

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of)	
Columbus Southern Power Company for)	
Approval of its Electric Security Plan; an)	Case No. 08-917-EL-SSO
Amendment to its Corporate Separation)	
Plan, and the Sale or Transfer of Certain)	
Generating Assets.)	

In the Matter of the Application of Ohio)	
Power Company for Approval of its)	
Electric Security Plan; and an)	Case No. 08-918-EL-SSO
Amendment to its Corporate Separation)	
Plan.)	

**DIRECT TESTIMONY OF KEVIN M. MURRAY
ON BEHALF OF INDUSTRIAL ENERGY USERS-OHIO**

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June 30, 2011

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1 **I. INTRODUCTION**

2 **Q1. Please state your name and business address.**

3 A1. My name is Kevin M. Murray. My business address is 21 East State Street, 17th
4 Floor, Columbus, Ohio 43215-4228.

5 **Q2. By whom are you employed and in what position?**

6 A2. I am a Technical Specialist for McNees Wallace & Nurick LLC ("McNees") and
7 the Executive Director of the Industrial Energy Users-Ohio ("IEU-Ohio"). I am
8 providing testimony on behalf of IEU-Ohio.

9 **Q3. Please describe your educational background.**

10 A3. I graduated from the University of Cincinnati in 1982 with a Bachelor of Science
11 degree in Metallurgical Engineering.

1 **Q4. Please describe your professional experience.**

2 A4. I have been employed by McNees for 14 years where I focus on helping
3 IEU-Ohio members address issues that affect the price and availability of utility
4 services. I have also been actively involved, on behalf of commercial and
5 industrial customers, in the formation of regional transmission operators and the
6 organization of regional electricity markets from both the supply-side and
7 demand-side perspective. I serve as an end-use customer sector representative
8 on the Midwest Independent Transmission System Operator, Inc. ("MISO")
9 Advisory Committee and I have been actively involved in MISO working groups
10 that focus on various issues since 1999. I am familiar with the market rules used
11 within MISO and PJM Interconnection, Inc. ("PJM"). I have completed training
12 sessions offered by MISO and PJM to load-serving entities on how to participate
13 and operate in each RTO's regional electricity market. I have assisted customers
14 with facilities within the MISO and PJM regions on developing requests for
15 electricity supply proposals as well as contract negotiations with prospective
16 suppliers.

17 Prior to joining McNees, I was employed by the law firm of Kegler, Brown, Hill &
18 Ritter ("KBH&R") in a similar capacity. Prior to joining KBH&R, I spent 12 years
19 with The Timken Company, a specialty steel and bearing manufacturer. While at
20 The Timken Company, I worked within a group that focused on meeting the
21 electricity and natural gas requirements for facilities in the United States. I also
22 spent several years in supervisory positions within The Timken Company's
23 steelmaking operations.

1 **Q5. Have you previously testified before the Public Utilities Commission of**
2 **Ohio ("Commission")?**

3 A5. Yes. The proceedings before the Commission in which I have submitted
4 testimony are identified in Exhibit KMM-1.

5 **II. PROPOSED PROVIDER OF LAST RESORT ("POLR") CHARGES**

6 **Q6. What is the purpose of your testimony?**

7 A6. The purpose of my testimony is to address the proposed POLR charges for Ohio
8 Power Company ("OPCO") and Columbus Southern Power Company ("CSP")
9 (collectively "the Companies").

10 **Q7. What is your understanding of the generation supply responsibilities of**
11 **electric distribution utilities ("EDU") like OPCO and CSP?**

12 A7. Based on my participation in the electric transition plan proceedings related to
13 the implementation of Ohio's electric restructuring legislation, it is my
14 understanding that EDUs have an obligation to provide a standard service offer
15 ("SSO") of all competitive retail electric services necessary to maintain service to
16 consumers, including a firm supply of electric generation service, and that this
17 obligation was created as part of Amended Substitute Senate Bill 3 ("Am. Sub.
18 SB3") enacted in 1999.

19 **Q8. How does OPCO's and CSP's proposed POLR charge relate to OPCO's and**
20 **CSP's SSO?**

21 A8. As originally proposed, OPCO's and CSP's SSO was divided into generation
22 supply and distribution-related components. This is clearly identified in OPCO's

1 and CSP's application (beginning at page 6) which was filed in this proceeding
2 on July 31, 2008, and the proposed POLR charge is also treated as a distribution
3 component in the Commission's Opinion and Order issued on March 18, 2009
4 (for example, beginning at page 39). In the July 31, 2008 application, OPCO and
5 CSP claimed that the distribution component of its SSO reflected the cost of,
6 among other things, the POLR obligation. In the March 18, 2009 Opinion and
7 Order, at page 40, the Commission stated that the "...Companies proposed ESP
8 should be modified such that the POLR rider will be based on the cost to the
9 Companies to be the POLR and carry the risks associated therewith, including
10 the migration risks." As a result of the appeal taken by IEU-Ohio and the Office
11 of the Ohio Consumers' Counsel ("OCC"), the Ohio Supreme Court recently ruled
12 that there was no evidence to support the position that the Companies' POLR
13 charge is related to any costs that they will incur and "does not reveal 'the cost to
14 the Companies to be the POLR and carry the risks associated therewith'".

