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**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Commission's)
Review of Fuel Adjustment Clause)
[Audit] Guidelines.)

Case No. 10-479-EL-UNC

**COMMENTS
BY
THE OFFICE OF THE OHIO CONSUMERS' COUNSEL**

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I. INTRODUCTION

The Office of the Ohio Consumers' Counsel ("OCC"), on behalf of the residential utility consumers in the state of Ohio, submits these comments after having reviewed the Staff's proposed fuel adjustment clause ("FAC") audit guidelines. These comments are submitted in order to establish clear guidelines to assure that the audits conducted of electric utilities identify whether the fuel costs the utilities seek to collect from customers are prudently incurred. Additionally, the comments are submitted in light of the mandates of R.C. 4928.02(A) to ensure adequate, reliable, and reasonably priced retail electric service for customers.

OCC has presented in its comments the Staff guidelines as proposed, with OCC's suggested modifications appearing as red line modifications to the Staff's guidelines. Where language is added, OCC has underlined the language. Where language is deleted, OCC has used a strike-out symbol. For the Commission's convenience, OCC has attached, as Attachment A, OCC's proposed complete modifications of the Staff guidelines.

II. COMMENTS

A. **Proposed Modification: Additional language to assure compliance with PUCO orders and cost of audits to be borne by utilities (Section I, Introduction):**

I. Introduction

Ohio electric utilities are required to provide consumers a standard service offer of electric service. The electric utility can provide this service through either a market rate offer (MRO) or an electric security plan (ESP). Under an MRO (which features a blended rate) or an ESP the utility may recover, among other things, the costs of fuel and purchased power, provided that the costs are prudently incurred. The Public Utilities Commission of Ohio must ensure, as part of its regulation to ensure reasonable rates for Ohio customers, that the costs were prudently incurred before the Commission can approve recovery of costs under a fuel adjustment clause (FAC). In order to properly investigate the costs incurred, the Commission shall conduct or direct that an audit be performed. The guidelines set out below are intended to provide guidance throughout the audit process. The FAC is the mechanism that will be used to recover prudently incurred fuel, purchased power, and other miscellaneous expenses, as articulated under the utility's standard service offer (SSO). An auditor shall verify compliance with the FAC conditions, terms and calculations as approved by the Commission for each utility under the utility's SSO. An auditor must also verify that costs are allowable under the FAC approved for the SSO. However, appropriate discretion on the part of the auditor will be essential in order to conduct an audit in conformance with specific requirements set forth by different standard service offerings. The electric utility shall bear the cost of the audit and shall cooperate with the auditor during the course of its audit.

Rationale:

The introductory paragraph of the Staff's proposed guidelines does not address an auditor's responsibility to verify compliance with the FAC conditions for each utility under the utility's SSO. The OCC believes that providing the suggested language will improve the proposed guidelines by making them more specific and detailed with respect to the auditor's responsibilities. The OCC recommends that the guidelines require an auditor to verify compliance with the FAC conditions, terms, and calculations as approved by the Commission for each utility under the utility's SSO, in addition to verifying that costs are allowable under the FAC approved for the SSO.

Additionally, OCC proposes to add a final sentence to clarify that the cost of the audit shall be borne by the utility and not passed through to customers under the FAC. Under R.C. 4903.24, the Commission has discretion to assess costs and fees of expenses incurred in investigating the rates, charges, and schedules of a public utility. The PUCO has exercised this authority on many occasions to direct costs associated with audits to be borne by the public utilities.¹ The recently adopted fuel adjustment clause rules require that the cost of audits be billed to the utilities. See Ohio Admin. Code 4901:1-35-09(D). Similarly, Ohio Admin. Code 4901:1-14-07(A) directs that the cost of the periodic financial and performance audits of gas companies shall be paid by the gas utility. Ohio Admin. Code 4901-11-10(B), a former provision of the Code addressing the electric fuel component, also contained such a provision. Consistent with these various provisions of the Ohio Revised Code and Ohio Administrative Code, OCC recommends the audit guidelines should clarify that the cost of the audits should be borne by the electric distribution utility.

