even though another Company witness estimates these costs to be
5 higher in 2012.⁹⁴

6 In sharp contrast, Ms. Thomas does use forward energy prices (*i.e.*, for 2012
7 through May 2014 delivery) on the other side of the equation to increase the Competitive
8 Benchmark Price. Ms. Thomas’ simple swap energy price inputs, the largest cost
9 component of the Competitive Benchmark Price, are based on forward looking prices for
10 the 2012 through May 2014 time period. For example, the simple swap energy price
11 shown in Exhibit LJT-1 increases by about \$5 per MWH from 2012 to 2013/14.
12 Similarly, for purposes of calculating the Alternative Energy Requirement included in the
13 Competitive Benchmark Price, Ms. Thomas attempts “to reflect the requirements that will
14 be, or are anticipated to be, applicable to suppliers in 2012.”⁹⁵ This inconsistent treatment
15 of reflecting rising energy prices in the Competitive Benchmark Price while holding fuel
16 and environmental costs constant at 2011 levels in the Proposed ESP Price, which are then
17 compared to each other, adds to the systemic bias in Ms. Thomas’ analysis. As a result,
18 AEP Ohio underestimates the fuel and environmental costs in its Proposed ESP Price.

⁹³ AEP Interrogatory Response, IEU, Set 3, INT-113.

⁹⁴ Environmental compliance costs are fixed at the 2011 level throughout the entire proposed ESP period at \$0.90 per MWH. See Mr. Roush’s workpaper, “Market Comparable Generation Prices.” Meanwhile, Company witness Moore shows the EICCR costs in AEM-1 to be \$1.52 per MWH for 2012.

⁹⁵ Direct Testimony of Laura Thomas on behalf of CSP and OPCo, at 5, lines 20-21, (emphasis added).

1 1. Fuel Adjustment Clause Rider

2 **Q. DID THE COMPANY PROVIDE ANY INFORMATION ABOUT HOW THE FAC**
3 **OR AVERAGE FUEL COSTS MAY CHANGE DURING THE PROPOSED ESP**
4 **PERIOD?**

5 A. Yes. In discovery, the Company provided projected fuel revenues, sales and an average
6 rate for the years 2012, 2013 and 2014.⁹⁶ However, these figures are higher than the 2011
7 fuel charge embedded in the Proposed ESP Price that Ms. Thomas relies on when
8 performing her MRO price comparison.

9 **Q. WHAT ADJUSTMENT SHOULD BE MADE TO THE PROPOSED ESP PRICE**
10 **FOR FUEL COSTS?**

11 A. To more accurately compare AEP Ohio's proposed ESP to an MRO, I replaced the 2011
12 fuel cost used by Ms. Thomas with the Company's projected average fuel costs on a
13 \$/MWH basis for 2012-2014 provided in discovery. This adjustment alone increases the
14 Proposed ESP Price by [REDACTED] [RESTRICTED ACCESS CONFIDENTIAL].

15 2. Environmental Investment Carrying Cost Rider

16 **Q. DOES AEP OHIO'S ESTIMATE OF THE PROPOSED ESP PRICE REFLECT**
17 **THE EXPECTED ENVIRONMENTAL COSTS TO BE INCLUDED IN THE**
18 **EICCR DURING THE ESP PERIOD?**

19 A. No. Please note that I am not addressing the underlying question of whether AEP Ohio's
20 proposed EICCR recovery mechanism is permissible under S.B. 221. That issue aside,

⁹⁶ AEP Ohio Interrogatory Response, FES, Set 1, Attachment 1, RESTRICTED ACCESS CONFIDENTIAL.

1 when developing the Proposed ESP Price, AEP Ohio ignored the increased costs
2 associated with environmental requirements that AEP Ohio itself anticipates during the
3 term of the proposed ESP. This is seen most clearly by comparing the environmental
4 costs included in AEP Ohio's Proposed ESP Price to the costs included in AEP Ohio's
5 estimate for the EICCR in 2012. The Company's estimate of the environmental
6 compliance costs for 2012 is found in Company witness Moore's Exhibit AEM-1. This
7 exhibit shows the annual revenue requirement and MWH associated with the EICCR,
8 *which translates into a \$1.52 per MWH charge in 2012. However, Mr. Roush's and Ms.*
9 *Thomas' Proposed ESP Price only includes \$0.90 per MWH. By including AEP Ohio's*
10 *own estimate of the 2012 EICCR price into the Proposed ESP Price, the Proposed ESP*
11 *Price increases. To even more accurately represent AEP Ohio's environmental costs, I*
12 *have replaced the 2011 figure included in AEP Ohio's Proposed ESP Price with a low and*
13 *a high estimate of these costs for the entire ESP period, 2012 through May 2014, which I*
14 *describe below. These corrections further increase the Proposed ESP Price and confirm*
15 *that the Proposed ESP Price is not more favorable than the expected price of an MRO.*

16 **Q. HAS AEP OHIO PROVIDED THE COMMISSION WITH AN ESTIMATE OF**
17 **THE COSTS TO BE RECOVERED IN THE EICCR THROUGHOUT THE**
18 **PROPOSED ESP PERIOD?**

19 A. No. AEP Ohio has not calculated the EICCR for the 29-month proposed ESP period.⁹⁷
20 AEP Ohio has only provided an estimate of the EICCR for 2012. Based on a 2009
21 through 2012 capital expenditure estimate of \$486 million, AEP Ohio shows that the

⁹⁷ AEP Ohio's Interrogatory Response, IEU, Set 2, INT-073.

1 proposed 2012 EICCR would average \$1.52 per MWH across all the rate classes.⁹⁸ This
2 estimate of the EICCR was developed prior to AEP's recent announcement of its plan for
3 compliance with proposed EPA regulations, and thus underestimates the likely 2012
4 EICCR.⁹⁹

5 **Q. HOW WILL THE 2013 AND 2014 EICCRs COMPARE TO THE 2012 EICCR?**

6 A. The EICCRs in those later years of the ESP period are likely to be much larger than the
7 one estimated for 2012.

8 **Q. WHY IS THAT?**

9 A. AEP Ohio is expected to incur very large capital and O&M costs in order to comply with
10 the consent decree signed by AEP and the Environmental Protection Agency ("EPA"),
11 and to meet the requirements of several new EPA rules.

12 **Q. WHAT IS THE CONSENT DECREE?**

13 A. The consent decree, which was signed on October 9, 2007, resolved a number of
14 complaints filed against AEP and its affiliates related to compliance with the Clean Air
15 Act.¹⁰⁰ The consent decree obligates AEP to achieve specified sulfur, nitrous oxide and

⁹⁸ The EICCR is based on recovery of the carrying costs of certain environmental capital expenditures. The \$486 million includes the full year's expected 2012 environmental capital expenditures. Direct Testimony of Andrea Moore on Behalf of CSP and OPCo, Exhibit AEM-1, at 2 of 2. This exhibit includes 2010 load to calculate the 2012 EICCR estimate. Using the Company's forecasted load for 2012 results in a slightly lower 2012 EICCR estimate of \$1.49 per MWH.

⁹⁹ On June 9, 2011 AEP announced its plan for complying with a series of regulations proposed by the EPA that would impact coal-fueled power plants. "AEP Shares Plan For Compliance With Proposed EPA Regulations," 6/9/2011, (<http://www.aep.com/newsroom/newsreleases/?id=1697>).

¹⁰⁰ AEP Press Release, "AEP Reaches Settlement Agreement in NSR Case," 10/9/2007. See also, Consent Decree, *United States et al. v. American Electric Power Service Corp.*, 10/7/2007.

1 particulate emission reductions and install emission controls or otherwise achieve
2 compliance at units whose costs would be recovered through the proposed ESP.

3 **Q. WHAT ARE THE NEW EPA RULES?**

4 A. The EPA rules include but are not limited to the Clean Air Transport Rule (“CATR”),¹⁰¹
5 the Toxics rule (also known as the “Hazardous Air Pollutants” or “MACT” rule),¹⁰² and
6 the Coal Combustion Residuals (“CCR”) rule.¹⁰³ These rules are expected to cause AEP
7 Ohio to install additional air emission controls and ash and water management systems at
8 generating facilities, the costs of which AEP Ohio would recover through the proposed
9 EICCR.

