

In The
SUPREME COURT OF OHIO

ORIGINAL

Industrial Energy Users-Ohio, <i>et al.</i> ,	:	Case Nos. 2013-0228
	:	2012-2098
Appellants,	:	
	:	Appeal from the Public Utilities
v.	:	Commission of Ohio, Case No. 10-2929-
	:	EL-UNC, <i>In the Matter of the</i>
The Public Utilities Commission of Ohio,	:	<i>Commission Review of the Capacity</i>
	:	<i>Charges of Ohio Power Company and</i>
Appellee.	:	<i>Columbus Southern Power Company.</i>

**THIRD MERIT BRIEF
SUBMITTED ON BEHALF OF
THE PUBLIC UTILITIES COMMISSION OF OHIO**

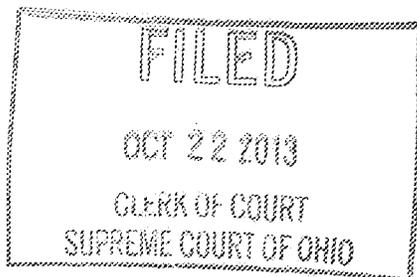
Samuel C. Randazzo (0016386)
Counsel of Record
Frank P. Darr (0025469)
Joseph E. Oliker (0086088)
Matthew R. Pritchard (0088070)
McNees Wallace & Nurick LLC
21 East State Street, 17th Floor
Columbus, Ohio 43215
614.469.8000 (telephone)
614.469.4653 (fax)
sam@mwncmh.com
fdarr@mwncmh.com
joliker@mwncmh.com
mpritchard@mwncmh.com

**Counsel for Appellant/Cross-Appellee,
Industrial Energy Users-Ohio**

Michael DeWine (0009181)
Attorney General of Ohio

William L. Wright (0018010)
Section Chief
John H. Jones (0051913)
Counsel of Record
Thomas W. McNamee (0017352)
Steven L. Beeler (0078076)
Assistant Attorneys General
Public Utilities Section
180 East Broad Street, 6th Floor
Columbus, Ohio 43215-3793
614.466.4397 (telephone)
614.644.8764 (fax)
william.wright@puc.state.oh.us
john.jones@puc.state.oh.us
thomas.mcnamee@puc.state.oh.us
steven.beeler@puc.state.oh.us

**Counsel for Appellee,
Public Utilities Commission of Ohio**



Bruce L. Weston (0016973)
Ohio Consumers' Counsel
Kyle L. Kern (0084199)
Counsel of Record
Melissa R. Yost (0070914)
Assistant Consumers' Counsel
Office of the Ohio Consumers' Counsel
10 West Broad Street, Suite 1800
Columbus, OH 43215-3485
614.466.9585 (telephone)
614.466.9475 (fax)
kern@occ.state.oh.us
yost@occ.state.oh.us

**Counsel for Appellant/Cross-Appellee,
Ohio Consumers' Counsel**

Mark A. Hayden (0081077)
Counsel of Record
FirstEnergy Service Company
76 South main Street
Akron, OH 44308
330.761.7735 (telephone)
330.384.3875 (fax)
haydenm@firstenergycorp.com

James F. Lange (0059668)
N. Trevor Alexander (0080713)
Calfee, Halter & Griswold
1405 East Sixth Street
Cleveland, OH 44114
216.622.8200 (telephone)
216.241.0816 (fax)
jlang@calfee.com
talexander@calfee.com

David A. Kutik (0006418)
Allison E. Haedt (0082243)
Jones Day
901 Lakeside Avenue
Cleveland, OH 44114
216.586.3939 (telephone)
216.579.0212 (fax)
dakutick@jonesday.com
aehaedt@jonesday.com

**Counsel for Appellant/Cross-Appellee,
FirstEnergy Solutions Corp.**

Steven T. Nourse (0046705)
Counsel of Record
Matthew J. Satterwhite (0071972)
American Electric Power Corporation
1 Riverside Plaza, 29th Floor
Columbus, OH 43215
614.716.1608 (telephone)
614.716.2950 (fax)
stnourse@aep.com
mjsatterwhite@aep.com

Daniel R. Conway (0023058)
James B. Hadden (0059315)
L. Bradford Hughes (0070997)
Christen M. Blend (0086881)
Porter Wright Morris & Arthur
41 South High Street
Columbus, OH 43215
614.227.2270 (telephone)
614.227.1000 (fax)
dconway@porterwright.com
jhadden@porterwright.com
bhughes@porterwright.com
cblend@porterwright.com

Martin V. Totaro (PHV 4122-2013)
Jeffrey A. Lamken (PHB 4120-2013)
MoloLamken
The Watergate, Suite 660
600 New Hampshire Avenue, N.W.
Washington, D.C. 20037
202.556.2013 (telephone)
202.536.2013 (fax)
mtotaro@mololamken.com
jlamken@mololamken.com

**Counsel for Appellee/Cross-Appellant,
Ohio Power Company**

TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES	ii
INTRODUCTION.....	1
BACKGROUND.....	3
STATEMENT OF THE FACTS.....	6
STANDARD OF REVIEW	9
ARGUMENT	11
Proposition of Law No. I:	
The Commission’s factual findings applying a widely used model and methodology for calculating the energy credit to AEP-Ohio’s capacity rate are reasonable and lawful.	11
A. The Commission’s shopping level for the energy credit was appropriate.	12
B. The Commission incorporated accurate inputs into its energy credit methodology.	13
1. The Commission’s model inputs are known and verifiable.	13
2. The Commission’s Aurora model was properly calibrated.....	15
3. The Commission’s model incorporated the proper energy margins.	16
4. The Commission’s model reasonably forecasted market prices.....	20
5. The Commission’s model utilized accurate fuel costs and heat rates for AEP-Ohio’s generation plants.	21
CONCLUSION	23
PROOF OF SERVICE	25