15 **Q9. Does the testimony that the Companies have filed in this proceeding reveal**
16 **the cost incurred by the Companies to be the POLR and carry the risks**
17 **associated therewith?**

18 A9. No. Although the Companies could have originally proposed a POLR charge to
19 reflect their costs, they did not do so and they have elected to not take advantage
20 of the opportunity to do so in this phase of the proceeding. The Companies have
21 not demonstrated they incur any costs associated with POLR. Instead, the
22 Companies continue to propose a POLR charge that they claim is supported by
23 their specification and application of the so-called Black Scholes option model (or

1 Black model) as a means to establish a distribution-related charge. The model is
2 based on the optionality that customers have relative to the generation supply
3 service available from an EDU as a result of Ohio law. As indicated previously,
4 this optionality existed prior to the Companies' electric security plan ("ESP").
5 Because the Black model relied upon by the Companies relies upon several
6 incorrect assumptions and also does not reflect any actual costs incurred by the
7 Companies, it is not an appropriate methodology to identify the cost incurred by
8 the Companies to be the POLR and carry the risks, if any, associated therewith
9 or to properly establish POLR charges. Therefore, the Commission should reject
10 the proposed POLR charges.

11 Additionally, the POLR risk that the Companies continue to point to as a result of
12 the potential for customer switching to a competitive retail electric service
13 ("CRES") provider and subsequently returning to SSO can be mitigated by
14 proactively encouraging customers to waive POLR charges and elect to receive
15 SSO service upon any return to the Companies at a market-based price during
16 the remaining term of the ESP.

17 **Q10. Does fulfilling their SSO obligation create risks for EDUs?**

18 A10. The SSO obligation may, depending on the terms of the applicable ESP or
19 market rate offer ("MRO"), create financial risks for the EDU. However, the SSO
20 obligation does not impose a risk on EDUs with regard to the obligation to
21 physically provide generation supply.

1 **Q11. Why does the SSO obligation not impose a risk on EDUs with regard to the**
2 **obligation to provide generation supply?**

3 A11. All Ohio EDUs are members of regional transmission organizations ("RTOs") that
4 are subject to regulation by the Federal Energy Regulatory Commission
5 ("FERC"). The Companies are members of PJM and are obligated to follow
6 PJM's FERC-approved tariff. PJM operates a regional electricity market in all or
7 parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey,
8 North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the
9 District of Columbia. Within PJM's market, the physical risks of electricity supply
10 are managed by PJM. It is my understanding, based on discussions with
11 counsel and my involvement in regulatory proceedings, that the responsibilities of
12 an RTO to ensure reliable operation of the transmission system are recognized in
13 Section 4928.12, Ohio Revised Code.

14 **Q12. How does PJM manage physical supply and risks of electricity supply?**

15 A12. On an annual basis (three years in advance of a delivery year), PJM conducts
16 periodic auctions or requires the submission of resource plans to identify capacity
17 resources deemed sufficient to meet forecast demand, including any required
18 reserve margins. On a day-ahead basis, and in real-time, PJM requires the
19 capacity resources to submit offers to PJM and these offers reflect the prices at
20 which the resources are willing to make themselves available to PJM to be
21 dispatched in accordance with PJM's directions. PJM dispatches resources
22 based upon the least cost set of offer prices to meet actual load that materializes
23 within the PJM footprint and without regard to things like retail service areas.

1 Thus, the dispatching of generation to meet the load of the Companies'
2 customers is managed by PJM. PJM's role in assuming and managing the
3 physical supply risk was discussed extensively during the cross-examination of
4 the Companies' witness J. Craig Baker during the initial evidentiary hearing
5 conducted in this proceeding. At pages 58-60 of Transcript Volume XI, witness
6 Baker acknowledged that PJM dispatches generation resources within its
7 footprint to satisfy demand within the footprint irrespective of who owns the
8 generation resources.