10 **Q. WHAT IMPACT WILL THE COSTS RESULTING FROM THE CONSENT**
11 **DECREE AND NEW EPA RULES HAVE ON THE EICCR?**

12 A. AEP Ohio has estimated that compliance with the EPA’s proposed environmental
13 regulations may require expenditures of \$2.1 billion to \$2.8 billion by AEP Ohio between
14 2012 and 2020.¹⁰⁴ In discovery, AEP Ohio provided a high and low estimate of the annual
15 capital expenditures necessary to comply with environmental regulations consistent with
16 AEP’s most recent June 9, 2011 press release, “Plan for Compliance with Proposed EPA

¹⁰¹ “Environmental Protection Agency; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone; proposed rule,” 75 Federal Register 147 (2 Aug 2010), at 45210 - 45465.

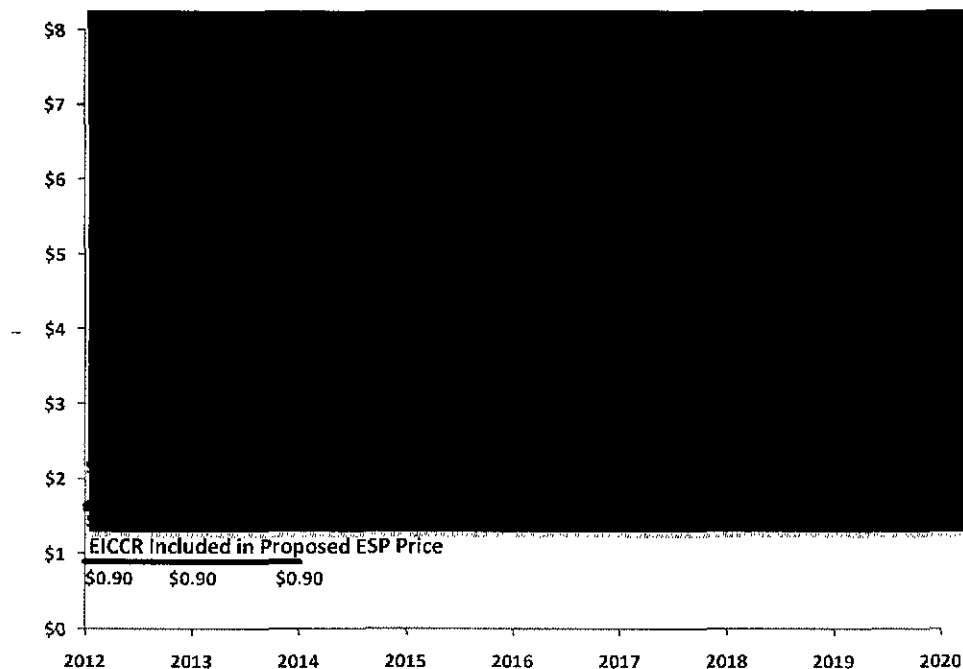
¹⁰² “Environmental Protection Agency; National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units; proposed rule,” 76 Federal Register 85 (3 May 2011), at 24976 - 25147.

¹⁰³ “Environmental Protection Agency; Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities; proposed rule,” 75 Federal Register 118 (21 June 2010), at 35128 - 35264.

¹⁰⁴ AEP Ohio’s Interrogatory Response, FES, Set 10, INT-10-2.

1 Regulations.”^{105,106} Using AEP Ohio’s annual estimates, it is possible to forecast the
2 EICCR through 2020. Again, while I am not opining as to whether the proposed EICCR
3 is permissible under S.B. 221, based on the proposed EICCR recovery mechanism
4 (allowing investment recovery over a 25-year period), the EICCR will continue increasing
5 for the foreseeable future.

6 **The EICCR is Expected to Increase Based on Company Estimates**



¹⁰⁵ Based on AEP Ohio’s Interrogatory Response, FES, Set 10, INT-10-2, Attachments 1 and 2.

¹⁰⁶ On June 9, 2011 AEP announced its plan for complying with a series of regulations proposed by the EPA that would impact coal-fueled power plants. Based on the regulations as proposed, AEP’s compliance plan would retire nearly 6,000 MW of coal-fueled power generation; upgrade or install new advanced emissions reduction equipment on another 10,100 MW; refuel 1,070 MW of coal generation as 932 MW of natural gas capacity; and build 1,220 MW of natural gas-fueled generation. The cost of AEP’s compliance plan could range from \$6 billion to \$8 billion in capital investment across its entire system through the end of the decade. According to their press release, they state that high demand for labor and materials due to a constrained compliance time frame could drive actual costs higher than these estimates and that the plan, including retirements, could change significantly depending on the final form of the EPA regulations and regulatory approvals from state commissions. “AEP Shares Plan For Compliance With Proposed EPA Regulations,” 6/9/2011, (<http://www.aep.com/newsroom/newsreleases/?id=1697>).

1 Using the Company's capital expenditure estimates of \$2.1 to \$2.8 billion, revenues
2 collected from customers under this rider over the 2012 to 2020 period would total \$1.9 to
3 \$2.4 billion, with continuing collections after 2020. The graph also highlights the
4 difference between the 2011 EICCR included in the Proposed ESP Price and the much
5 higher EICCR estimates based on the Company's most recent announcement of capital
6 expenditures necessary to comply with environmental regulations.

7 **Q. NOTWITHSTANDING AEP OHIO'S ANNUAL COST ESTIMATES, COULD**
8 **MORE OF THESE COSTS BE INCURRED DURING THE PROPOSED ESP**
9 **PERIOD?**

10 A. Yes. The compliance deadlines in the proposed EPA rules are such that AEP Ohio could
11 incur much of the \$2.8 billion during the proposed ESP period. The second of the two
12 CATR compliance phases is scheduled for 2014, and the compliance deadline for the
13 Toxics rule is currently expected to be November of 2014.¹⁰⁷ The consent decree also
14 requires at least nine AEP Ohio generating units to be retrofit (or in some cases perhaps
15 retired or repowered) between 2013 and 2017. These compliance deadlines are all within
16 or shortly after the end of the proposed ESP period in May of 2014. As a result, these
17 deadlines will require significant expenditures during the proposed ESP period due to the
18 time required to engineer, procure and construct the control systems. For example, AEP's
19 comments in the CATR rulemaking discuss the effort and time required to engineer,
20 procure and construct FGD systems at five of their generating plants. They report that the

¹⁰⁷ EPA has the discretion to grant an extension for up to one year.

1 projects took between 41 and 53 months, or roughly three to four years,¹⁰⁸ suggesting that
2 AEP will be forced to accelerate its forecasted spending into the proposed ESP period in
3 order to comply with these obligations.

4 **Q. IS AEP PLANNING TO COMPLY WITH THE EPA'S CURRENTLY-PROPOSED**
5 **DEADLINES FOR PROPOSED ENVIRONMENTAL REGULATIONS?**

6 A. [REDACTED]
7 [REDACTED] [COMPETITIVELY-
8 SENSITIVE CONFIDENTIAL] [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]¹⁰⁹ [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED].

16 **Q. ARE THERE OTHER REASONS WHY COMPLIANCE EXPENDITURES WILL**
17 **BE INCURRED DURING THE PROPOSED ESP PERIOD?**

18 A. Yes. Generating units are typically taken out of service for several weeks to finish the
19 construction process and test the equipment. To maintain system reliability, installations

¹⁰⁸ McManus, John M, Vice-President Environmental Services, AEP. Comments filed 1 Oct 2010, Docket ID No. EPA-HQ-OAR-2009-0491, at 6.

¹⁰⁹ AEP Ohio's Interrogatory Response, Exelon Generation Company, Set 3, RPD-3-012, Attachment 1, at 6, COMPETITIVELY-SENSITIVE CONFIDENTIAL, emphasis retained from the original.

1 are often scheduled during off-peak times of the year, typically the spring and fall seasons.
2 And when multiple generating units are involved, as is the case here, installations may be
3 sequenced over a series of spring and fall seasons to maintain adequate generating
4 reserves and system reliability. To meet a fixed compliance deadline, this may require
5 accelerating the procurement and construction schedules for some units,¹¹⁰ moving
6 expenditures into the proposed ESP period. AEP's comments on the CATR rulemaking
7 claim that the new rules' implied construction schedules are difficult if not infeasible
8 under AEP's currently assumed forecast of expenditures,¹¹¹ which is further evidence that
9 the forecast 2012-2020 capital spending could occur disproportionately in the early years.