OCC believes also that it is important to distinguish what costs can be passed through to consumers under an MRO or ESP. In the case of an MRO that is not blended² only the cost bid by the winning bidder may be recovered. Risks for increased fuel or

¹ See for e.g. *In the Matter of the Regulation of the Electric Fuel Component Contained Within the Rate Schedules of Ohio Power Company, Columbus Southern Power Company, The Cincinnati Gas & Electric Company, the Dayton Power and Light company, and Related Matters*, Case Nos. 99-101-EL-EFC, 99-102-EL-EFC, 99-103-EL-EFC, 99-105-EL-EFC, Finding and Order at ¶3 (Oct. 21, 1999); *In the Matter of the Commission's Promulgation of Rules for Electric Transition Plans and of a Consumer Education Plan, Pursuant to Chapter 4928, Revised Code*, Case No. 99-1141-E:L-ORD, Entry at ¶5 (Feb. 14, 2002); *In the Matter of the Commission-Ordered Investigation of Ameritech Ohio Relative to Its Compliance with Certain Provisions of the Minimum Telephone Service Standards Set Forth in Chapter 49901:1-5, Ohio Administrative Code*, Case No. 99-938-TP-COI, Entry at ¶9 (Oct. 18, 2000).

² A MRO that is blended is provided for under R.C. 4928.142(D)(2). This section requires a standard service offer price under the first MRO application for an electric distribution company that owns electric generating facilities, to be a blend of the bid price and the price of the utility's most recent standard service offer. The most recent standard service offer can be adjusted by the Commission for specified items, including fuel and purchased power costs.

purchased power costs are factored into the bid which is an all-in price. No further increases beyond the generation rate should be allowed.

With regard to the audit of fuel and purchased power costs that are passed through to consumers and paid for by consumers, consumers are entitled to an audit of all such costs at all times to ensure that the dollars that these sometimes captive customers are paying are reasonable and prudent. This is no different than the historical EFC audits. Customers should not pay what utilities can not verify as being prudent and it is the job of regulators to protect these consumers by ensuring accountability and transparency.

B. Proposed Modification: Additional language to assure auditor evaluates company's fuel procurement practices and policies (Section II.A.(6)):

(6) Audit procedures for fuel procurement

The procedures that the auditor shall follow in analyzing and evaluating the company's fuel procurement practices and policies include, but are not limited to, the following:

Rationale:

The PUCO should adopt this proposed modification to provide clarity that in all aspects of review, assessment, and determination related to fuel procurement practices and policies, the auditor is to also evaluate the utility's practices and policies. The words "and evaluating" add the needed aspect of qualitative appraisal to the auditor's work, which goes beyond the examination aspect conveyed from the word "analyzing." If only "analyzing" is specified, the auditor could merely examine and report the utility's practices and policies, but not necessarily provide an opinion on the quality of the utility's practices and policies. This modification is also consistent with the purchased gas adjustment clause review, where under R.C. 4905.302(E), the Commission considers

the arithmetic and accounting inaccuracies, as well as the prudence and reasonableness of the utility's fuel procurement practices and policies.

C. Proposed Modification: Additional language to include review of the basis for contract amendments (Section II.A(6)(c)(iii)):

- (i i) Review any contract amendments that contain a price escalation provision and review correspondence on the amendment negotiations, including the basis for such amendments.

Rationale:

Contract amendments that contain escalation provisions should be closely scrutinized because the escalation provisions can increase the fuel costs passed through to customers. Thus, OCC proposes that the auditor review why amendments were made. This will assist in determining whether the fuel costs resulting from such amendments were prudently incurred, which is the standard for passing the costs through to customers in the FAC. Moreover documents containing the basis for such amendments should be retained by the utilities, consistent with the retention policies required of utilities, as set forth in the Ohio Admin. Code 4901:1-9-06 (Appendix).

D. Proposed Modification: Additional language to expand evaluation of delivery performance of fuel supplier (Section II.A(6)(c)(iii)):

- (iii) Evaluate the delivery performance of the fuel supplier for each long term fuel supply contract, including: evaluating the consequences of a supplier's failure to deliver; analyzing the consequences of a supplier's bankruptcy; reviewing a utility's policies and procedures employed to monitor and/or track the supplier's finances which could threaten performance of the contract; determining whether force majeure had been appropriately invoked; and, determining whether the utility responded appropriately after being notified of a force majeure event.