9 **Q13. Do CSP and OPCO have any financial risks regarding the generation**
10 **supply responsibility that is part of the SSO function?**

11 A13. It depends on the structure of the SSO that OPCO and CSP elect to accept as
12 part of an ESP. The Companies' current ESP contains an SSO that includes
13 compensation for generation supply that occurs through fixed rates as well as
14 rates that vary periodically, like the fuel adjustment clause or "FAC", in
15 accordance with specified costs. These rates, by customer class, are shown as
16 total kWh-based prices in Exhibit LJT-4 attached to the direct testimony of
17 Company witness Laura J. Thomas. If the actual cost of providing the SSO
18 generation supply service is below the revenue collected through the SSO
19 charges, the EDUs generate profit. If the reverse is true, a loss occurs. To the
20 extent the EDUs' SSO prices are fixed (rather than variable as a function of
21 specified costs), the EDUs assume a financial risk that the fixed cost component
22 may provide inadequate compensation.

1 **Q14. You indicated earlier that OPCO and CSP have not presented information**
2 **that reveals the cost to the Companies to be the POLR and carry any risks**
3 **associated therewith. Is it possible to identify the Companies' actual POLR**
4 **cost and establish a charge based on the actual cost?**

5 A14. Yes. There are several ways any such actual POLR costs could be measured,
6 quantified and properly reflected in charges. As discussed in the testimony of
7 Company witness Chantale LaCasse, one option is to bid out the SSO supply
8 obligation through a competitive solicitation. This would transfer the entire
9 default generation supply responsibility (including anything that might be called
10 POLR risks) to winning bidders and the costs of the POLR obligation would be
11 reflected in the winning bid price. This approach could also provide an
12 opportunity to make the entire generation supply price bypassable, allow
13 customers to make better "apples to apples" comparisons for purposes of
14 evaluating shopping opportunities and be less demanding from an administrative
15 standpoint.

16 Another option would be to directly measure the Companies' actual incremental
17 costs of satisfying the POLR function. EDUs are not required to use their
18 generation to provide the SSO and as explained previously the actual generation
19 resources dispatched to serve Ohio customers in the Companies' service areas
20 are controlled by PJM. Thus, since PJM has assumed responsibility for
21 dispatching generation to serve load, it would be possible to track the actual
22 costs (purchased power) incurred to provide service to the customer that took
23 generation supply service from a CRES provider and subsequently returned to

1 SSO. The prudently incurred cost of purchased power is recoverable through the
2 Companies' FAC.

3 **Q15. Do the Companies incur costs when a customer leaves the SSO and elects**
4 **to receive generation supply service from a CRES provider?**

5 A15. No. The Companies do not incur any actual out of pocket costs when a
6 customer elects to receive service from a CRES provider. The Companies may
7 see a decline in the amount of revenue that they can bill and collect in this
8 circumstance.

9 **Q16. Have the Companies identified whether they have experienced lost**
10 **revenues during the term of the ESP?**

11 A16. No. In an Interrogatory, the Companies were asked to identify any actual loss
12 experienced over the term of the ESP. As shown on Exhibit KMM-2, the
13 Companies have not quantified any actual losses.

14 **Q17. You previously indicated that the Companies have not presented**
15 **information that reveals the cost to the Companies to be the POLR and**
16 **carry any risks associated therewith. What about the information**
17 **presented by witness Thomas?**

18 A17. Witness Thomas continues to advocate the use of the Black model to establish
19 POLR charges based upon option values, notwithstanding the fact that the
20 Companies have not and do not intend to actually purchase any options. The
21 other witnesses presented by the Companies rely on various theories that they
22 say could be used to legitimize a separate charge for POLR but they too do not

1 identify any actual incurred costs. Therefore, the Companies continue to
2 propose a POLR charge that is subjectively and administratively determined. At
3 best, it is a non-cost based charge proposal. At worst, it is an arbitrary proposal.

4 **Q18. Are the methods relied upon by the Companies to support their proposed**
5 **POLR charge reliable for purposes of establishing a POLR charge?**

6 A18. No. As an initial matter, the Companies have again proposed POLR charges
7 without making any attempt to show that they need additional compensation for
8 the POLR and any associated risks beyond the compensation provided by their
9 rates including the components that provide the Companies with compensation
10 for providing generating supply. As previously noted, the Companies have had
11 an obligation to provide a SSO since the implementation of Am. Sub. SB 3.
12 Customers have had the ability to switch to a CRES provider both on an
13 individual basis and through community aggregation programs since 2001.
14 Thus, business and financial risks related to the possibility of customer migration
15 to a CRES provider and the possibility of a shopping customer returning to the
16 SSO existed prior to the establishment of the ESP and were reflected in the rates
17 that the Companies accepted as part of the rate stabilization process that
18 predated the ESP opportunity. Because the Black model, as applied by the
19 Companies, relies upon several incorrect assumptions and also does not reflect
20 any actual costs incurred by the Companies, it is not an appropriate methodology
21 for purposes of developing administratively determined POLR charges.