10 **Q. IS THERE REASON TO BELIEVE THAT AEP OHIO'S ENVIRONMENTAL**
11 **CAPITAL EXPENDITURES COULD EXCEED THEIR ESTIMATES?**

12 A. Yes. In fact, in AEP's announcement of its plan for compliance with proposed EPA
13 regulations, AEP warned, "High demand for labor and materials due to a constrained
14 compliance time frame could drive actual costs higher than these estimates."¹¹² Thus,
15 environmental capital expenditures could exceed AEP's current estimates.

16 **Q. WHAT IMPACT WOULD THESE ADDITIONAL COSTS HAVE ON THE**
17 **EICCR?**

¹¹⁰ NERC, "2010 Special Reliability Scenario Assessment: Resource Adequacy Impacts of Potential U.S. Environmental Regulations," (October 2010), at 4.

¹¹¹ McManus, John M, Vice-President Environmental Services, AEP. Comments filed 1 Oct 2010, Docket ID No. EPA-HQ-OAR-2009-0491, at 4.

¹¹² "AEP Shares Plan For Compliance With Proposed EPA Regulations," 6/9/2011, (<http://www.aep.com/newsroom/newsreleases/?id=1697>).

1 A. Using AEP's low forecast of annual costs to comply with proposed EPA regulations,¹¹³
2 the 2014 EICCR would rise to [REDACTED]. Alternately, assuming AEP Ohio is
3 forced to accelerate its planned expenditures to meet the EPA's proposed deadlines and
4 that AEP Ohio's compliance costs do not exceed its high forecast of costs to comply with
5 proposed EPA regulations,¹¹⁴ the 2014 EICCR would rise to [REDACTED]. This is [REDACTED]
6 times larger than AEP Ohio's EICCR estimate for 2012 and [REDACTED] times larger than the
7 EICCR included in AEP Ohio's Proposed ESP Price. When averaged over the proposed
8 29-month ESP period, the EICCR would range between [REDACTED] in the low case
9 and [REDACTED] in the high case.

10 **Q. MR. SCHNITZER, YOU JUST DESCRIBED THE CORRECTIONS TO THE**
11 **PROPOSED ESP PRICE FOR FUEL AND THE EICCR. DID YOU MAKE**
12 **SIMILAR ADJUSTMENTS TO THE TOTAL GENERATION SERVICE PRICE**
13 **THAT MS. THOMAS USES TO BLEND WITH THE COMPETITIVE**
14 **BENCHMARK PRICE TO OBTAIN THE MRO PRICE?**

15 A. Yes. I made the same adjustment for fuel to the Total Generation Service Price (line 4 in
16 Exhibit LJT-2) as I did to the Proposed ESP Price (line 12 in Exhibit LJT-2). For the
17 2011 Environmental Compliance Costs figure (line 3 of Exhibit LJT-2), I assumed the
18 same capital expenditures as I did for the adjustments to the Proposed ESP Price;
19 however, I used the current (rather than the proposed) EICCR calculation methodology.¹¹⁵

¹¹³ AEP Ohio's Interrogatory Response, FES, Set 10, INT-10-2, Attachment 1.

¹¹⁴ AEP Ohio's Interrogatory Response, FES, Set 10, INT-10-2, Attachment 2.

¹¹⁵ The current EICCR calculation does not include any O&M expenses, nor does it allow costs to be included on a forecast basis.

1 These adjustments are shown in Exhibit MMS-2 [RESTRICTED ACCESS
2 CONFIDENTIAL].

3 **B. AEP Ohio Does Not Include the Costs Associated with Other Riders in its**
4 **Proposed ESP Price and Analysis of These Costs Suggests They Are Not Zero**
5 **and Should Not be Ignored**

6 **Q. PLEASE EXPLAIN THE SECOND REASON WHY AEP OHIO HAS**
7 **UNDERESTIMATED ITS PROPOSED ESP PRICE.**

8 A. As I described earlier, the Proposed ESP Price quoted by Ms. Thomas does not include the
9 costs associated with the numerous generation-related riders that AEP Ohio proposes.

10 **Q. MR. SCHNITZER, WHILE AEP OHIO CLAIMS THAT IT CANNOT ESTIMATE**
11 **THE POTENTIAL COSTS AND RISKS ASSOCIATED WITH MANY OF THE**
12 **GENERATION-RELATED RIDERS, IS IT APPROPRIATE TO ASSUME THE**
13 **COSTS ARE ZERO IN THE MRO PRICE COMPARISON?**

14 A. No. AEP Ohio does not include the costs associated with other riders in its Proposed ESP
15 Price and analysis of these costs suggests they are not zero and should not be ignored.
16 AEP Ohio unfairly biases the comparison in favor of the ESP as compared to a fixed-price
17 full requirements MRO bid that truly fixes the price to customers (without the use of
18 riders) throughout the duration of the supply contract. AEP Ohio's solution of throwing
19 up its hands at the work necessary to prepare such estimates does nothing but provide a
20 biased comparison between the Proposed ESP Price and the results of a fixed-price full
21 requirements competitive MRO solicitation. It distorts the impact of the proposed ESP
22 and will likely prove costly for customers who will be exposed to these unknown costs in
23 the future.

1 **Q. IN ADDITION TO THE FUEL AND EICCR ADJUSTMENTS DESCRIBED**
2 **ABOVE, WHAT OTHER CORRECTIONS DID YOU MAKE TO MS. THOMAS'**
3 **PROPOSED ESP PRICE?**

4 A. Rather than claim that the riders cannot be estimated at this time and effectively assume
5 that their costs are zero in the MRO price comparison, I included the estimated costs for
6 the following riders:

- 7 • the Facility Closure Cost Recovery Rider,
- 8 • the Carbon Capture and Sequestration Rider,
- 9 • the Generation Resource Rider,
- 10 • the Pool Termination and Modification Provision, and
- 11 • the POLR Charge Rider.

12 I prepared cost estimates based, for the most part, on information provided by the
13 Company and publicly available information. The discovery responses that I relied on in
14 my testimony are attached as Exhibit MMS-3.¹¹⁶ Each correction is described below.

15 1. Facility Closure Cost Recovery Rider

16 **Q. DOES AEP OHIO ANTICIPATE GENERATING FACILITY CLOSURES**
17 **DURING THE PROPOSED ESP PERIOD?**

18 A. Yes. AEP Ohio states:

¹¹⁶ The confidential discovery responses that I relied on are attached separately as Exhibit MMS-4. The RESTRICTED ACCESS CONFIDENTIAL discovery response is not attached, pursuant to the requirements of the Protective Agreement.

1 “It is very likely that some generation-facilities will close during the
2 proposed ESP period and there are many reasons for such potential
3 closures. First, some facilities might close due to their age and/or
4 planned retirement. Units may also close to fulfill commitments made
5 by the Company as part of the AEP New Source Review (NSR) consent
6 decree. Premature or early retirements of facilities may occur due to
7 operational, safety, or economic reasons. However, the potential for
8 closure is more likely due to comply [sic] with new environmental
9 requirements where emissions controls may be uneconomic.”¹¹⁷

10 **Q. DOES THE COMPANY IDENTIFY WHICH FACILITY CLOSURES AND**
11 **COSTS WILL OCCUR DURING THE PROPOSED ESP PERIOD?**

12 A. No. The Company simply notes that the “evolution of environmental requirements is
13 uncertain; the only certainty is that more environmental requirements are on the horizon
14 and that they will be more stringent. However, the timing for compliance with new rules
15 is unknown.”¹¹⁸ Ms. Thomas concludes that the Company is not able to determine the
16 total cost for specific facilities at this time. For this reason, the Company proposes a rider
17 – the FCCR Rider – where actual costs, net of salvage or other related proceeds, would be
18 submitted on an annual basis for review and recovery in the subsequent year.¹¹⁹

19 **Q. DOES THE COMPANY INCLUDE AN ESTIMATE OF THE CLOSURE COSTS**
20 **IN ITS PROPOSED ESP PRICE?**

21 A. No. Although, the Company admits that generation-related facility closures are likely
22 during the ESP period, it claims that it is unable to estimate these costs in order to include
23 them in the Company’s Proposed ESP Price. Ms. Thomas did state, however, that “If the

¹¹⁷ Direct Testimony of Laura Thomas on behalf of CSP and OPCo, at 23, lines 2-12.