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>AK Steel Corp. v. Pub. Util. Comm.</i> , 95 Ohio St.3d 81, 2002-Ohio-1735, 765 N.E.2d 862	10
<i>AT&T Communications of Ohio, Inc. v. Pub. Util. Comm.</i> , 51 Ohio St.3d 150 154, 555 N.E.2d 288 (1990).....	10
<i>Cincinnati Bell Tel. Co. v. Pub. Util. Comm.</i> , 92 Ohio St.3d 177, 749 N.E.2d 262 (2001).....	10
<i>Cleveland Elec. Illum. Co. v. Pub. Util. Comm.</i> , 46 Ohio St.2d 105, 346 N.E.2d 778 (1976).....	10
<i>Collingsworth v. W. Elec. Co.</i> , 63 Ohio St.3d 268, 586 N.E.2d 1071 (1992).....	11
<i>Columbus v. Pub. Util. Comm.</i> , 170 Ohio St. 105, 163 N.E.2d 167 (1959)	22
<i>Constellation NewEnergy, Inc. v. Pub. Util. Comm.</i> , 104 Ohio St.3d 530, 2004-Ohio-6767, 820 N.E.2d 885	10
<i>Consumers' Counsel v. Pub. Util. Comm.</i> , 58 Ohio St. 2d 108, 388 N.E.2d 1370 (1979).....	11
<i>E. Ohio Gas Co. v. Pub. Util. Comm.</i> , 137 Ohio St. 225, 28 N.E.2d 599 (1940).....	22
<i>In re Application of Columbus S. Power Co.</i> , 129 Ohio St.3d 271, 2011- Ohio-2638,951 N.E.2d 751	22
<i>Monongahela Power Co. v. Pub. Util. Comm.</i> , 104 Ohio St.3d 571, 2004- Ohio-6896, 820 N.E.2d 921	10
<i>Ohio Edison Co. v. Pub. Util. Comm.</i> , 78 Ohio St.3d 466, 678 N.E.2d 922 (1997).....	10
<i>Payphone Assn. of Ohio v. Pub. Util. Comm.</i> , 109 Ohio St.3d 453, 2006- Ohio-2988, 849 N.E.2d 4.....	23
<i>Weiss v. Pub. Util. Comm.</i> , 90 Ohio St.3d 15, 2000-Ohio-491, 734 N.E.2d 775.....	11

TABLE OF AUTHORITIES (cont'd)

Page(s)

Statutes

R.C. 4903.13..... 9

Other Authorities

*In the Matter of the Commission Review of the Capacity Charges of Ohio
Power Company and Columbus Southern Power Company, Case No. 10-
2929-EL-UNC (Entry on Rehearing) (Oct. 17, 2012)..... 12*

*In the Matter of the Commission Review of the Capacity Charges of Ohio
Power Company and Columbus Southern Power Company, Case No. 10-
2929-EL-UNC (Opinion and Order) (Jul. 2, 2012) 6, 8, 22, 23*

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**THIRD MERIT BRIEF
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INTRODUCTION

The provision of electricity is generally comprised of two components – capacity and energy. Capacity is the physical plant (“iron in the ground”) that stands ready to generate electric energy. Electric energy is created by *operating* the capacity. Operating the capacity means burning fuel in order to generate the electric energy that turns on the lights or runs the motors.

The cost of capacity is a fixed cost, which includes the capital cost of building and maintaining the generating plant in a ready state, and a fair return on that investment. The cost of operating the capacity is mostly the cost of fuel that is burned to generate electricity, but also includes some variable maintenance and operating costs.

Revenue is generated by operating the plant (burning the fuel) and selling the output. Revenue in excess of fuel costs, as used in this brief, is termed “margin.” As in any business, the margin is a contribution to fixed capacity costs.

The Commission’s¹ task below was to determine a reasonable charge for adequately compensating AEP-Ohio² for its generating capacity. This was done by first totaling the cost to establish and maintain that capacity, including a reasonable return on that investment. The next step was to determine the net revenues that would be available to the Company as a contribution to fixed costs. The difference between the cost of the capacity and the net revenue obtained from operating that capacity (*i.e.*, burning fuel, and generating and selling electric energy output from the capacity) is the amount the Company needs in order to be adequately compensated for its capacity. The Company needs only the difference between the cost of the capacity and the net revenue from operating the capacity, because a fair return is already built into the cost of the capacity. Any more than the difference would overcompensate the Company, any less than the difference would leave the Company short.

The dispute here is over the amount of net revenue likely to be received from generating and selling electric energy, and the general methodology employed in making that determination. That revenue comes from two sources: (1) sales AEP-Ohio makes to its

¹ Public Utilities Commission of Ohio (“Commission” or “PUCO”).

² Ohio Power Company (“AEP-Ohio” or “Company”).

own retail customers and (2) sales made to anyone else. Sales to its own retail customers include sales to retail customers who have not switched to a competitive generation supplier, and are taking service under the standard service offer (“SSO”). This is also sometimes called “native load.” Sales to anyone else means bilateral transactions in the wholesale market selling to third parties and sales into the daily and hourly auction based energy markets administered by PJM. These have traditionally been termed “off system sales” (“OSS”).

It is important to count *all* the net revenues, whether they are received from retail SSO customers, or from wholesale OSS transactions. Net revenues from both comprise the contribution to fixed capacity costs. AEP-Ohio argues that the Commission should have ignored a portion of the revenues. That cannot work. All the net revenues must be weighed against the costs. That is what the Commission did and it should be affirmed.

BACKGROUND

In calculating a just and reasonable capacity rate for AEP-Ohio to satisfy its Fixed Resource Requirement (“FRR”) obligations, the Commission applied an energy credit so the Company would not be over-compensated for its capacity resources. AEP-Ohio disagrees with the methodology the Commission approved to calculate the energy credit to its capacity rate. AEP-Ohio prefers a different methodology, which would decrease the Company’s energy credit and increase its capacity rate. The Commission rejected AEP-Ohio’s methodology and approved another methodology instead. AEP-Ohio appeals that decision.