22 **Q19. In utilizing the Black model, what assumptions did the Companies make**
23 **regarding a customer's ability to switch to a CRES provider?**

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1 A19. The Companies assumed that 100% of their customers are eligible to elect to
2 receive service from a CRES provider.

3 **Q20. Is that assumption correct?**

4 A20. No. When Am. Sub. SB 221 was enacted, a policy determination was made that
5 customers served under the percentage of income payment plan ("PIPP"), which
6 was superseded by the universal service fund ("USF"), would not be eligible to
7 directly contract for service from a CRES provider. The Commission prohibited
8 CRES providers from enrolling PIPP customers. It is my understanding that this
9 requirement is embodied in Rule 4901:01-21-06, Ohio Administrative Code, and
10 that Section 4928.54, Ohio Revised Code, authorizes the Ohio Department of
11 Development ("ODOD") to aggregate PIPP customers for the purpose of
12 securing competitive retail electric generation service for PIPP customers.
13 However, ODOD has never utilized this authority. Thus, the Companies'
14 assumption that 100% of their customers are eligible to elect to receive service
15 from a CRES provider ignores the reality that ODOD controls if and when PIPP
16 customers might move away from SSO service and the fact that ODOD has
17 never exercised this control.

18 **Q21. Are there other inaccurate switching assumptions made by the**
19 **Companies?**

20 A21. Yes. The Black model relied upon initially by the Companies' witness Baker
21 included an assumption that customers would switch immediately to a CRES
22 provider whenever market prices fell below the price to compare ("PTC") and,
23 conversely, immediately return to SSO service when market prices rose above

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1 the PTC. Company witness Thomas refers to this as the unconstrained
2 switching model.

3 In her testimony, witness Thomas discusses using the Black model to calculate
4 option values but she indicates that the Companies are now recognizing
5 switching rules that are in effect. Witness Thomas refers to this as the
6 constrained switching model. The switching rules discussed by witness Thomas
7 include minimum stay requirements that apply to customers that switch to a
8 CRES provider and subsequently return to SSO generation rates. Witness
9 Thomas indicates that reflecting these switching rules, which places restrictions
10 on a customer's ability to migrate to a CRES provider, results in lower option
11 values.

12 **Q22. Do the switching rules which the Companies have recognized in the**
13 **constrained option model cover all the rules that affect switching?**

14 A22. No. Although the constrained model may appear to be an improvement over the
15 unconstrained model, the constrained model still omits switching rules, thereby
16 rendering the model defective. For OPCO and CSP customers served under
17 rate schedules GS2, GS3 and GS4, the rate schedule terms and conditions
18 require customers to provide a minimum notice of 90 days before they may
19 switch to a CRES provider. The assumptions in the constrained option model fail
20 to pick up this hard limitation on switching. Instead, the constrained model
21 assumes immediate switching whenever market prices fall below the PTC. In
22 response to an interrogatory, the Companies provided a narrative description of
23 the assumptions used in the Black model, which I have included as confidential

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1 Exhibit KMM-3. This interrogatory response confirms that the Companies did not
2 recognize the 90-day notice requirement. Additionally, the Black model relied
3 upon by the Companies does not recognize customer inertia, customer loyalty
4 irrespective of price, and other non-price factors that customers consider in
5 making supplier choices. The Black model does not recognize the time it takes to
6 review and sign CRES supply contracts as well as the time business customers
7 require to obtain management approvals necessary to enter into a contract with a
8 CRES provider. The Black model does not recognize the timing differences
9 between a drop in wholesale market prices and when any such wholesale price
10 declines may be reflected in the prices offered from CRES providers and many
11 other real world factors that are always going to cause actual switching to lag the
12 customers' recognition that prices available from CRES providers are better than
13 the PTC.

14 **Q23. What do you mean by customer inertia?**

15 A23. The Companies' application of the Black model works off of an assumption that
16 customers are perfectly economically rational and switch immediately to a CRES
17 provider from SSO rates or conversely back to SSO rates from a CRES provider
18 when market prices are below or above the PTC, respectively. In reality,
19 customers are not 100% economically rational for a variety of reasons. Some
20 customers may not be knowledgeable about their ability to choose a CRES
21 provider. Some customers may stick with their incumbent utility out of brand
22 loyalty.

1 We can see examples of customer inertia in the electricity industry throughout
2 Ohio today. For example, switching rates for residential customers in many EDU
3 service areas remain low even though the generation rates they are paying under
4 current SSO rates are above prices available from CRES providers, including
5 AEP Retail Energy, the CRES provider affiliated with the Companies. If the
6 Companies' assumption regarding the timing of customer switching had any
7 connection with reality, there would be much higher shopping percentages today
8 throughout the state of Ohio.