¹¹⁸ Direct Testimony of Laura Thomas on behalf of CSP and OPCo, at 23, lines 15-17.

¹¹⁹ Direct Testimony of Laura Thomas on behalf of CSP and OPCo, at 25, lines 1-3.

1 Company was able to determine the cost at this time, it would be included in the
2 Company's proposed ESP prices."¹²⁰ As a result, these costs are completely ignored in
3 Ms. Thomas' comparison of the Proposed ESP Price to a Competitive Benchmark price,
4 even though the costs can be expected to be positive.

5 **Q. HAVE YOU BEEN ABLE TO QUANTIFY THE POTENTIAL COSTS**
6 **ASSOCIATED WITH THE FCCR RIDER?**

7 A. Yes, it is possible to estimate the magnitude of the costs that would be recovered through
8 the FCCR Rider. The closure costs recovered through the FCCR Rider, as envisioned by
9 AEP Ohio, "could include, but are not limited to, materials and supplies unique to the
10 facility, environmental liabilities requiring action upon facility closure, mitigation costs
11 required by applicable existing or future environmental regulations, and legacy pension
12 and benefit requirements... [C]osts may also include undepreciated balances."¹²¹ I have
13 used AEP Ohio's estimates of these costs, to the extent they are quantifiable, to develop
14 an estimate of the FCCR Rider during the proposed ESP period.

15 **Q. HOW HAVE YOU IDENTIFIED "POTENTIAL RETIREMENT CANDIDATES"?**

16 A. I relied on the retirements assumed in AEP's Long-Term Forecast Report ("LTFR"),
17 which was filed with the Commission on April 15, 2011. Although the retirement
18 candidates provided by AEP Ohio in this filing are not necessarily binding, they are
19 indicative of the retirements under consideration by AEP Ohio. While I rely on the

¹²⁰ Direct Testimony of Laura Thomas on behalf of CSP and OPCo, at 25, lines 3-5.

¹²¹ CSP's and OPCo's Application, at 12-13. Direct Testimony of Laura Thomas on behalf of CSP and OPCo, at 24, lines 15-19. *See also*, Direct Testimony of Thomas Mitchell on behalf of CSP and OPCo, at 11-12.

1 retirements as proposed in the LTFR docket, I have also compared these retirements to
2 those described in AEP's recently announced environmental compliance plan.

3 **Q. WHICH PLANTS HAVE BEEN IDENTIFIED AS "POTENTIAL RETIREMENT**
4 **CANDIDATES"?**

5 A. The AEP Ohio plants listed as retirement candidates in its LTFR are shown below:¹²²

6 **AEP Ohio's List of Potential Retirement Candidates**

Retirement Candidate	Capacity (MW)	Potential Year of Retirement
Phil Sporn 5 (WV)	440	2010
Conesville 3 (OH)	165	2012
Muskingum River 2 (OH)	190	2012
Muskingum River 4 (OH)	205	2012
Muskingum River 1 (OH)	190	2014
Muskingum River 3 (OH)	205	2014
Muskingum River 5 (OH)	585	2015
Phil Sporn 2 (WV)	145	2017
Phil Sporn 4 (WV)	145	2017
Picway 5 (OH)	95	2017
Kammer 1 (WV)	200	2019
Kammer 2 (WV)	200	2019
Kammer 3 (WV)	200	2019

7
8 In addition to its announced consideration of the retirements of these units, AEP Ohio has
9 excluded Phil Sporn 5, Conesville 3, Muskingum River 2, and Muskingum River 4 from
10 its capacity resources designated for the 2012/2013 and the 2013/2014 PJM Planning
11 Years.¹²³ AEP also expects the following units to run on limited service (extended start-
12 up status) through May 31, 2014: Phil Sporn 4 and 5, Muskingum River 4, and Picway

¹²² AEP Filing, PUCO Case Nos. 11-2501-EL-FOR and 11-2502-EL-FOR, 4/15/2011, at 138-139.

¹²³ PJM RPM Auction User Information, "FRR Resources 2012/2013," 1/6/2011 and PJM RPM Auction User Information, "FRR Resources 2013/2014," 1/5/2011.

1 5.¹²⁴ These actions suggest that additional units could be retired during the proposed ESP
2 term.

3 I have also reviewed AEP's recent announcement of its "Plan for Compliance with
4 Proposed EPA Regulations."¹²⁵ The retirements listed in this plan are similar to those
5 itemized in the LTFR during the proposed ESP period. However, AEP has accelerated the
6 deadline for the proposed closure of several facilities to year-end 2014, which would have
7 the potential to increase the FCCR Rider in the period following this proposed ESP.

8 **Q. HOW HAVE YOU ESTIMATED THE CLOSURE COSTS THAT AEP OHIO**
9 **MAY SEEK TO RECOVER DURING THE PROPOSED ESP PERIOD?**

10 A. I first reviewed the closure costs that AEP Ohio seeks to recover for the retirement of Phil
11 Sporn 5. AEP Ohio is seeking recovery of at least \$58.7 million, an amount that excludes
12 "future closure costs" for which it also seeks recovery. These future closure costs include
13 "any legally required asset retirement obligations, including asbestos removal, the fly ash
14 pond closure and the disposal of transformer-rectifier set fluids."¹²⁶

15 I next developed estimates of the closure costs for which AEP Ohio may seek
16 recovery due to the retirements of Muskingum River Units 2 and 4 and Conesville Unit 3.
17 I relied on AEP Ohio's estimates of the undepreciated remaining investment in Account
18 101, Electric Plant In Service, along with estimates of the asset retirement obligations for

¹²⁴ AEP Ohio Interrogatory Response, Exelon, Set 1, INT-1-002.

¹²⁵ "AEP Shares Plan For Compliance With Proposed EPA Regulations," 6/9/2011, (<http://www.aep.com/newsroom/newsreleases/?id=1697>).

¹²⁶ OPCo Application, PUCO Case No. 10-1454-EL-RDR, at 4.

1 the potential retirement candidates.¹²⁷ I offset these costs with an estimate of the
2 applicable unamortized deferred investment tax credit. Notably, these estimates of closure
3 costs exclude several cost categories which AEP Ohio has proposed to include in the
4 FCCR Rider (e.g., materials and supplies unique to the facilities, future closure costs,
5 etc.).

6 **Estimated Closure Costs of Potential Retirement Candidates**

Retirement Candidate	Capacity (MW)	Potential Year of Retirement	Est. Closure Costs (\$MM)	Est. Closure Costs (\$/kW)
Phil Sporn 5	440	2010	\$58.7	\$133
Conesville 3	165	2012	\$7.3	\$44
Muskingum River 2	190	2012	\$28.3	\$149
Muskingum River 4	205	2012	\$30.8	\$150

7
8 **Q. HAVE YOU ESTIMATED THE IMPACT THAT THE RECOVERY OF THESE**
9 **CLOSURE COSTS WOULD HAVE ON RATES?**

10 A. Yes, I have. Using the closure cost estimates shown above, I have quantified the potential
11 rate impacts associated with the FCCR Rider. I estimate that the FCCR Rider would be
12 [REDACTED] over the ESP period.¹²⁸ I believe this estimate reflects a reasonable
13 quantification of the costs to which ratepayers could be exposed based on available
14 information and therefore I added it to the Proposed ESP Price.

¹²⁷ AEP Ohio Interrogatory Response, FES, Set 10, INT-10-5, Attachment 1 and AEP Ohio Interrogatory Response, FES, Set 10, INT-10-9, Attachment 1. Both the undepreciated remaining balances and the asset retirement obligations were estimated as of the forecast retirement date from AEP Ohio's most recent LTFR.

¹²⁸ Figures assume a pre-tax WACC of 11.77% (AEP Ohio Interrogatory Response, IEU, Set 3, INT-129), all retirements occur at mid-year (AEP Filing, PUCO Case Nos. 11-2501-EL-FOR and 11-2502-EL-FOR, 4/15/2011, at 138-139), and recovery occurs in the subsequent calendar year. The costs of Phil Sporn 5, approximately \$1.54 per MWH, are assumed to be recovered during 2012.