The Commission's methodology appropriately captured all of AEP-Ohio's energy margins in the calculation. Some of AEP-Ohio's fixed capacity costs can be recovered from its energy margins from both SSO sales and OSS. The Commission's capacity rate compensates AEP-Ohio for its difference in capacity costs not recovered by both margins.

AEP-Ohio's first obligation is to serve its native load pursuant to its SSO. The SSO rate generates revenues above variable costs, in other words, a margin that contributes to the fixed capacity costs.

After serving its native load, AEP-Ohio can sell any excess energy through OSS. The portion of revenues from OSS, net of fuel and variable operating costs, attributable to capacity dedicated to serving Ohio load under the AEP System Interconnection Agreement ("Pool Agreement"), represent a contribution to the fixed cost of capacity at issue in this case. This part of AEP-Ohio's energy margins from OSS under the Pool Agreement are calculated based upon the Company's 40% member load ratio ("MLR"). OSS can occur when a customer shops and AEP-Ohio is relieved of its responsibility to serve that customer's load under the SSO, or any time AEP-Ohio has capacity in excess of its SSO requirements. AEP-Ohio is then free to sell the energy from that capacity to wholesale customers in the market.

In order to establish a just and reasonable capacity rate the Commission must calculate an energy credit that takes into account all of AEP-Ohio's energy margins (revenue less cost) from both the Company's OSS and SSO sales.

Contrary to AEP-Ohio's claims, energy margins from AEP-Ohio's SSO sales were not used to increase the Company's MLR of OSS margins. The SSO margins were calculated separately from the OSS margins, and then added to the OSS margins to compute the Company's total energy margins. Both OSS and SSO sales margins are relevant to the overall calculation of the energy credit using the Commission's methodology. AEP-Ohio's methodology would exclude margins from SSO sales. This would result in the Company obtaining a double recovery of its capacity costs.

The capacity charge of \$188.88 per Megawatt-day ("MW-day") the Commission approved for AEP-Ohio to satisfy its FRR obligations, reflects an energy credit of \$154.07/MW-day.³ This energy credit, which offsets AEP-Ohio's capacity rate, was calculated using a methodology that is widely used throughout the electric industry. In fact, the production simulation model used to calculate the energy credit is what AEP-Ohio is licensed to use, and has used, outside of this case for valuing its own generation fleet and cost of service. The fact that AEP-Ohio now wants the Commission to apply a

³ Also includes \$6.66/MW-day credit for Ancillary Services and \$5/MW-day adjustment the Commission made to the energy credit calculation for the Company's sales to Wheeling Power Company (\$152.41/MW-day energy credit - \$5/MW-day energy credit + \$6.66/MW-day for ancillary services = \$154.07); see *Capacity Case* (Direct Testimony of Emily Medine at Ex. ESM-4) (May 7, 2012) ("Medine Testimony"), IEU App. at 78-79. ("Supp." references the Second Supplement submitted in this docket on behalf of the Public Utilities Commission of Ohio on September 23, 2013; "3rd Supp." references the supplement attached to this brief (Third Brief); "IEU App." references the appendix filed on September 23, 2013 by the Appellant/Cross-Appellee the Industrial Energy Users-Ohio; "FE Supp." references the Supplement filed by FirstEnergy Solutions Corp. September 23, 2013.)

different methodology in this case, because it benefits AEP-Ohio's bottom-line, is without merit.

Although the Commission agreed with AEP-Ohio on other adjustments to the capacity rate, and one related to the energy credit, it is still not satisfied. AEP-Ohio continues to argue for a rate that over-compensates the Company for its FRR capacity resource obligations. AEP-Ohio's dispute amounts to a fundamental difference in methodology in everything from the calculation of total energy margins to accounting for the operation of the Pool Agreement.⁴ The fact that AEP-Ohio prefers a different methodology than the one the Commission approved, to forecast market prices for energy, among other inputs, does not make the Commission's methodology and resulting energy credit calculation unreasonable and unlawful. AEP-Ohio's arguments have no merit. The Court should affirm the Commission's findings of facts.

STATEMENT OF THE FACTS

On July 2, 2012, the Commission issued its Opinion and Order. *In the Matter of the Commission Review of the Capacity Charges of Ohio Power Company and Columbus Southern Power Company*, Case No. 10-2929-EL-UNC ("*Capacity Case*") (Opinion and Order) (Jul. 2, 2012), IEU App. at 50. The Commission established \$188.88/MW-day as an appropriate charge for AEP-Ohio to recover its capacity costs while satisfying the Company's FRR obligations to serve Competitive Retail Electric Service ("CRES") pro-

⁴ See Proposition I.B.3. below for an explanation of the Pool Agreement.

viders. *Id.* at 33, IEU App. at 50. The Commission authorized AEP-Ohio to charge CRES providers only the Reliability Pricing Model (“RPM”) rate in order to promote shopping and competition. *Id.* at 23, IEU App. at 50. The Commission further authorized AEP-Ohio to modify its accounting procedures to defer its incurred capacity costs not recovered from CRES providers up to \$188.88/MW-day during the Electric Security Plan 2 (“ESP 2”) period. *Id.*, IEU App. at 50.

The Commission stated that the record reflected a range in AEP-Ohio’s cost of capacity from a low of \$78.53/MW-day, put forth by FirstEnergy Solutions (“FES”), to the Company’s high of \$355.72/MW-day, with Staff and the Ohio Energy Group (“OEG”) offering recommendations more in the middle of the range. *Id.* (The Commission cited AEP-Ohio Ex. 102 (Direct Testimony of Kelly Pearce at 21) (Mar. 23, 2012) (“Pearce Testimony”), 3rd Supp. at 19; FES Ex. 103 (Direct Testimony of Jonathan Lesser at 55) (Apr. 4, 2012), 3rd Supp. at 24; Staff Ex. 105 (Medine Testimony) at Ex. ESM-4 (May 7, 2012), 3rd Supp. at 57; and OEG Ex. 102 (Direct Testimony of Lane Kollen at 10-11) (Apr. 4, 2012), 3rd Supp. at 26-27. The Commission noted that its modified rate of \$188.88/MW-day is fairly in line with OEG’s recommendation that the capacity charge not exceed \$145.79/MW-day. The Commission remarked that the close proximity of its charge with OEG’s recommendation was further confirmation that the approved charge falls within the zone of reasonableness. *Capacity Case* (Opinion and Order at 35) (Jul. 2, 2012), IEU App. at 79.