Rationale:

The PUCO should adopt these changes to protect customers from various types of supplier failure that could be detrimental to customers. In this regard, OCC Witness Emily S. Medine discussed coal contracts and the effects of bankruptcy in the testimony presented in the proceeding for the AEP Electric Security Plan, Case 08-917-EL-ESO. See copy attached hereto as Appendix B. She described, analyzed and approved of a “multi-prong approach” to addressing this potential issue. Such an approach is an example of what may be a reasonable approach for a utility to follow for purposes of providing reasonable rates to customers.

Ms. Medine’s approach is reflected in the OCC’s recommended language. The OCC suggested language should be added to the Staff’s proposed guidelines advising an auditor to evaluate the consequences of supplier failure, review a company’s procedures employed to monitor a supplier’s finances, determine whether force majeure has been appropriately invoked, and finally determine whether the company responded appropriately after being notified of a force majeure event.

E. Proposed Modification: Additional language to add areas to management performance audit (Section II.A(6)(c)):

- (vi) Review the terms and conditions of fuel supply contracts for affiliate and non-affiliate fuel companies.
- (vii) Review affiliate performance compared to the performance of non-affiliates in relation to the fuel procurement functions.
- (viii) Determine how the acquisition and purchased power cost of fuel supplied to the electric utility by an affiliate company compares to the acquisition of fuel supplied to the electric utility by a non-affiliate company. If there is no acquisition of fuel or purchased power from a non-affiliate company,

compare the acquisition and purchased power cost of fuel supplied by an affiliate company to the average acquisition and purchased power in the market.

(ix) Determine the impact on fuel costs associated with major plant outages.

Rationale:

The PUCO should add this language, (vi) through (ix), to allow the auditor to determine whether the price of fuel supplied by affiliate companies is excessively high compared to the price of fuel supplied by non-affiliate companies. R.C. 4905.67(B), repealed in 2001, provided that the Commission was required annually to determine whether the acquisition cost of fuel supplied by an affiliate company represented a sales price that caused the affiliate company to earn a return on its investment that was fair and reasonable.³ Further, in past electric fuel component cases, the fuel cost auditor examined the costs of fuel purchased by the utility from affiliate companies compared to those same costs from non-affiliate companies.⁴ Thus, the addition of this language is consistent with Commission precedent and should be included in the FAC guidelines. Further the language is consistent with the corporate separation principles embodied in R.C. 4928.17. The language recognizes that scrutiny should be given to affiliate transactions so that customers are protected against abusive practices such as cross-subsidization between regulated and non-regulated operations.

OCC also proposes to add a provision (ix) under the management performance audit that will require the auditor to analyze the plant outages on a utility's system to

³ R.C. 4905.67 (Repealed in 2001).

⁴ *In the Matter of the Regulation of the Electric Fuel Component Contained within the Rate Schedules of Ohio Power Company and Related Matters*, Case No. 87-101-EL-EFC, Opinion and Order (November 3, 1987); *In the Matter of the Regulation of the Electric Fuel Component Contained within the Rate Schedules of Ohio Power Company and Related Matters*, No. 89-101-EL-EFC, Entry on Rehearing (March 6, 1990).

determine whether the outages are reasonable and the costs associated with the outages prudently incurred. The Staff's proposed guidelines do not include a provision to have the auditor investigate the impact on fuel costs associated with plant outages. Plant outages within a utility's system may increase the utility's incurred fuel costs if the utility must purchase additional power to meet its demand load during the plant outages. Such costs should be reviewed by the auditor to determine whether the costs are prudently incurred, consistent with the mandates of the statute, for purposes of providing reasonable rates to Ohio customers.

F. Proposed Modification: Additional language to clarify policies reviewed (Section II.A(6)(D)(VIII)):

- (viii) If fuel procurement policies have changed over time due to economic conditions.

Rationale:

The PUCO should adopt this change to clarify that fuel procurement policies are the policies that are referenced in the guideline.

G. Proposed Modifications: Additional language to add areas for management performance audit (Section II.A.(6)(d)):

- (xi) Examine the company's fuel transportation policies and procedures to determine if the company maintains the optimal mix of transportation resources necessary for fuel to be delivered reliably and at the most cost effective price, including an examination of demurrage costs incurred.