1 2. Carbon Capture and Sequestration Rider

2 **Q. DID THE COMPANY PROVIDE AN ESTIMATE OF THE COSTS TO BE**
3 **RECOVERED UNDER THE CARBON CAPTURE AND SEQUESTRATION**
4 **RIDER DURING THE PROPOSED ESP?**

5 A. Yes, the Company has stated that it is requesting recovery of an annual revenue
6 requirement of \$1.5 million related to the FEED Study performed at Appalachian Power's
7 Mountaineer Plant in West Virginia.¹²⁹ This translates to a rate impact of [REDACTED]
8 during the proposed ESP period. The Company is seeking recovery of this revenue
9 requirement over a period of 25 years.¹³⁰

10 **Q. ARE THERE OTHER COSTS FOR WHICH THE COMPANY COULD SEEK**
11 **RECOVERY USING THE CCSR?**

12 A. Yes. For example, AEP's planned carbon capture and sequestration facility at the
13 Mountaineer Plant is projected to have a total capital cost of \$610 million and annual
14 O&M of \$58 million. Applying the same ratios as applied to the FEED Study produces an
15 annual AEP Ohio revenue requirement of \$42.9 million, which would increase the CCSR
16 by \$0.89 per MWH.¹³¹ However, AEP recently announced that it has placed this project
17 "on hold until economic and policy conditions create a viable path forward."¹³² So it

¹²⁹ Direct Testimony of Phillip Nelson on behalf of CSP and OPCo, at 20-21. AEP Ohio Interrogatory Response, PUCO, Set 18, INT-01, "Staff 18-1 Attachment 1.xls."

¹³⁰ Direct Testimony of Phillip Nelson on behalf of CSP and OPCo, at 20-21.

¹³¹ Assuming total annual load of 48 TWH.

¹³² "AEP Places Carbon Capture Commercialization On Hold, Citing Uncertain Status of Climate Policy, Weak Economy," 7/14/2011, (<http://www.aep.com/newsroom/newsreleases/?id=1704>).

1 appears that this particular project will not move forward at this time, although AEP Ohio
2 has not yet amended its application to withdraw or eliminate this rider.

3 **Q. DOES AEP OHIO INCLUDE EITHER THE FEED STUDY OR TOTAL COSTS IN**
4 **ITS ESTIMATE OF THE PROPOSED ESP PRICE?**

5 A. No.

6 **Q. WHAT COSTS DID YOU INCLUDE FOR THE CCSR DURING THE PROPOSED**
7 **ESP PERIOD?**

8 A. I added the Company's estimated costs associated with only the FEED Study (*i.e.*, a rate
9 impact of [REDACTED]) to the Proposed ESP Price.

10 3. Generation Resource Rider

11 **Q. DID THE COMPANY INCLUDE AN ESTIMATE OF THE COSTS TO BE**
12 **RECOVERED UNDER THE GENERATION RESOURCE RIDER IN ITS MRO-**
13 **ESP PRICE COMPARISON?**

14 A. No. At the time of its initial filing, AEP Ohio had yet to estimate any costs associated
15 with the Generation Resource Rider, and as a result Ms. Thomas excluded this proposed
16 rider from the MRO test.¹³³

17 **Q. HAS AEP DESCRIBED ANY OF THE COSTS THAT WILL BE INCLUDED IN**
18 **THIS RIDER?**

¹³³ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, Exhibit LJT-2.

1 A. The Turning Point Solar Project, as discussed by Company witnesses Godfrey and Nelson,
2 is anticipated to be the first project included in the GRR. According to the Company,
3 construction and commercial operation of the solar facility will be phased in over a three
4 year period. Approximately 20 MW is expected to be in operation by the end of 2012,
5 with an additional 15 MW in 2013, and the remaining 14.9 MW by 2014 year end.¹³⁴
6 According to a press release by the project developers, the estimated cost of the Turning
7 Point Solar project is \$250 million, or \$5,010 per kW.¹³⁵ The costs associated with this
8 project included in the GRR will include “the lease payment..., O&M expenses associated
9 with the operation of the facility, and taxes. It is expected that over the life of the facility
10 certain other capital investments will need to be made to keep it in operation. These
11 investments will be made directly by AEP Ohio.”¹³⁶ On, July 1, 2011, AEP Ohio filed an
12 estimate of the annual revenue requirements associated with this project.¹³⁷

13 In addition to renewable and alternative capacity investments such as the Turning
14 Point Solar Project, the GRR could include the costs of “more traditional capacity
15 constructed or financed by the Company and approved by the Commission. This rider
16 would also be used to recover any major investments that extend the life or increase the
17 capacity of existing generation, or investments made to replace older, smaller coal-fired

¹³⁴ Direct Testimony of Joseph Hamrock on behalf of CSP and OPCo, at 39, lines 10-14.

¹³⁵ “Transformative 49.9 MW Solar Array to be Developed on Reclaimed Ohio Strip Mine; Spain’s Leading Solar Manufacturers to Build Ohio Production Facilities: Gov. Strickland, American Electric Power CEO, Turning Point Solar and Others Sign Memoranda to Create \$250 Million Solar Farm,” October 5, 2010.

¹³⁶ Supplemental Direct Testimony of Philip Nelson on behalf of CSP and OPCo, at 4, lines 18-22.

¹³⁷ Supplemental Direct Testimony of Philip Nelson on behalf of CSP and OPCo, Exhibit PJN-4, at 2.

1 units with new gas-fired capacity.”¹³⁸ However, the Company has made no attempt to
2 explain or itemize what those costs might be.

3 **Q. BESIDES THE TURNING POINT SOLAR PROJECT, HAS AEP OHIO**
4 **IDENTIFIED OTHER SPECIFIC GENERATION INVESTMENTS TO BE**
5 **INCLUDED IN THE GRR?**

6 A. The Company has not identified in this proceeding other specific generation investments
7 to be included in the GRR during the proposed ESP period. However, in a recent investor
8 presentation AEP provided a range of estimates of the costs necessary to replace coal-fired
9 generation that may be retired due to proposed environmental regulations. AEP projected
10 costs of \$973 million to \$1,807 million to replace 5,480 MW of coal-fired generation that
11 it identified as “fully exposed” to upcoming environmental regulations and which is likely
12 to retire between 2012 and 2020. Given that 2,485 MW (or 45%) of this “fully exposed”
13 generation is owned by AEP Ohio, the proportionate costs of replacement generation in
14 AEP Ohio could be approximately \$440 million to \$819 million.¹³⁹ These figures do not
15 include any costs associated with replacing the generation capacity that AEP has identified
16 as “partially exposed” to environmental regulations. Therefore, the costs included in the
17 GRR could be higher if AEP Ohio were to replace more of its generation capacity.

18 **Q. WHAT DOES THIS MEAN FOR CUSTOMERS?**

19 A. It appears possible that the Company may seek to recover significant expenditures from
20 customers through the GRR although the Company has provided neither a justification for

¹³⁸ Direct Testimony of Philip Nelson on behalf of CSP and OPCo, at 22, lines 1-5.

¹³⁹ AEP Investor Presentation at Deutsche Bank Alternative Energy, Utilities & Power Conference, 5/12/2011, at 9.

1 any facilities nor a projection of the associated costs in this proceeding. While the timing
2 of such costs is uncertain, these costs could be substantial and could be recovered in the
3 GRR in the future. The wide range of potential costs to which Ohio ratepayers may be
4 exposed reveals the risk associated with the proposed ESP.