The Commission further found that AEP-Ohio did not demonstrate that its proposed charge of \$355.72/MW-day fell within the zone of reasonableness, nor did it

believe that FES' proposed charge of \$78.53/MW-day would result in reasonable compensation for the Company's FRR capacity obligations. *Capacity Case* (Opinion and Order at 33) (Jul. 2, 2012), IEU App. at 77.

The Commission found that the methodology its Staff used for determining AEP-Ohio's capacity cost was appropriate. The Commission adopted most, but not all, of the adjustments its Staff made. For example, it agreed with the adjustments its Staff made to account for margins from OSS and ancillary services receipts. *Id.* at 33-35, IEU App. at 77-79; *see, also*, Medine Testimony at 14-20 and Exs. ESM-1, ESM-2, ESM-3, ESM-4), 3rd Supp. at 43-49, 52, 53-54, 55-56, 57. The Commission, however, took issue with some of the other adjustments its Staff made. *Capacity Case* (Opinion and Order at 34-35) (Jul. 2, 2012), IEU App. at 78-79. Overall, the Commission found Staff's determination of AEP-Ohio's capacity costs to be reasonable, supported by the evidence of record, and adopted it with modifications. *Capacity Case* (Opinion and Order at 33) (Jul. 2, 2012), IEU App. at 77.

The consultant used by the Commission's Staff to calculate the energy credit as an offset to the capacity rate charge was Energy Ventures Analysis, Inc. ("EVA"). Medine Testimony at 1, 3rd Supp. at 30. Energy consultants working for EVA have performed 32 management/performance audits of fuel purchasing practices over the last 27 years. *Id.* at 3, 3rd Supp. at 32. Reports of these audits have been filed with the Commission and its consultants have testified in cases that have gone to hearing. *Id.* An EVA consultant testified in AEP-Ohio's Management/Performance and Financial Audits of the Company's Fuel Adjustment Clause ("FAC") cases and its Electric Security Plan ("ESP") 1

case. *Id.* at 2, 3rd Supp. at 31. The latter case included the Company's amendment to its corporate separation plan and sale or transfer of certain generation assets. *Id.* at 2-3, 3rd Supp. at 31-32.

The methodology employed by EVA in determining the energy credit simulated the hourly dispatch of energy in PJM's energy market using the AURORAxmp ("Aurora") model. *Capacity Case*, Staff Ex. 105 at 4 (Medine Testimony), 3rd Supp. at 33; *Capacity Case*, (Direct Testimony of Ryan Harter) (Apr. 16, 2012) ("Harter Testimony"), 3rd Supp. at 1-17. This model is an energy market forecasting tool that EVA licenses from EPIS, Inc. ("EPIS"). *Capacity Case*, Medine Testimony at 4, 3rd Supp. 33. Aurora allows EVA to generate market-based price and quantity forecasts for all generation units in the market. *Id.* EVA generates a complete electricity market outlook by combining Aurora's dispatch logic with EVA's forecast of fuel prices it develops as part of its FUELCAST services. Harter Testimony at 6-7, 3rd Supp. at 8-9. The forecast of fuel prices is based upon EVA's extensive knowledge and experience with coal, gas, and nuclear fuel markets, including AEP-Ohio's purchasing functions within those markets. The Aurora model is widely used throughout the Electric industry. *Id.* at 7, 3rd Supp. at 9.

STANDARD OF REVIEW

This cross-appeal involves factual questions. R.C. 4903.13 provides that a PUCO order shall be reversed, vacated, or modified by the Court only when, upon consideration of the record, the Court finds the order to be unlawful or unreasonable. *Constellation NewEnergy, Inc. v. Pub. Util. Comm.*, 104 Ohio St.3d 530, 540-541, 2004-Ohio-6767,

820 N.E.2d 885, 894. The Court “will not reverse or modify a PUCO decision as to questions of fact when the record contains sufficient probative evidence to show that the commission’s decision was not manifestly against the weight of the evidence and was not so clearly unsupported by the record as to show misapprehension, mistake, or willful disregard of duty.” *Monongahela Power Co. v. Pub. Util. Comm.*, 104 Ohio St.3d 571, 578, 2004-Ohio-6896, 820 N.E.2d 921, 927 (citations omitted).

The appellant bears the burden of demonstrating that the PUCO’s decision is against the manifest weight of the evidence or is clearly unsupported by the record. *Id.* This Court has consistently refused to substitute its judgment for that of the commission on evidentiary matters, *AK Steel Corp. v. Pub. Util. Comm.*, 95 Ohio St.3d 81, 84, 2002-Ohio-1735, 765 N.E.2d 862, and it should be so here. The appellant’s burden is difficult to sustain since the Court has consistently deferred to the Commission’s judgment in matters that require the Commission to apply its special expertise and discretion with regard to factual matters. *Cincinnati Bell Tel. Co. v. Pub. Util. Comm.*, 92 Ohio St.3d 177, 180, 749 N.E.2d 262 (2001); *AT&T Communications of Ohio, Inc. v. Pub. Util. Comm.*, 51 Ohio St.3d 150 154, 555 N.E.2d 288 (1990); *Cleveland Elec. Illum. Co. v. Pub. Util. Comm.*, 46 Ohio St.2d 105, 108, 346 N.E.2d 778 (1976).