Rationale:

The Staff's proposed guidelines do not include a provision to examine and review the utility's fuel transportation policies and procedures. A review of such policies should be included in the scope of the audit as these are costs that are passed onto customers

through the fuel clause. This additional guideline would direct the auditor to make a determination as to how transportation reliability and costs are factored into the utility's fuel procurement decisions. It would also require the auditor to review any analysis the utility has undertaken to evaluate alternative carriers and alternative modes of fuel delivery. Including this guideline in the audit plan will allow the PUCO to determine that the fuel is being delivered at the most cost effective price for customers, consistent with the mandates of R.C. 4928.02 for ensuring reasonably priced electric service. In addition, auditors have regularly found issues with coal transportation costs in fuel cases.⁵

H. Proposed Modifications: Additional language to include management/performance audit related to managing volatility in fuel prices (Section II.A.(6)(f)):

- (f) Review practices employed to manage the increased level of volatility in fuel prices, including risk management practices that include hedging programs and the use of other risk mitigation instruments.

Rationale:

The Staff's proposed guidelines do not include a provision to have the auditor review the risk management operations of the utilities. A review of the utility's risk management practices should be included in the audit. In recent years there has been an increased volatility in fuel prices that warrants an in-depth review of the utilities' risk management practices including hedging programs and the use of risk mitigation

⁵ See e.g. *In the Matter of the Regulation of the Electric Fuel Component Contained Within the Rate Schedules of the Ohio Power Company and Related Matters*, Case No. 95-101-EL-EFC, Opinion and Order at 22 (May 30, 1996); *In the Matter of the Regulation of the Electric Fuel Component Within the Rate Schedules of The Cleveland Electric Illuminating Company and Related Matters*, 94-108-EL-EFC, Opinion and Order at 11-12; *In the Matter of the Regulation of the Electric Fuel Component 'Contained Within the Rate Schedules of the Cleveland Electric Illuminating Company and Related Matters*, Case No. 93-08-EL-EFC, Opinion and Order at 18 (February 24, 1994); *In the Matter of the Regulation of the Electric Fuel Component Contained Within the Rate Schedules of the Dayton Power & Light Company and Related Matters*, Case No. 86-07-EL-EFC, Opinion and Order at 66 (February 18, 1987).

instruments. Adding this provision into the scope of the audit will allow parties to assess whether the utility is prudently managing its risks, and will allow an examination of the impact of such activities on the fuel costs sought to be recovered from customers.

I. Proposed Modifications: Additional language to review of company's coal sampling procedures (Section II.A.(7)(b)):

- (vi) Evaluate the reliability of the company's laboratory conducting the coal testing.

Rationale:

The Staff's proposed guidelines do not include a provision whereby the auditor would investigate the accuracy and reliability of the utility's laboratory. A review of the reliability of the laboratory should be part of the scope of the audit. This will enable the auditor to investigate whether the utility testing is accurate for purposes of ensuring that the fuel acquired meets the specifications of the fuel procurement contract. This is important because if the fuel specifications are not being met, the utility should be undertaking appropriate actions in response. Such actions can bear upon the cost of the fuel being recovered through the fuel clause. The auditors in the past have frequently identified the measurement and testing of coal by the Company's laboratory as an issue.⁶

J. Proposed Modifications: Additional language to review coal inventories (Section II.A.(7)(e)):

- (vii) Examine the reasonableness of the fuel inventory policies and plans of the company.

⁶ See, *In the Matter of the Regulation of the Electric Fuel Component Contained Within the Rate Schedules of The Toledo Edison Company and Related Matters*, Case No. 93-07-EL-EFC, Opinion and Order at 30-31 (February 24, 1994); *In the Matter of the Regulation of the Electric Fuel Component Contained Within the Rate Schedules of Dayton Power and Light Company*, Case No. 96-105-EL-EFC, Opinion and Order at 22-23 (July 31, 1997).

Rationale:

The guidelines proposed by the Staff do not currently require the auditor to review the utilities' fuel inventory policies and plans. A review of these policies should be included in the scope of the audit. Including this provision in the audit guidelines would provide parties with information detailing the efforts the utility has undertaken to optimize fuel inventory based upon current fuel availability and environmental requirements.