5 **Q. DOES AEP OHIO INCLUDE EITHER THE TURNING POINT SOLAR PROJECT**
6 **OR THE COSTS OF OTHER REPLACEMENT GENERATION TO BE**
7 **RECOVERED IN THE GRR RIDER IN ITS ESTIMATE OF THE PROPOSED**
8 **ESP PRICE?**

9 A. No.

10 **Q. DID YOU CORRECT AEP OHIO'S PROPOSED ESP PRICE TO REFLECT THE**
11 **ESTIMATED COSTS OF THE GRR?**

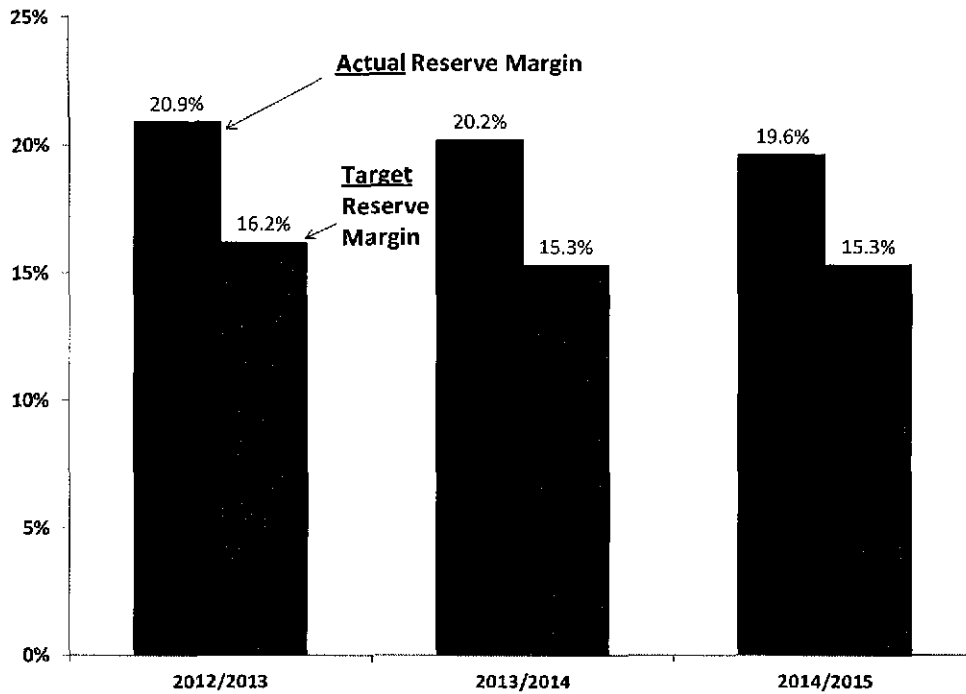
12 A. Yes. As a conservative estimate, I included a cost estimate of the Company's proposed
13 Turning Point Solar Project, but did not include any additional costs associated with
14 replacement generation for the "fully exposed" coal plants during the ESP period. I relied
15 on Mr. Nelson's forecasted annual revenue requirement associated with the Turning Point
16 Solar Project to derive an estimate of \$0.12 per MWH on average over the entire ESP
17 period. However, as I noted earlier, if the Commission approves the GRR, I would expect
18 that the costs associated with this rider could be much higher in the future, especially
19 given the parent company's statements and cost estimates regarding the need to replace
20 "fully exposed" coal plants.

1 **Q. IS THERE ANY EVIDENCE TO SUGGEST THAT MORE GENERATION**
2 **CAPACITY IS PHYSICALLY NEEDED IN AEP OHIO'S REGION OF PJM?**

3 A. No. The results of PJM's RPM auctions suggest that there is a substantial amount of
4 excess capacity in the region, with which AEP Ohio could contract bilaterally. As FES
5 witness Dr. Shanker describes, RPM acquires all the necessary capacity needed for the
6 LSEs participating in the RPM. Eligible resources can be generation, demand response,
7 energy efficiency and qualified transmission enhancements. PJM's RPM auctions solicit
8 commitments from capacity resources to ensure resource adequacy, which will enhance
9 the long-term reliability of service within the RTO. While AEP Ohio load is not part of
10 the RPM auction, PJM has already procured more than enough capacity for all of the
11 LSEs in PJM, including AEP Ohio, for the entire ESP period and has a reserve margin that
12 exceeds its target.¹⁴⁰

¹⁴⁰ The actual reserve margin shown in the graph is understated since it only includes capacity that cleared in the PJM base residual auctions. Other capacity in PJM that did not clear in the auction and has not been retired, if included, would increase the size of the reserve margin.

PJM Has Sufficient Capacity



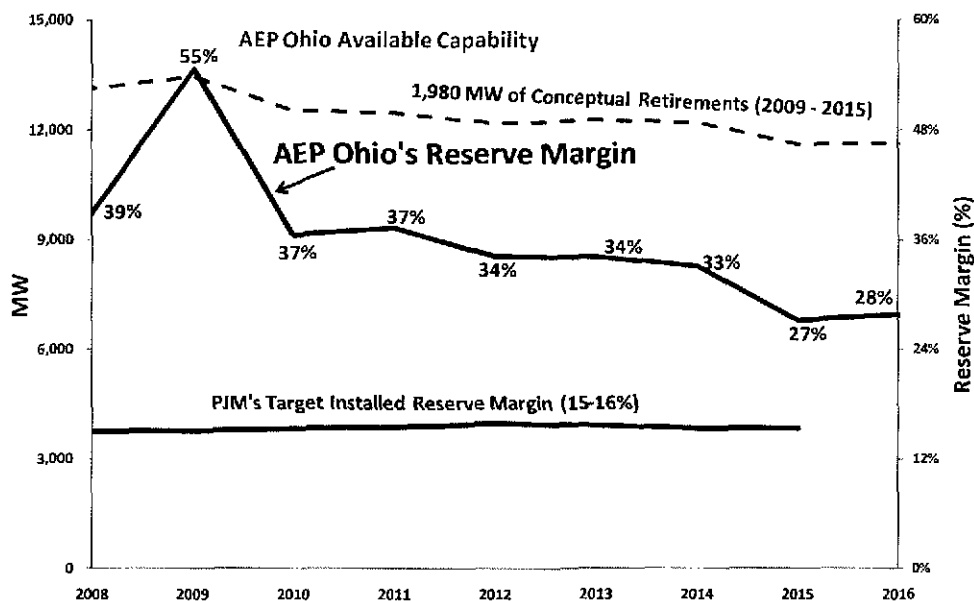
Q. IS THERE ANY EVIDENCE TO DEMONSTRATE THAT THERE IS A NEED FOR AEP OHIO TO BUILD MORE GENERATION CAPACITY TO SERVE ITS CUSTOMERS?

A. No. According to AEP Ohio's own figures, the Company's net capability of its generating assets well exceeds its peak load both now and in the foreseeable future.¹⁴¹ AEP Ohio's reserve margin was about 55% in 2009, 37% in 2010, and is expected to gradually decline to about 28% by 2016, even after assuming 2.0 GW in plant retirements.¹⁴² These numbers are well above PJM's target installed reserve margin of 15-16%.

¹⁴¹ AEP Ohio Filing, PUCO Case Nos. 11-2501-EL-FOR and 11-2502-EL-FOR, 4/15/2011, at 140-141.

¹⁴²

AEP Ohio's Reserve Margin is Well Above PJM's Target Reserve Margin



Source: AEP Filing, PUOCO Case Nos. 11-2501-EL-FOR and 11-2502-EL-FOR, 4/15/2011, pp. 140-141. Retirements include Phil Sporn 5 (440 MW, 2010), Conesville 3 (165 MW, 2012), Muskingum River 284 (395 MW, 2012), Muskingum River 183 (380 MW, 2014), Muskingum River 5 (600 MW, 2015). OPCo and CSP's Non-Coincident Peak Loads have been scaled to reflect AEP Ohio's expected share of PJM ICP, based upon AEP Ohio's SCP contribution to PJM's SCP in 2009. Available Capability is net of an average of 1.0 GW in annual net sales over the 2008-2016 period. PJM's Target IRM is known through PY14/15.

As a result, AEP Ohio has excess supply, which excess capacity and energy it can then sell to its affiliates and other third parties.¹⁴³

4. Pool Termination or Modification Provision

Q. BRIEFLY DESCRIBE THE AEP INTERCONNECTION AGREEMENT.

A. The AEP Interconnection Agreement is a generation pooling agreement that was initially entered into in 1951. The Agreement has undergone various modifications, with the last one occurring in November 1980. Current parties include Appalachian Power Company, Kentucky Power Company, Indiana Michigan Power, CSP, and OPCo. American Electric

COMPETITIVELY-SENSITIVE CONFIDENTIAL, emphasis retained from the original.

¹⁴³ The available capability and reserve margin shown above is net of an average of 970 MW in annual net sales of capacity over the period 2008-2016. AEP Ohio's forecast of the margins from off-system sales of energy total over \$770 million pre-tax during the 2012-2014 period.

1 Power Service Corporation acts as the agent on behalf of the members. Members share
2 their generation resources to obtain the net requirements for each member's internal load,
3 share in off-system sales revenues, and protect against unplanned outages.

4 As a part of the proposed ESP, AEP Ohio is proposing to recover the costs
5 associated with a significant change in its generating cost resulting from either the
6 termination of the AEP Pool or from the substitution of a new agreement.