The Court has “complete and independent power of review as to all questions of law” in appeals from the Commission. *Ohio Edison Co. v. Pub. Util. Comm.*, 78 Ohio St.3d 466, 469, 678 N.E.2d 922 (1997). The Court has explained that it may rely on the expertise of a state agency in interpreting a law where “highly specialized issues” are involved and “where agency expertise would, therefore, be of assistance in discerning the

presumed intent of our General Assembly.” *Consumers’ Counsel v. Pub. Util. Comm.*, 58 Ohio St. 2d 108, 110, 388 N.E.2d 1370 (1979). “Due deference should be given to statutory interpretations by an agency that has accumulated substantial expertise and to which the General Assembly has delegated enforcement responsibility.” *Weiss v. Pub. Util. Comm.*, 90 Ohio St.3d 15, 17-18, 2000-Ohio-491, 734 N.E.2d 775, *citing Collingsworth v. W. Elec. Co.*, 63 Ohio St.3d 268, 272, 586 N.E.2d 1071 (1992).

ARGUMENT

Proposition of Law No. I:

The Commission’s factual findings applying a widely used model and methodology for calculating the energy credit to AEP-Ohio’s capacity rate are reasonable and lawful.

In calculating the energy credit, the Commission’s Staff used an accepted market simulation model known as Aurora licensed by Staff’s consultant EVA. The same model is licensed and used by AEP-Ohio and other utility companies. Harter Testimony at 6, 3rd Supp. at 8; Tr. X at 2146, 2149, 3rd Supp. at 79, 80; Tr. XII at 2637, 3rd Supp. at 114.

AEP-Ohio argues, not surprisingly, that the energy credit that the Commission calculated is grossly overstated and therefore that the capacity rate is grossly understated. AEP-Ohio is wrong. Its proposed methodology provides an approximation of the costs incurred to keep its assets operational, but, importantly, neglects to account for profits earned through generating electricity and providing ancillary services. By failing to consider the entire picture, AEP-Ohio’s calculation overstates the capacity charge.

A. The Commission's shopping level for the energy credit was appropriate.

AEP-Ohio argues that the Commission's energy credit is overstated because it is based on a static shopping assumption that is lower than actual shopping levels. EVA assumed a shopping level of 26%, which reflected the current level of shopping in AEP-Ohio's service territory at the time of EVA's analysis. Medine Testimony at 19, 3rd Supp. at 48; Tr. X at 2189, 3rd Supp. at 90. In preparing for this case and gathering the inputs for the Aurora model, EVA requested and received from AEP-Ohio information supporting a then-current shopping level of 26% for the Company's connected load. Tr. X at 2189, 2195, 3rd Supp. at 90, 92. EVA reasonably applied that percentage across the AEP-Ohio system. *Id.* at 2194, 3rd Supp. at 91.

The Commission, rejecting AEP-Ohio's argument on rehearing, stated the obvious – that is, that shopping levels will continually fluctuate in both directions. *Capacity Case* (Entry on Rehearing at 35) (Oct. 17, 2012), IEU App. at 124. The Commission reasoned:

For that reason, we believe that it was appropriate for EVA to use the actual level of shopping as of a recent date, rather than a projection, and find that EVA's figure is a reasonable approximation. EVA's use of a static shopping level provides certainty to the energy credit and capacity rate. The alternative would be to review the level of shopping at regular intervals, an option that would unreasonably necessitate continual recalculations of the energy credit to reflect the shopping level of the moment, while introducing uncertainty into the capacity rate.

IEU App. at 124 (emphasis added).

The methodology employed by EVA and adopted by the Commission, which included the 26% shopping level as an input to the Aurora model, was reasonable and lawful.

B. The Commission incorporated accurate inputs into its energy credit methodology.

AEP-Ohio challenges the Commission's judgment with a panoply of arguments. Specifically, it argues that: the Commission's methodology employs a "black box" model containing unknown inputs that cannot be tested; the model was not properly calibrated before it calculated the energy credit; the energy credit wrongly incorporated traditional OSS and does not properly reflect the Pool Agreement on OSS margins; and the model overstated forecasted market prices, understated fuel costs for AEP-Ohio's coal generation units, and used incorrect heat rates. EVA did not conduct a results-oriented analysis. Tr. X at 2169, 3rd Supp at 86. While EVA's approach did not adjust or manipulate the inputs to come up with a certain output it was reasonable because it considered actual information then known and knowable. The Commission will individually address each of AEP-Ohio's arguments.

1. The Commission's model inputs are known and verifiable.

The Commission did not employ a "black box" method to calculate the energy credit as AEP-Ohio argues. Instead, EVA employed a standard investment approach to valuing capacity and the energy credit that nets against capacity. Tr. X at 2138, 3rd Supp.

at 75. The approach would be the same if EVA were working for a Wall Street firm or working for a utility to sell an asset. *Id.*

AEP-Ohio attempts to support its argument from testimony it solicited on model inputs from the modeler, Mr. Harter, who did not design the inputs. *Id.* at 2141, 3rd Supp. at 76. Ms. Medine, the designer, was the better witness for the model inputs and the aggregations. *Id.* at 2117, 3rd Supp. at 72. In regard to the latter, she simply took the model outputs and summed them according to AEP-Ohio plant ownership and operations. *Id.* at 2126-2127, 3rd Supp. at 73-74. She could and did describe the model inputs. Medine Testimony at 4-14, 3rd Supp. at 33-43; Tr. X at 2141-2142, 2206, 3rd Supp. at 76-77. Ms. Medine described the modeling process as having three parts: 1) the inputs; 2) the actual Aurora run; and 3) the aggregation of the outputs. Tr. X at 2144, 3rd Supp. at 78. Generally, the inputs are AEP-Ohio specific and include its power plant operating characteristics, fuel prices, transmission availability, and wind curves. *Id.* at 2206, 3rd Supp. at 95. The actual Aurora model run is transparent to AEP-Ohio, which licenses and uses the same model from the same vendor. The aggregation of the outputs is simply the sum of the components comprising the margin that contributes to AEP-Ohio's fixed capacity costs.