Decisions made by the electric utilities about what inventories of different fuel types and emission allowances they maintain will affect the utilities' fuel costs. In the past, coal inventories, along with some nuclear fuel and emission allowance inventories have been at issue.⁷ Moreover, the costs of fuel inventories can impact the costs of fuel passed onto consumers. Additionally, this information would provide parties with insight as to how the utility incorporates market or internal disruptions into the fuel inventory planning and fuel acquisition decisions, which can also affect the price of fuel procured and ultimately passed through to consumers.

More recently since the passage of S.B. 221 and its promotion of renewable fuel sources under R. C. 4928.01 and 4928.64(B)(2), the renewable fuel inventories that electric utilities maintain for such fuel as biomass will become increasingly relevant. The relevance of renewable fuel inventories are sure to be important in the future as the

⁷ See, *In the Matter of the Regulation of the Electric Fuel Component Contained Within the Rate Schedules of Cincinnati Gas and Electric Company*, Case No. 96-103-EL-EFC, Finding and Order at 3 (December 19, 1996); *In the Matter of the Regulation of the Electric Fuel Component Contained Within the Rate Schedules of Cincinnati Gas and Electric Company*, Case No. 99-103-EL-EFC, Finding and Order at 4 (June 29, 2000); *In the Matter of the Regulation of the Electric Fuel Component Contained Within the Rate Schedules of Monongahela Power Company and Related Matters*, Case No. 98-106-EL-EFC, Opinion and Order at 15 (January 21, 1999).

utilities have been obtaining certificates of renewable energy facilities for many of their previously coal fired plants.⁸

K. Proposed Modifications: Additional and clarifying language to scope of management/performance audit report (Section II.A.(10)):

- (a) Description of the scope and objectives utilized in conducting the FAC audit, including verification of compliance with the FAC conditions, terms and calculations as approved by the Commission for each utility under the utility's SSO. An auditor must also verify that costs are allowable under the FAC approved for the SSO.
* * *
- (e) A primary emphasis upon both improvement rather than criticism and where appropriate, critique of the past practices.
 - (i) An evaluation of management decisions in light of the conditions, circumstances, and available information, that was known or should have been known, at the time the decisions were made.”

Rationale:

The Staff's proposed guidelines do not address an auditor's responsibility to verify compliance with the FAC terms and conditions for each utility under the utility's SSO. OCC proposes adding a sentence to expand the scope of the audit to cover this.

⁸ See *In the Matter of the Application of Columbus Southern Power Company For Certification As an Eligible Ohio Renewable Energy Resource Generating Facility*, Case No. 09-1860-EL-REN; *In the Matter of the Application of Dayton Power and Light Company for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility* Case No. 09-891-EL-REN; *In the Matter of the Application of Dayton Power and Light Company for Certification as an Eligible Ohio Renewable Energy Resource Generating Facility*, Case No. 09-892-EL-REN.

OCC also proposes other modifications. The OCC believes that providing the suggested language will improve the proposed guidelines by making them more specific and detailed with respect to an auditor's responsibilities.

Staff's proposed section (10)(e) correctly identifies that an emphasis in an audit report should be on improvement; however, it fails to recognize that an imperative for regulation in the public interest is for an audit report to also provide, where appropriate, critique of past practices, for determining whether rates are reasonable under Ohio law. Primary emphasis on improvement, to the exclusion of critique of past practices, could result in a utility claiming (inappropriately) that an auditor is constrained from identifying past practices of the utility that were unreasonable or imprudent. There clearly should be no such constraint placed on the auditor's findings and conclusions, considering the requirements of Ohio law. Criticism of the utility's past practices are necessary as needed to fulfill Ohio's regulatory requirements to protect customers from imprudent costs and ensure reasonable rates. The audit report should provide the auditor's opinion on such practices to the Commission and parties.

Finally OCC proposes a modification to the prudence standard proposed in subsection (i). According to the Staff guidelines, the Auditor is to examine management decisions "in light of the conditions, circumstances, and available information at the time the decisions were made." This guideline should be further defined to include OCC's proposed clarification of "that was known or should have been known," which is consistent with the prudence standard the Commission has adopted in the past⁹:

⁹ See for e.g. *In the Matter of the Investigation into the Perry Nuclear Power Station*, Case No. 85-521-EL-COI, Opinion and Order at 21-27 (Jan. 12, 1988).