7 **Q. DID THE COMPANY PROVIDE AN ESTIMATE OF THE COSTS TO BE**
8 **RECOVERED UNDER THE POOL TERMINATION OR MODIFICATION**
9 **PROVISION?**

10 A. No. Company witness Nelson simply stated that, "In general, the Company will compare
11 the lost AEP Pool capacity revenue to increases in net revenue related to new wholesale
12 transaction [sic] or decreases in generation asset costs that result from the FERC
13 proceedings related to the AEP Pool."¹⁴⁴ In addition, Mr. Nelson stated that "[t]he
14 Company has not developed any mathematical calculation" to be used by AEP Ohio to
15 make this determination.¹⁴⁵

16 **Q. HAVE YOU BEEN ABLE TO QUANTIFY THE POTENTIAL LOSS OF**
17 **CAPACITY REVENUES THAT AEP OHIO MAY EXPERIENCE UPON**
18 **TERMINATION OR MODIFICATION OF THE AEP POOL?**

¹⁴⁴ Direct Testimony of Philip Nelson on behalf of CSP and OPCo, at 30, lines 20-22.

¹⁴⁵ AEP Ohio's Interrogatory Response, FES, Set 5, INT-5-018.

1 A. Yes. Although the outcome of AEP's negotiations pertaining to the termination or
2 modification of its Interconnection Agreement is uncertain, it is possible to use AEP
3 Ohio's forecasted AEP Pool capacity revenues to quantify the potential charges under the
4 Pool Termination or Modification Provision rider. For instance, AEP Ohio forecasts
5 revenues in 2014 of \$481 million from net sales of an average 2,761 MW in capacity to
6 the AEP Pool.¹⁴⁶ This equates to a capacity transfer price of \$478 per MW-Day during
7 2014, a price that AEP Ohio is unlikely to replicate through market-based transactions.

8 **Q. USING THE 2014 FORECASTED YEAR, DO YOU HAVE AN ESTIMATE OF**
9 **THE REPLACEMENT CAPACITY REVENUES AEP OHIO MAY BE ABLE TO**
10 **RECEIVE FOR ITS EXCESS CAPACITY?**

11 A. One reasonable proxy for the value AEP Ohio may be able to receive for its excess
12 capacity once the AEP Pool is either terminated or modified is the PJM RPM capacity
13 price,¹⁴⁷ which has an average value of \$85 per MW-Day in 2014 (\$392 per MW-Day less
14 than AEP Ohio's currently forecast capacity transfer price).¹⁴⁸

15 **Q. HAVE YOU BEEN ABLE TO QUANTIFY THE POTENTIAL IMPACT OF THE**
16 **POOL TERMINATION OR MODIFICATION PROVISION ON RETAIL RATES?**

¹⁴⁶ AEP Ohio's Interrogatory Response, FES 6-009, Attachment 1, at 5.

¹⁴⁷ When AEP modeled the costs associated with the termination of the AEP Pool for a study conducted in Indiana, it assumed that replacement capacity prices were those available from PJM's RPM market. (Study Report of AEP Interconnection Agreement submitted by Indiana Michigan Power to the Indiana Utility Regulatory Commission, IURC Cause No. 43306, 12/11/2009, at 25-30.)

¹⁴⁸ \$85 per MW-Day is the weighted average of PJM's Base Residual Auction results of \$27.73 per MW-Day for the planning year 2013-2014 and \$125.99 per MW-Day for the planning year 2014-2015.

1 A. Yes, based upon AEP's forecast for 2014, AEP Ohio would lose \$392 per MW-Day in
2 revenue on sales of its excess capacity. Therefore, if this Pool Termination or
3 Modification Provision were in place, AEP Ohio would be able to seek recovery of \$395
4 million from customers in 2014, at a charge of approximately [REDACTED].¹⁴⁹ This
5 figure is based on a full year of lost capacity revenues. According to the Company, the
6 earliest date that the AEP Pool can be terminated is January 1, 2014, unless the members
7 all agree to terminate earlier.¹⁵⁰ Therefore, whenever the AEP Pool does terminate or is
8 modified, this rider could increase charges to Ohio customers by hundreds of millions of
9 dollars per year.

10 **Q. DOES AEP OHIO INCLUDE THESE COSTS IN ITS ESTIMATE OF THE**
11 **PROPOSED ESP PRICE?**

12 A. No.

13 **Q. DID YOU CORRECT AEP OHIO'S PROPOSED ESP PRICE TO REFLECT THE**
14 **ESTIMATED COSTS OF THE POOL TERMINATION OR MODIFICATION**
15 **PROVISION?**

16 A. Yes. For purposes of comparison to the Competitive Benchmark Price in this proceeding,
17 I considered a low and a high range of costs associated with this provision. For the low
18 range, I assumed that the financial impact of this rider is zero throughout the proposed

¹⁴⁹ 2,761 MW * \$392 per MW-Day * 365 Days = \$395 million in 2014. [REDACTED]

¹⁵⁰ AEP Ohio Interrogatory Response, OCC, Set 3, INT-074. AEP Ohio claims that the rider is needed during this ESP "to recover any significant increase in costs if that were to occur during the term of this ESP plan" (CSP's and OPCo's Application, at 15).

1 ESP period.¹⁵¹ On the upper end, I assume that the AEP Pool agreement is modified so as
2 to impact only the last five of the 29 months in the proposed ESP period based on the
3 2014 estimate of lost capacity revenues shown above. This represents a [REDACTED]
4 rate impact over the current proposed ESP period.

5 **Q. DOES THE TERMINATION OF THE AEP POOL HAVE ANY OTHER**
6 **SIGNIFICANT IMPLICATIONS FOR AEP OHIO?**

7 A. Yes. With the termination of the AEP Pool, AEP Ohio, as an entity with excess capacity,
8 will have the opportunity to make additional energy sales at market prices that were
9 previously transacted within the AEP Pool at below-market rates.

10 **Q. WHAT DO THESE INCREASED ENERGY SALES MEAN FOR AEP OHIO?**

11 A. Because AEP Ohio is able to retain 100% of off-system energy sales margins, these
12 increased sales could directly translate into increased profits for AEP shareholders,
13 notwithstanding the fact that AEP Ohio is asking the Commission for recovery of the
14 additional environmental capital and O&M needed to keep its plants running.¹⁵²

15 **Q. HAVE YOU BEEN ABLE TO QUANTIFY THE POTENTIAL INCREASE IN**
16 **ENERGY MARGINS THAT AEP OHIO MAY EXPERIENCE UPON THE**
17 **TERMINATION OF THE AEP POOL?**

¹⁵¹ It is not clear why the Commission needs to approve the rider at this time given that Mr. Nelson claims in discovery that it is more likely that the members will not terminate the AEP Pool before June 1, 2014. AEP Ohio Interrogatory Response, OCC, Set 3, INT-074.

¹⁵² Since the Company has not provided the methodology that will be used to determine the costs recovered in the proposed rider, it is unclear whether and how AEP Ohio would credit additional net sales energy revenues that would not exist absent the pool termination or modification. AEP Ohio Interrogatory Response, FES, Set 10, INT-10-3.

1 A. Again, although uncertainty surrounds the outcome of AEP's negotiations pertaining to
2 the termination of its Interconnection Agreement, it is possible to use AEP Ohio's
3 historical AEP Pool energy revenues to quantify the potential increase in off-system sales
4 energy margins that AEP Ohio may experience upon the termination of the AEP Pool.
5 For instance, during the most recent twelve-month period for which AEP supplied data
6 (March 2010 to February 2011), AEP Ohio sold approximately 6.4 TWH in net internal
7 energy transactions within the AEP Pool for sales revenues of approximately \$170
8 million.¹⁵³ These sales revenues correspond to an average energy transfer price within the
9 AEP Pool of \$26.60 per MWH. The AEP Zone around-the-clock energy price for the
10 same period was \$37.72 per MWh, \$11.12 per MWh higher than the internal transfer
11 price. If AEP Ohio had sold these 6.4 TWH at an average price equal to the around-the-
12 clock price, it would have earned an additional \$72 million in off-system energy margins
13 to the benefit of AEP's shareholders.