Far from a "black box," the Commission's methodology used known AEP-Ohio specific inputs that can be meaningfully evaluated. AEP-Ohio's claims to the contrary are without merit and should be denied. The Commission relied on Ms. Medine's testimony, which described the model inputs and explained their origin and design.

2. The Commission's Aurora model was properly calibrated.

EVA properly calibrated the model through running the model “hot” using updated forecasts and pricing information, and by conducting sensitivity tests. Tr. X at 2163-2164, 2209-2211, 3rd Supp. at 82-83, 96-98. EVA did multiple runs of the Aurora model. *Id.* at 2209, 3rd Supp. at 96. It did sensitivity analysis using alternate gas prices, alternate coal prices, and alternate emission allowance prices. *Id.*; See, also Medine Testimony at 7-10, 3rd Supp. at 36-39. EVA spent a considerable amount of time looking at the results and assessing their accuracy, and made some changes, following its multiple runs of the model. Tr. X at 2209, 3rd Supp. at 96. EVA was comfortable with the model's performance, since it had recently been used to value the energy aspects of generation for work related to investments and a major utility that was looking to sell a piece of its position. *Id.* at 2211, 3rd Supp. at 98.

Prior to this assignment and analysis, EVA was involved in a project with the federal government that utilized and ran the Aurora model many times. *Id.* at 2163-2164, 3rd Supp. at 82-83. The federal project concerned a complicated regulatory rate impact analysis that incorporated scenarios involving a number of gas cases, capacity cases, and air regulation cases. *Id.* at 2164-2165, 3rd Supp. at 83-84. The model's projected market prices were checked against actual market prices, thus validating the calibration. *Id.* at 2165, 3rd Supp. at 84.

The model was calibrated using EVA's latest assumptions. *Id.* at 2164, 3rd Supp. at 83. The default databases used by EVA were also calibrated prior to running the

model. *Id.* at 2255, 3rd Supp. at 110. Contrary to AEP-Ohio's claim, the Aurora model was properly calibrated for this run and calculation of AEP-Ohio's energy credit.

3. The Commission's model incorporated the proper energy margins.

AEP-Ohio, along with Appalachian Power, Indiana & Michigan, Kentucky Power, and American Electric Power Service Corporation ("AEPSC"), are parties to the Pool Agreement. Medine Testimony at 16, 3rd Supp. at 45. The Pool Agreement defines how the member companies share the costs and benefits associated with the capacity of their generating plants. *Id.* This sharing is based upon each company's member load ratio. *Id.* The MLR is calculated monthly by dividing each company's highest monthly peak demand for the last twelve months by the aggregate of the highest monthly peak demand for the last twelve months for all member companies. *Id.* The MLR multiplied by the aggregate generation capacity of all the member companies determines each member company's capacity obligation. *Id.*

Some member companies of the AEP system own more capacity than they need to serve native load, other member companies own less. The Pool Agreement reassigns costs from companies that are "long" to companies that are "short" of capacity. The difference between each member company's load obligation and its own generation capacity determines the capacity surplus or deficit of each member company. *Id.* The Pool Agreement requires the capacity deficit companies to make monthly capacity equalization payments to the capacity surplus companies based on the surplus companies' average fixed cost of generation. *Id.* at 16-17, Supp. at 26-27.

As a consequence of AEP-Ohio's participation in the Pool Agreement, a portion of its margins from OSS are redistributed to other members of the Pool Agreement. Harter Testimony at 7, 3rd Supp. at 9. To estimate AEP-Ohio margins subject to this redistribution, EVA compared total hourly simulated dispatch of its generation assets with the forecasted hourly demand data for SSO load provided by AEP-Ohio. *Id.* Where the simulated hourly generation exceeded retail demand, EVA attributed the contribution associated with the excess generation to OSS. *Id.* The portion of OSS revenue retained by AEP-Ohio is the MLR. *Id.* EVA used the average 2010 MLR provided by AEP-Ohio for the entire forecast period. *Id.*; also see Pearce Testimony at Ex. KDP-5, 3rd Supp. at 21-22.

EVA requested an hourly load forecast from AEP-Ohio for its retail load. Tr. IX at 1829, Supp. at 65; Tr. X at 2285, 3rd Supp. at 112. EVA had AEP-Ohio's generation by unit and it made deductions for fuel costs, emission costs, and variable operating and maintenance costs ("VOM"). Tr. X at 2252, 2284, 3rd Supp. at 109, 111. In the Aurora model, EVA used AEP-Ohio's own hourly load forecast to determine the level of OSS that would be available to AEP-Ohio. Tr. IX at 1830, 3rd Supp. at 66.

The calculation done here accounted for OSS and EVA defined that as all generation at an hourly level that was in excess of the retail load and that margin is attributed to MLR. Tr. IX at 1819, 3rd Supp. at 61. There are some hours when none of the revenue is taken as OSS and there are some hours when there is a significant portion. *Id.* OSS are subject to the Pool Agreement and would be scaled by the MLR. *Id.* at 1821, 3rd Supp. at 62. EVA applied the MLR ratio for each of the years 2012 through 2015. *Id.*

All member companies of the Pool Agreement share OSS margins based upon each member company's MLR. Medine Testimony at 17, 3rd Supp. at 46. While recognizing the MLR can change on a monthly basis, EVA decided to establish the MLR for this analysis at 40% for AEP-Ohio, based upon 2010 actual information that indicated a year-round average of 40%. *Id.* EVA included 40% of the margin from OSS and 100% of the margin from standard service offer ("SSO") sales in Ohio (Tr. IX at 1912, 3rd Supp. at 70) to calculate the energy credit. Tr. X at 2186-2189, 2235, 3rd Supp. at 87-90.