9 **Q24. Are there other real world factors that render the assumption about the**
10 **timing of customer switching defective?**

11 A24. Yes. As mentioned briefly above, switching to a CRES provider involves the
12 execution of contracts and there are time consuming tasks associated with the
13 review and execution of contracts. Customers that switch to a CRES provider
14 often sign contracts with a term of one or more years. The contracts may have
15 provisions that provide for a penalty or cancellation fee for early termination.
16 Thus, the customer's decision to consider returning to SSO rates is not limited to
17 comparing only the PTC to market prices. The customer may not have the
18 contractual ability to return to SSO service at a given point in time or the return
19 may trigger a penalty or cancellation fee. This is true whether the customer is
20 obtaining service directly through a CRES provider or is shopping as a result of
21 participation in a community aggregation program. Therefore, the assumption
22 that all customers immediately return to SSO service when market prices exceed

SSO rates is unrealistic and its use in the Black model renders the model fundamentally defective.

Q25. What option value did the Companies estimate using the Black model?

A25. The Companies' application of the Black model assumes that the option value is equal to the value of a put option exercisable for the sale of a megawatt-hour ("MWH") of power at the ESP strike price. This is shown on Exhibit KMM-4.

Q26. Does the value of a put option as described in the Companies' application of the Black model accurately reveal the Companies' POLR cost or risk?

A26. No. As previously explained, since the Companies did not elect to actually purchase any options, they did not incur any costs. Additionally, put options do not reliably or accurately reflect the Companies' financial risks from customer switching.

For example, if a customer switches to a CRES provider during the ESP and remains with the CRES provider for the remainder of the ESP, the Companies lose the opportunity to provide the customer generation supply at the SSO rate. A put option equivalent in volume to the customer's load, if exercised, hedges or protects the Companies against this risk because it would provide the Companies with the option to continue to sell the equivalent amount of power at the SSO rate, rather than subjecting them to a no sale or a sale at a presumably lower price consequence.

The put option structure embedded in the Companies' application of the Black model necessarily and administratively overstates the Companies' actual risk

1 because it fails to recognize that the entire SSO rate revenue is not at risk when
2 a customer elects to obtain generation supply from a CRES provider. As
3 discussed below, because the Companies are operating under the fixed resource
4 requirement ("FRR") option under PJM's reliability pricing model ("RPM"), the
5 Companies will receive capacity revenues regardless of whether a customer
6 elects to obtain service under the SSO rate or from a CRES provider. Further,
7 even if customer switching to a CRES provider results in no sale by the
8 Companies, the variable costs that are reflected in the SSO rate would be
9 avoided. Thus, the Companies' modeling assumption that treats the entire SSO
10 rate revenue as being at risk as a result of customer switching corrupts any
11 results produced by the model.

12 **Q27. How do the Companies receive capacity revenue under PJM's FRR option**
13 **even when a customer switches to a CRES provider?**

14 A27. PJM's RPM includes a mandatory centrally cleared auction market for capacity
15 resources that is intended to ensure that sufficient capacity resources exist to
16 meet forecasted demand, consistent with reliability objectives established by
17 PJM. PJM conducts a base residual auction three years in advance of each
18 delivery year, which runs from June 1 through the following May 31. Within
19 binding zones, a single clearing price is established for capacity resources and
20 that price is paid to capacity resources that clear in the auction. Up to three
21 incremental auctions are held subsequent to the base residual auction but prior
22 to the delivery year. Load-serving entities such as the Companies and any
23 CRES providers are charged for capacity resources in an amount deemed by

1 PJM to be adequate to meet their individual forecasted peak load requirements
2 calculated in accordance with PJM's requirements. To accommodate retail load
3 switching in states with "customer choice" like Ohio, PJM's market model
4 supports the daily reassignment of capacity obligations between load-serving
5 entities with the price for capacity set equal to the prevailing price from the RPM
6 auction.

7 An option under PJM's RPM is the FRR alternative. Under the FRR alternative,
8 an investor-owned utility, electric cooperative or public power entity may submit a
9 resource plan to PJM prior to the base residual auction for the delivery year. The
10 resource plan identifies the capacity resources the entity will make available to
11 meet forecasted peak demand in the FRR service area. The entity electing the
12 FRR plan assumes the obligation to obtain sufficient capacity resources to meet
13 all demand in the FRR service area, including load growth. The Companies
14 elected the FRR option prior to the ESP and they continue to operate under the
15 FRR option for purposes of meeting the resource adequacy obligations which
16 they agreed to satisfy when they agreed to participate in PJM.