14 5. POLR Charge

15 **Q. MR. SCHNITZER, DOES MS. THOMAS MAKE A PROPER COMPARISON OF**
16 **CUSTOMER MIGRATION COSTS IN HER PROPOSED ESP PRICE AND THE**
17 **COMPETITIVE BENCHMARK PRICE?**

18 A. No. Ms. Thomas does not include the cost associated with customer migration in AEP
19 Ohio's Proposed ESP Price, but does include this cost in her estimate of the Competitive
20 Benchmark Price – so her comparison is skewed in favor of the proposed ESP.
21

¹⁵³ AEP Ohio Interrogatory Response, OEG, Set 3, INT-3-003, Attachment 1, at 4.

1 **Q. PLEASE EXPLAIN.**

2 **A. Ms. Thomas describes the POLR obligation as follows:**

3 “The Company incurs a POLR obligation because all customers are
4 free to switch to receive generation service from a CRES provider,
5 either on an individual basis or as part of governmental aggregation. In
6 addition, customers are free to return to receiving SSO generation
7 service from the Company when they so choose.”¹⁵⁴

8 Ms. Thomas argues that “[t]here is a definite and significant cost associated with
9 providing customers this flexibility” because customers “have the right to rely on the
10 Company for fixed price generation service,” and therefore claims that the “Company
11 must be appropriately compensated for this option that it is required to provide.”¹⁵⁵ Ms.
12 Thomas adds that the Company’s proposed POLR charge is “nonbypassable because
13 customers must continue to pay the POLR charge if they want to retain access to SSO
14 generation rates.”¹⁵⁶ Although the POLR charge is a separate non-bypassable charge in
15 the Company’s proposal, it is not included in the Proposed ESP Price shown in Exhibit
16 LJT-2.

17 But, she does include consideration of those same risks and costs in her
18 Competitive Benchmark Price via the Transaction Risk Adder.¹⁵⁷ Indeed, wholesale
19 suppliers bidding fixed-price full requirements service in a competitive SSO solicitation
20 process also assume migration costs and risks associated with retail customers switching
21 to and from SSO service, and therefore include such costs in their bid prices. Customer
22 migration costs involve the financial costs and risks associated with the uncertainty

¹⁵⁴ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 13, lines 18-21.

¹⁵⁵ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 14, lines 6-7, 16-18.

¹⁵⁶ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 15, lines 20-21.

¹⁵⁷ Direct Testimony of Laura Thomas on Behalf of CSP and OPCo, at 8, lines 7-10.

1 regarding customer switching and its effect on the SSO volumes to be supplied.
2 Customers have an incentive to elect service from CRES suppliers when the SSO rate is
3 higher than market prices, and they have an incentive to elect SSO service when the rate is
4 lower than market prices. This POLR cost and risk is therefore included in a supplier's
5 bid.¹⁵⁸

6 However, Ms. Thomas compares the Proposed ESP Price (without the POLR
7 charge) to the Competitive Benchmark Price (including migration costs and risks) in
8 Exhibit LJT-2. As a result, she is making an "apples" to "oranges" comparison. Because
9 the POLR charge is undeniably part of the ESP, this cost must be included in the price
10 comparison with an MRO and its omission in Exhibit LJT-2 is inappropriate.

11 **Q. IN ITS 2008 FILING FOR THE CURRENT ESP, DID AEP OHIO**
12 **ACKNOWLEDGE THAT CUSTOMER MIGRATION COSTS SHOULD BE**
13 **INCLUDED IN THE PROPOSED ESP PRICE?**

14 **A.** Yes. In Exhibit JCB-2, since POLR costs are already included in the estimated market bid
15 price, AEP Ohio witness Baker made an adjustment to include the POLR costs in both the
16 "Estimated Cost of the Companies' ESP" and in the blended generation price used to
17 develop the "Estimated Cost of the Market Rate Option."¹⁵⁹

¹⁵⁸ In discovery response PUCO, Set 28, INT-28-001, Ms. Thomas states that the POLR costs are not included in the Company's Competitive Benchmark Price. However, no adjustment is made to back out these costs from the estimated MRO supplier bid price.

¹⁵⁹ Case No. 08- 918-EL-SSO, Direct Testimony of Craig Baker on Behalf of CSP and OPCo, 7/31/2008, Exhibit JCB-2.

1 **Q. WHAT EXPLANATION DOES MS. THOMAS PROVIDE FOR NOT INCLUDING**
2 **THE POLR COSTS IN THE PROPOSED ESP PRICE AND THE TOTAL**
3 **GENERATION PRICE SHOWN IN EXHIBIT LJT-2?**

4 A. In her Supplemental Direct Testimony filed on July 6, 2011, Ms. Thomas states that “the
5 POLR charges were not included in the MRO test because, generally, their existence does
6 not impact the results of the test” because “[a]dding the same charge to both sides of an
7 equation or comparison would not change the end result.”¹⁶⁰

8 **Q. DO YOU AGREE WITH HER CONCLUSION?**

9 A. No. In fact, Ms. Thomas’ Exhibit LJT-4 in her Supplemental Direct Testimony reveals
10 that the net benefit of the ESP that she calculates decreases from \$1.41 to \$1.10 per MWH
11 when POLR costs are included in the Total Generation Service Price and the Proposed
12 ESP Price. I believe this correction to her analysis is material, and when combined with
13 other corrections to Ms. Thomas’ analysis, significantly alters the results of her price
14 comparison.

15 **Q. IN MS. THOMAS’ SUPPLEMENTAL DIRECT TESTIMONY, SHE STATES**
16 **THAT, “FOR SIMPLICITY AND FOR PURPOSES OF THIS ILLUSTRATION,**
17 **NO ADDITIONAL POLR COSTS WERE ADDED TO THE COMPETITIVE**
18 **BENCHMARK PRICE. THIS PROVIDES A CONSERVATIVE ASSUMPTION IN**
19 **THAT NO ADJUSTMENTS ARE MADE TO THE COMPETITIVE**

¹⁶⁰ Supplemental Direct Testimony of Laura Thomas on behalf of CSP and OPCo, at 19, lines 6-9.

1 **BENCHMARK PRICE TO ACCOUNT FOR POLR.”¹⁶¹ DO YOU AGREE THAT**
2 **HER APPROACH REGARDING THE POLR CHARGE IS CONSERVATIVE?**

3 A. No. There is no reason to add POLR costs to the Competitive Benchmark Price, since as I
4 describe earlier, bidders already reflect these costs in their bids. Therefore, it is not
5 necessary to add these costs to the suppliers’ bid prices. Ms. Thomas does not make a
6 conservative assumption; rather, she appears to be correcting the mistake found in Exhibit
7 LJT-2, where she omits the POLR costs in the Proposed ESP Price when making the price
8 comparison to an MRO. In her Supplemental Direct Testimony Exhibit LJT-4, Ms.
9 Thomas adds \$3.07 per MWH of estimated POLR costs to the Total Generation Service
10 Price that is blended with the Competitive Benchmark Price and adds \$2.84 per MWH of
11 estimated POLR costs to the Proposed ESP Price.

12 **Q. DID YOU CORRECT MS. THOMAS' ESTIMATE OF THE PROPOSED ESP**
13 **PRICE FOR THE POLR CHARGE?**

14 A. Yes. For purposes of comparison to a competitive bid price, I accepted AEP Ohio’s
15 calculation of the POLR charge of \$2.84 per MWH and added it to the Proposed ESP
16 Price. I also included the same POLR charge in the Total Generation Service Price used
17 to calculate the blended “MRO Annual Price.”

¹⁶¹ Supplemental Direct Testimony of Laura Thomas on behalf of CSP and OPCo, at 20, lines 6-9.

6. Once Corrected, the Proposed ESP Price is \$10 to \$14 per MWH Higher than AEP Ohio's Figure

Q. MR. SCHNITZER, DID YOU CORRECT AEP OHIO'S PROPOSED ESP PRICE TO REFLECT THE COST AND UNCERTAINTY RESULTING FROM AEP OHIO'S PROPOSED RIDERS THAT YOU JUST DESCRIBED?

A. Yes. I do not believe it is correct to ignore the expected fuel and environmental cost increases over the proposed ESP period, or omit the costs and risks of the other proposed riders and simply assume they are zero. The Proposed ESP Price that Ms. Thomas presents significantly understates the range of costs and risks that customers would face under the proposed ESP. Adding the costs associated with the proposed generation-related riders that I have quantified increases AEP Ohio's Proposed ESP Price by about \$10 to \$14 per MWH – from \$59.82 per MWH to somewhere in the range between \$69.89 and \$73.49 per MWH. My corrections to the Proposed ESP Price are summarized below.