AEP-Ohio argues that the energy credit the Commission approved wrongly incorporated traditional OSS margins that did not properly reflect the impact of the Pool Agreement on OSS margins. The Commission properly applied 40% of OSS as the MLR for AEP-Ohio consistent with the Pool Agreement. The Commission's methodology accounted for all of AEP-Ohio's energy revenues and costs from SSO sales and OSS. The net revenue from all of those sales contributed to AEP-Ohio's fixed capacity costs. This overall net revenue must be applied as a credit to AEP-Ohio's capacity rate so the Company is not overcompensated for its capacity resources. The Commission accounted for 40% from OSS pursuant to the Pool Agreement and 100% from SSO sales and then calculated the margins (revenue less cost) for both to obtain a combined total margin for the energy credit. Tr. X at 2186-2189, 2235, 3rd Supp. at 87-90. The Commission calculated the correct energy credit using its methodology.

Under the Commission's methodology, the revenue from both OSS and SSO sales were determined by the locational marginal price ("LMP"), which is an output of the Aurora simulation model. The modeled LMP was a proxy for the actual market-based

rates, which were unknown in advance of their occurrence in the marketplace. Tr. X at 2233, 3rd Supp. at 104. This was a conservative approach because non-shopping SSO customers pay a tariff rate that is in fact higher than the LMP on average. *Id.* at 2198-2199, 2231-2233, 3rd Supp. at 93-94, 102-104. In calculating the energy credit EVA took the LMP and multiplied that price by the sales from the SSO generation and OSS generation, as adjusted by the MLR, and then subtracted the costs of generation being fuel, emissions, and VOM. Tr. X at 2220, 2224, 2226, Supp. at 99, 100, 101.

Another conservative aspect of the approach taken by EVA in calculating the energy credit involved AEP-Ohio's proposal to terminate the Pool Agreement effective January 1, 2014. Because it is merely a proposal that the Federal Energy Regulatory Commission must approve, EVA kept the 40% MLR constant in 2014-2015 because of the uncertainty of its application. Medine Testimony at 18, 3rd Supp. at 47. The exact timing and implications of the termination are difficult to predict. *Id.* Rather than speculate as to its consequences, which could either increase or decrease the energy credit, EVA decided to hold the MLR adjustment constant throughout the period. *Id.* EVA took a reasonable and conservative approach to applying the Pool Agreement due to this uncertainty. If the Pool Agreement were to be terminated and discontinued for those years, then AEP-Ohio would retain 100% of the energy margins instead of the allocated 40% for 2014-2015, and that would result in an increased energy credit for those years. Tr. IX at 1821-1823, 3rd Supp. at 62-64.

4. The Commission's model reasonably forecasted market prices.

AEP-Ohio holds a different view than the Commission as to what methodology should be employed to forecast market prices to calculate the energy credit. AEP-Ohio prefers current forward prices to forecast prices rather than a model forecast. AEP-Ohio accepts forward prices at face value for its analysis, despite the fact that forward prices change hourly and daily. Tr. XII at 2757, 3rd Supp. at 115.

EVA's model relied on a forecast of underlying fuel prices based upon its informed assumptions as to what fuel costs will be in the future. Tr. X at 2165, 3rd Supp. at 84. EVA starts with actual current market prices obtained from being actively involved in both buying and selling coal for parties, and then adds its detailed analysis to determine future market prices both in supply and demand. *Id.* at 2165-2166, 3rd Supp. at 84-85. EVA produces such fuel price forecasts for various clients on a commercial fee basis. EVA's Aurora model constantly gets updated with delivered prices for coal, gas, and emissions, which have been projected by EVA on the same commercial basis. *Id.* at 2169, 3rd Supp. at 86. It conducts quarterly forecasts for clients. *Id.* Forward prices, which AEP-Ohio argues for, are not forecasts. *Id.* at 2166, 3rd Supp. at 85. EVA believed it was more accurate to use a fundamental forecast rather than a forward price curve. *Id.* In developing its market forecast, EVA used current market prices for fuel and then applied its expertise in studying and analyzing market trends in supply and demand. EVA's business is based on its market insight, which has every potential to be more accurate than a forward price curve.

5. The Commission's model utilized accurate fuel costs and heat rates for AEP-Ohio's generation plants.

EVA did not change or manipulate any projected or forecast fuel price data for its Aurora run and analysis in this case. The data reflected EVA's latest input assumptions applicable to analyses performed for any and all clients when it ran the Aurora model and calculated AEP-Ohio's energy credit. The fuel price data used in the model represented the most recent fuel forecasts. Tr. IX at 1841, 3rd Supp. at 67. EVA relied on its FUELCAST, which is a service that it provides to EVA customers. Tr. IX at 1850, 3rd Supp. at 68; Tr. X at 2156, 3rd Supp. at 81. The FUELCAST data includes heat rate, fuel costs, and emissions. Tr. IX at 1883, 3rd Supp. at 69. EVA continuously updated the inputs to the Aurora model to reflect the latest fuel prices. Medine Testimony at 9, 3rd Supp. at 38. This was the approach used by EVA for this engagement. *Id.*

Another set of inputs used by EVA was the EPIS (Aurora model vendor) default heat rate assumptions. EVA relied upon the vendor's default heat rates because EVA, based on experience and knowledge of market operations, believed they represented the appropriate heat rate for the Aurora type of analysis. *Id.* at 10, Supp. at 20. These heat rates were based on the most efficient heat rate at which each AEP-Ohio generation unit could operate, known as the full output heat rate. *Id.* EVA believed the use of the most efficient heat rate improved the quality of the model results. *Id.* at 11, 3rd Supp. at 40.

These AEP-Ohio plants are operating at full capacity, so the heat rates used by EVA are closest to the optimal numbers. Tr. X at 2242, 3rd Supp. at 106. Heat rates vary with the level of output from generating plants. They measure the efficiency of the plant

conversion of fuel to electricity. Just as an automobile is less efficient while accelerating than when maintaining a constant speed, generation plants are less efficient during ramp up. Plant owners attempt to operate them at a steady state of output; at a level of output that yields the most efficient conversion of fuel. Most of the generation from AEP-Ohio is coming from the large coal plants with high capacity factors. *Id.* The heat rates used by EVA are accurate because they reflect the most efficient operation mode. *Id.* at 2245, 3rd Supp. at 107. The point of the analysis is to try to capture the dispatch and that is based on the most efficient heat rate. *Id.* at 2246, 3rd Supp. at 108.