17 To accommodate retail load switching in states with competitive generation
18 supply where the FRR option has been elected, PJM's tariff provides:

19 In a state regulatory jurisdiction that has implemented retail choice,
20 the FRR Entity must include in its FRR Capacity Plan all load,
21 including expected load growth, in the FRR Service Area,
22 notwithstanding the loss of any such load to or among alternative
23 retail LSEs. In the case of load reflected in the FRR Capacity Plan
24 that switches to an alternative retail LSE, where the state regulatory
25 jurisdiction requires switching customers or the LSE to compensate
26 the FRR Entity for its FRR capacity obligations, such state

1 compensation mechanism will prevail. In the absence of a state
2 compensation mechanism, the applicable alternative retail LSE
3 shall compensate the FRR Entity at the capacity price in the
4 unconstrained portions of the PJM Region, as determined in
5 accordance with Attachment DD to the PJM Tariff, provided that the
6 FRR Entity may, at any time, make a filing with FERC under
7 Sections 205 of the Federal Power Act proposing to change the
8 basis for compensation to a method based on the FRR Entity's cost
9 or such other basis shown to be just and reasonable, and a retail
10 LSE may at any time exercise its rights under Section 206 of the
11 FPA.

12 Notwithstanding the foregoing, in lieu of providing the
13 compensation described above, such alternative retail LSE may, for
14 any Delivery Year subsequent to those addressed in the FRR
15 Entity's then-current FRR Capacity Plan, provide to the FRR Entity
16 Capacity Resources sufficient to meet the capacity obligation
17 described in paragraph D.2 for the switched load. Such Capacity
18 Resources shall meet all requirements applicable to Capacity
19 Resources pursuant to this Agreement and the PJM Operating
20 Agreement, all requirements applicable to resources committed to
21 an FRR Capacity Plan under this Agreement, and shall be
22 committed to service to the switched load under the FRR Capacity
23 Plan of such FRR Entity. The alternative retail LSE shall provide the
24 FRR Entity all information needed to fulfill these requirements and
25 permit the resource to be included in the FRR Capacity Plan. The
26 alternative retail LSE, rather than the FRR Entity, shall be
27 responsible for any performance charges or compliance penalties
28 related to the performance of the resources committed by such LSE
29 to the switched load. For any Delivery Year, or portion thereof, the
30 foregoing obligations apply to the alternative retail LSE serving the
31 load during such time period. PJM shall manage the transfer
32 accounting associated with such compensation and shall
33 administer the collection and payment of amounts pursuant to the
34 compensation mechanism.

35 Thus, unless a CRES provider elected to opt out of the Companies' FRR plan by
36 designating the CRES provider's own capacity resources, the Companies will
37 continue to receive capacity revenues from any CRES provider serving
38 customers located in the Companies' service areas even when the customer is
39 receiving generation service from the CRES provider. To date, no CRES
40 provider operating in the Companies' service areas has elected to opt out of the

1 FRR plan. Thus, the put option valuation assumption that has the Companies
2 losing all SSO revenue when a customer switches to a CRES provider is
3 erroneous and the results of the Black model are thereby corrupt.

4 I should note as well that the Companies have filed a complaint at the FERC in
5 Docket No. EL11-32-000 challenging the reasonableness of this provision in
6 PJM's tariff. Through the complaint, the Companies are seeking to significantly
7 increase the capacity-related price and revenue they would obtain from CRES
8 providers providing generation supply within their service areas.

9 **Q28. Are there any other factors the Commission should consider regarding the**
10 **Companies' proposed POLR charges?**

11 A28. Yes. As is the case today, any perceived POLR risk that the Companies may
12 have can be mitigated by the Companies proactively encouraging customers to
13 waive POLR charges and elect to receive SSO service, upon any return to the
14 Companies, at a market-based price during the remaining term of the ESP.

15 **III. CONCLUSION**

16 **Q29. What are your conclusions regarding the proposed POLR charges?**

17 A29. The Commission should reject the proposed POLR charges.

18 **Q30. Does this conclude your testimony?**

19 A30. Yes.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing *Direct Testimony of Kevin M. Murray on Behalf of Industrial Energy Users-Ohio* was served upon the following parties of record this 30th day of June 2011, via electronic transmission, hand-delivery or first class mail, postage prepaid.



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EXHIBIT KMM-1

EXHIBIT KMM-1

In the matter of the application of Columbus Southern Power for approval of its program portfolio plan and request for expedited consideration, PUCO Case No. 09-1089-EL-POR.

In the matter of the application of Ohio Power Company for approval of its program portfolio plan and request for expedited consideration, PUCO Case No. 09-1090-EL-POR.

In the matter of the application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for approval of a market rate offer to conduct a competitive bidding process for standard service offer electric generation supply, accounting modifications associated with reconciliation mechanism, and tariffs for generation service, PUCO Case No. 09-906-EL-SSO.