L. Proposed Modifications: Additional language to increase scope of audit areas for environmental compliance with Title IV of Clear Air Act re: emission allowances (Section II.A.(8))

II.A.(8)

Audit procedures for environmental compliance with Title IV of the Clean Air Act Amendments of 1990, the Clean Air Interstate Rule (CAIR), and any future replacement rule for CAIR.

- (e) Review all allowance transactions in which the company participated during the audit period, as well as foregone transactions; including gains and losses on emission allowance transactions and the basis for allocating such gains and losses.
- (f) Review the basis for the level of any contingency and/or banked reserves held, the sources of funding and the utility's plans for such reserves, if held.
- (g) Review the utility's actions to maximize the conservation of allowances associated with DSM and EE programs which pass the total resource cost (TRC) test.
- (h) Review the appropriateness of the company's allocation of emission allowances among companies within its system.
- (i) Determine whether modifications to the allowance inventory were correctly computed.
- (j) Review the appropriateness of emission allowance distribution for the operating utility of jointly-owned units.
- (k) Review the utility's actions to maximize its conservation of emission allowances associated with DSM and EE programs which pass the TRC test.

Rationale:

The Staff guidelines pertaining to emission allowances are skeletal and do not appear to address some of the issues raised by the PUCO in the past, and in particular in Case No. 91-2155-EL-COI, *In the Matter of the Commission's Investigation into the Trading and usage of and the Accounting Treatment for, Emissions Allowances by Electric Utilities in Ohio*. Also the guidelines do not extend to the more recent Clean Air Act Interstate Rule. OCC proposes these amendments to provide more specific areas for the audit to cover.

M. Proposed Modifications: Additional language to cope of objectives of the financial audit (Section II.B(2)(b)):

- **(b) Verify the arithmetic accuracy of fuel component and other allowable amounts passed through the FAC rate to the company's customers. Verify that any fuel procured for which costs are charged through the FAC rate to the company's customers was used to serve those customers.**

Rationale:

The PUCO should add this language to help ensure, through auditing, that the fuel costs the utility is charging to customers were incurred for fuel that is actually being used by the electric utility to provide electric service to those customers (and are not costs incurred related to fuel being used by an affiliate). This reinforces principles of corporate separation found in Ohio Admin. Code 4901:1-20-16(D), which provides "cross-subsidies between an electric utility and its affiliates are prohibited." Likewise, Ohio Admin. Code 4901:1-20-16(G)(3)(f) provides "an electric utility shall not pledge, mortgage, or use as collateral any assets of the electric utility for the benefit of an affiliate." Thus, inserting this language will ensure that the auditor examines whether

any assets being paid for by consumers are being used by the utility's affiliate companies rather than the electric utility itself—with a result that customers will be protected.

N. Proposed Modifications: Additional language to include off-system sales within the scope of the audit (Section II.(B)(5)(e), II.(B)(9)(a)):

II.(B)(5)

- (e) Recording purchases and interchanges and sales for resale.

II (B) (9) Audit procedures for purchased power and sales for resale

- (a) Obtain a description of the procedures followed by the system dispatcher in purchasing power and sales for resale and determine

Rationale:

The Staff guidelines do not include a provision to have the auditor review the off-system sales of the utilities. A review of the utility's off-system sales should be included in the scope of the audit. OCC supports the concept, as argued in AEP ESP proceeding and in its appeal of the AEP ESP proceeding (S.Ct. Case 09-2022), that off-system sales proceeds should be used either as an offset to the fuel adjustment clause ("FAC") component or an adjustment to rates. Doing so would also promote the policy of the state, under R.C. 4928.02(A) to "ensure the availability to consumers of adequate, reliable, safe, efficient, nondiscriminatory, and reasonably priced retail electric service." Additionally, treating off-system sales as offsets to the cost of fuel is consistent with the Commission's past policy of requiring a sharing of the profits of off-system sales between customers and shareholders. Including this item in the audit will permit the PUCO to keep apprised of the amount of off-system sales occurring which will enable the

parties to make direct offsets of the sales, in the event that the Supreme Court reverses the Commission, or the Commission determines to change its position on this issue.