The Court must presume that the Commission's order establishing a capacity rate, including the energy credit, for AEP-Ohio is reasonable; it falls to the appellant to upset that presumption. See *In re Application of Columbus S. Power Co.*, 129 Ohio St.3d 271, 2011-Ohio-2638, 951 N.E.2d 751, citing *Columbus v. Pub. Util. Comm.*, 170 Ohio St. 105, 163 N.E.2d 167 (1959), ¶ 2 of the syllabus, *E. Ohio Gas Co. v. Pub. Util. Comm.*, 137 Ohio St. 225, 28 N.E.2d 599 (1940).

AEP-Ohio's proposed capacity rate failed to credit OSS of energy and ancillary services that it made with its generating assets paid for by ratepayers. *Capacity Case* (Opinion and Order at 34) (Jul. 2, 2012), IEU App. at 78; see, also, Pearce Testimony at 13, Supp. at 2. This is a significant shortcoming that forces AEP-Ohio's capacity customers to bear the entire cost of supporting its generating facilities, while not using all of them. AEP-Ohio also uses these facilities to make OSS, with the cost already paid by its capacity customers. Excluding OSS and ancillary services inflates the Company's capacity price and results in overcompensation to AEP-Ohio. Harter Testimony at 5-6,

Supp. at 42-43; *see, also, Capacity Case* (Testimony of Robert Stoddard at 40) (Apr. 4, 2012), FE Supp. at 42.

The Commission stated that the \$188.88/MW-day capacity charge it approved should reasonably and fairly compensate AEP-Ohio and ensure its ability to earn an adequate return on its investment, as well as enable the further development of competition in the Company's service territory. *Capacity Case* (Opinion and Order at 35-36) (Jul. 2, 2012), IEU App. at 79-80. That determination is based upon substantial evidence addressed during nearly a month of hearing.

AEP-Ohio is asking this Court to reweigh the evidence and substitute its judgment for that of the Commission in deciding what methodology best calculates the energy credit to establish a just and reasonable rate for AEP-Ohio's capacity resources. The Court has previously stated that was not the prerogative of the Court in PUCO appeals. *See Payphone Assn. of Ohio v. Pub. Util. Comm.*, 109 Ohio St.3d 453, 2006-Ohio-2988, 849 N.E.2d 4, ¶ 16.

CONCLUSION

Stripped to its essentials, this cross-appeal presents the Court with competing exercises in judgment. AEP-Ohio seeks a higher capacity rate to inflate its revenues. In doing so it consciously omits important factors that would require its Ohio ratepayers to foot the bill for costs incurred to make sales to others. The Commission, on the other hand, relied upon a comprehensive analysis by a respected consultant, EVA, to reach a result that justly and reasonably compensates AEP-Ohio for its capacity. The question

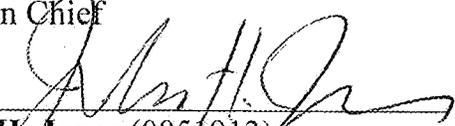
before this Court is not whether EVA's analysis was the best possible analysis, but, rather, only whether it was reasonable. It was.

The Court should reject AEP-Ohio's self-serving, result-oriented exercise and affirm the Commission's decision.

Respectfully submitted,

Mike DeWine (0009181)
Ohio Attorney General

William L. Wright (0018010)
Section Chief

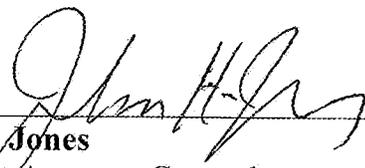


John H. Jones (0051913)
Thomas W. McNamee (0017352)
Steven L. Beeler (0078076)
Assistant Attorneys General
Public Utilities Section
180 East Broad Street, 6th Floor
Columbus, Ohio 43215-3793
Telephone: (614) 466-4397
Facsimile: (614) 644-8767
william.wright@puc.state.oh.us
john.jones@puc.state.oh.us
thomas.mcnamee@puc.state.oh.us
steven.beeler@puc.state.oh.us

Counsel for Appellee
Public Utilities Commission of Ohio

PROOF OF SERVICE

I hereby certify that a true copy of the foregoing Merit Brief, submitted on behalf of appellee, the Public Utilities Commission of Ohio, was served by regular U.S. mail, postage prepaid, or hand-delivered, upon the following parties of record, this 22nd day of October, 2013.



John H. Jones
Assistant Attorney General

Parties of Record:

Samuel C. Randazzo
Frank P. Darr
Joseph E. Olikier
Matthew R. Pritchard
McNees Wallace & Nurick LLC
21 East State Street, 17th Floor
Columbus, Ohio 43215

Kyle L. Kern
Melissa R. Yost
Assistant Consumers' Counsel
Office of the Ohio Consumers' Counsel
10 West Broad Street, Suite 1800
Columbus, OH 43215-3485

Mark A. Hayden
FirstEnergy Service Company
76 South main Street
Akron, OH 44308

James F. Lange
N. Trevor Alexander
Calfee, Halter & Griswold
1405 East Sixth Street
Cleveland, OH 4 4114

Steven T. Nourse
Matthew J. Satterwhite
American Electric Power Corporation
1 Riverside Plaza, 29th Floor
Columbus, OH 43215

Daniel R. Conway
James B. Hadden
L. Bradford Hughes
Christen M. Blend
Porter Wright Morris & Arthur
41 South High Street
Columbus, OH 43215

Martin V. Totaro
Jeffrey A. Lamken
MoloLamken
The Watergate, Suite 660
600 New Hampshire Avenue, N.W.
Washington, D.C. 20037

David A. Kutik
Allison E. Haedt
Jones Day
901 Lakeside Avenue
Cleveland, OH 44114