In the matter of the application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for authority to establish a standard service offer pursuant to R.C. 4928.143 in the form of an electric security plan, PUCO Case No. 08-935-EL-SSO.

In the matter of the application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for approval of a market rate offer to conduct a competitive bidding process for standard service offer electric generation supply, accounting modifications associated with reconciliation mechanism, and tariffs for generation service, PUCO Case No. 08-936-EL-SSO.

In the matter of the application of Columbus Southern Power Company for approval of its Electric Security Plan; an amendment to its Corporate Separation Plan; and the sale or transfer of certain generating assets, PUCO Case No. 08-917-EL-SSO.

In the matter of the application of Ohio Power Company for approval of its Electric Security Plan; and an amendment to its Corporate Separation Plan, PUCO Case No. 08-918-EL-SSO.

In the matter of the application of Duke Energy Ohio for approval of an Electric Security Plan, PUCO Case No. 08-920-EL-SSO.

In the Matter of the Application of The Dayton Power and Light Company for Approval of Its Electric Security Plan, PUCO Case No. 08-1094-EL-SSO.

EXHIBIT KMM-2

**AEP-OHIO'S RESPONSE TO
OFFICE OF CONSUMERS' COUNSEL'S
PUCO CASE NOS. 08-917-EL-SSO AND 08-918-EL-SSO
(ESP REMAND)
DATA REQUEST
SECOND SET**

INTERROGATORY

INT-R2-013. Define the "loss" referred to on page 15 of the Companies' Initial Merit Brief Filing of May 20, 2011 that results when AEP Ohio bears the difference between market and ESP prices. And for the ESP I period, please identify the actual loss experienced on a yearly basis over the term of the ESP.

RESPONSE

The loss is described on page 15 of the Companies' Initial Merit Brief, Section C, second paragraph. The Companies have not performed such a calculation.

Prepared by: Laura J. Thomas

EXHIBIT KMM-3

Filed under Seal

EXHIBIT KMM-4

**COLUMBUS SOUTHERN POWER COMPANY'S
AND OHIO POWER COMPANY'S RESPONSE TO
THE OFFICE OF THE OHIO CONSUMERS' COUNSEL'S
DISCOVERY REQUEST
PUCO CASE NO. 11-346-EL-SSO AND 11-348-EL-SSO
SIXTH SET**

REQUEST FOR PRODUCTION OF DOCUMENTS

RPD -108. Provide a copy of the excel spreadsheet or other model used to calculate POLR using Black Scholes in Case No. 08-917-EL-SSO with all formulas, inputs, and comments intact and functioning.

RESPONSE

See OCC RPD-108 Attachment 1.xls

Prepared By: Laura J. Thomas

PUT VALUES - POLR

	CSP Com	CSP Ind	CSP Res
	2009-11	2009-11	2009-11
Strike	60.21	44.76	55.58
Maturity	12/31/2011	12/31/2011	12/31/2011
Today	7/30/2008	7/30/2008	7/30/2008
Forward	87.08	78.67	96.66
Volatility	33.30%	33.30%	33.30%
Interest-Rate	0.035	0.035	0.035
Premium	\$6.66	\$3.13	\$3.99

PUT VALUES - POLR

	OP Com	OP Ind	OP Res
	2009-11	2009-11	2009-11
Strike	48.00	38.81	46.40
Maturity	12/31/2011	12/31/2011	12/31/2011
Today	7/30/2008	7/30/2008	7/30/2008
Forward	90.54	80.93	89.60
Volatility	33.30%	33.30%	33.30%
Interest-Rate	0.035	0.035	0.035
Premium	\$2.80	\$1.71	\$2.53

CSP Estimated Competitive Electric Retail Service Price for Calendar Year 2009-2011 Term

Cost Components	CSP Residential	CSP Commercial	CSP Industrial
ATC Simple Swap	\$57.84	\$57.84	\$57.84
Basis	\$0.51	\$0.51	\$0.51
Load Shape and Following	\$9.59	\$5.33	\$2.31
Retail Administration	\$5.00	\$5.00	\$5.00
Ancillary Services	\$1.19	\$1.19	\$1.19
Losses	\$4.01	\$2.53	\$0.91
PJM Capacity Requirements	\$15.78	\$11.80	\$7.86
ARR Credit	(\$2.73)	(\$2.05)	(\$1.40)
Transaction Risk Adder	\$5.47	\$4.93	\$4.45
Class Total	\$96.66	\$87.08	\$78.67
Class Weight	34%	40%	26%
CSP Total	\$88.15		

OP Estimated Competitive Electric Retail Service Price for the Calendar Year 2009-2011 Term

Cost Components	OP Residential	OP Commercial	OP Industrial
ATC Simple Swap	\$57.84	\$57.84	\$57.84
Basis	\$0.51	\$0.51	\$0.51
Load Shape and Following	\$7.66	\$6.06	\$2.58
Retail Administration	\$5.00	\$5.00	\$5.00
Ancillary Services	\$1.19	\$1.19	\$1.19
Losses	\$1.28	\$4.46	\$2.49
PJM Capacity Requirements	\$13.47	\$12.51	\$8.15
ARR Credit	(\$2.42)	(\$2.16)	(\$1.41)
Transaction Risk Adder	\$5.07	\$5.13	\$4.58
Class Total	\$89.60	\$90.54	\$80.93
Class Weight	26%	22%	52%
OP Total	\$85.32		

asofdate	curvedate	zero_cc	df
7/24/2008	1/15/2009	3.1%	0.985253494
7/24/2008	2/15/2009	3.2%	0.982269901
7/24/2008	3/15/2009	3.2%	0.979685835
7/24/2008	4/15/2009	3.2%	0.976777579
7/24/2008	5/15/2009	3.3%	0.973916235
7/24/2008	6/15/2009	3.3%	0.970911534
7/24/2008	7/15/2009	3.3%	0.9679578
7/24/2008	8/15/2009	3.4%	0.965000612
7/24/2008	9/15/2009	3.4%	0.962128394
7/24/2008	10/15/2009	3.4%	0.959339757
7/24/2008	11/15/2009	3.4%	0.956448927
7/24/2008	12/15/2009	3.4%	0.953642537
7/24/2008	1/15/2010	3.4%	0.950733627
7/24/2008	2/15/2010	3.4%	0.947815733
7/24/2008	3/15/2010	3.4%	0.945172607
7/24/2008	4/15/2010	3.4%	0.942237992
7/24/2008	5/15/2010	3.5%	0.939389866
7/24/2008	6/15/2010	3.5%	0.936438487
7/24/2008	7/15/2010	3.5%	0.933574397
7/24/2008	8/15/2010	3.5%	0.930387164
7/24/2008	9/15/2010	3.5%	0.927010748
7/24/2008	10/15/2010	3.6%	0.923708869
7/24/2008	11/15/2010	3.6%	0.920261878
7/24/2008	12/15/2010	3.6%	0.916892621
7/24/2008	1/15/2011	3.7%	0.913376965
7/24/2008	2/15/2011	3.7%	0.909827153
7/24/2008	3/15/2011	3.7%	0.906591934
7/24/2008	4/15/2011	3.7%	0.902978512
7/24/2008	5/15/2011	3.8%	0.899450527
7/24/2008	6/15/2011	3.8%	0.895773281
7/24/2008	7/15/2011	3.8%	0.892184495
7/24/2008	8/15/2011	3.9%	0.888672707
7/24/2008	9/15/2011	3.9%	0.88530904
7/24/2008	10/15/2011	3.9%	0.882042568
7/24/2008	11/15/2011	3.9%	0.878655752
7/24/2008	12/15/2011	3.9%	0.875367315

3.5%

OP POLR Data 12 Months Ended May 2008

	Distribution POLR Charges	Metered MWh	Distribution POLR Charges Per MWh	Class Load Weight
Residential	\$12,404,961	7,652,911	\$1.62	27%
Commercial	\$9,520,001	5,948,870	\$1.60	21%
Industrial	\$17,703,896	14,500,525	\$1.22	52%
OP Total	\$39,628,858	28,102,305	\$1.41	100%

	Distribution POLR Charges	Metered MWh	Distribution POLR Charges Per MWh	Class Load Weight
Residential	\$19,438,394	7,652,911	\$2.54	27%
Commercial	\$16,656,835	5,948,870	\$2.80	21%
Industrial	\$24,795,897	14,500,525	\$1.71	52%
OP Total	\$60,891,126	28,102,305	\$2.17	100%

CSP POLR Data 12 Months Ended May 2008

	Distribution POLR Charges	Metered MWh	Distribution POLR Charges Per MWh	Class Load Weight
Residential	\$6,346,946	7,755,121	\$0.82	35%
Commercial	\$5,193,001	8,913,106	\$0.58	40%
Industrial	\$2,891,901	5,718,983	\$0.51	26%
Total	\$14,431,848	22,387,210	\$0.64	100%

**Proposed CSP POLR Data for ESP Filing Based
on 12 Months Ended May 2008 Load**

	Distribution POLR Charges	Metered MWh	Distribution POLR Charges Per MWh	Class Load Weight
Residential	\$30,942,933	7,755,121	\$3.99	35%
Commercial	\$59,361,287	8,913,106	\$6.66	40%
Industrial	\$17,900,418	5,718,983	\$3.13	26%
Total	\$108,204,637	22,387,210	\$4.83	100%