O. Proposed Modifications: Additional Language to increase proposed scope of audit to include reconciliation adjustments (Section II.(B)(10)):

- (b) Obtain copies of the company's working papers for computing the FAC rates charged during the FAC audit period, verify the accuracy of the calculations, including reconciliation adjustments, and trace the costs shown on the working papers to their sources.
- (c) Compare the costs included in the company's FAC rate calculations with the most recent historical levels of such costs and present those findings in the audit report.

Rationale:

According to the Ohio Admin. Code 4901:1-35-09, a utility is to "calculate quarterly adjustments on projected costs and reconciliation requirements" for fuel and purchased power adjustments. The PUCO should adopt OCC's proposed addition to II.(B)(10)(b) to clarify the reconciliation nature of the FAC mechanism, and that reconciliation adjustments are part of the calculations that should be verified by the auditor.

OCC also proposes an addition, which it has labeled subsection (h). OCC recommends that the auditor should separately examine each cost or cost component for fuel and purchased power in comparison with the most recent levels of such cost, and require the utility to explain variations in such costs. This examination will assist the auditor (and ultimately the PUCO) in evaluating whether the company is purchasing fuel

at the lowest reasonable prices by alerting the auditor to large spikes in fuel costs over time.

Further, requiring the auditor to present its findings on the comparison of present fuel costs with previous fuel costs will also provide the Commission with notice about extreme fluctuations in fuel costs over time. This information will allow the Commission to determine whether such fluctuations are sufficiently justified when evaluating the company's FAC rate for purposes of ensuring reasonable rates for consumers.

P. Proposed Modifications: Additions, modifications, or replacements for financial audit report (Section II.B.(11)(d)(e) and (f)):

- d) ~~Include only the findings, facts, and conclusions that are adequately supported in the audit report or~~ and in the auditor's working papers (which may include supporting schedules or cross referencing of issues).
- e) ~~State specific recommendations, if any, and, when possible, an estimate of the savings to be realized by implementing the recommendations.~~ that management can undertake involving potential cost savings, improvements in productivity, or enhancements to operational efficiencies, if any, and, when possible, an estimate of the savings to be realized by implementing the recommendations.
- f) ~~Place primary emphasis upon both improvement rather than criticism~~ and, where appropriate, a critique of the past practices.

Rationale:

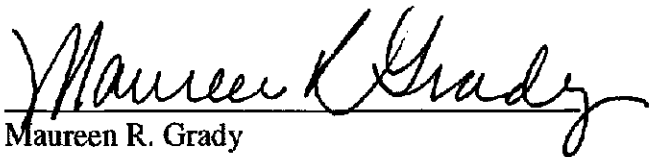
OCC recommends modifying this guideline to expand the definition of "recommendation" to include improvements in productivity and enhancements to operational efficiencies. Including this modification will contribute to more comprehensive and detailed recommendations which in turn will improve the overall quality of the audit.

III. CONCLUSION

This state, in adopting Ohio's new energy law, established a policy of "ensur[ing] to consumers ***reasonably priced retail electric service." Fuel-related costs are one of the most significant components of the electricity rates that Ohioans pay. Accordingly, the regulation of fuel-related costs presents a major responsibility of the PUCO for protecting Ohioan's pocketbooks. And therefore the primary objective of the guidelines that are under development in this case should be to establish the framework for regulation in the public interest. The PUCO should adopt OCC's recommendations toward this purpose.

Respectfully submitted,

JANINE L. MIGDEN-OSTRANDER
CONSUMERS' COUNSEL

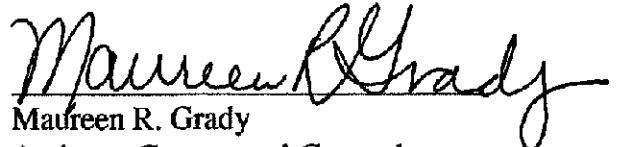


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CERTIFICATE OF SERVICE

I hereby certify that a copy of the Comments was served upon the persons listed below by Regular U.S. Mail service, postage prepaid, this 14th day of July, 2010.


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Attachment A

Fuel Adjustment Clause Guidelines

I. Introduction

Ohio electric utilities are required to provide consumers a standard service offer of electric service. The electric utility can provide this service through either a market rate offer (MRO) or an electric security plan (ESP). Under aAn MRO (which features a blended rate) or an ESP the utility may recover, among other things, the costs of fuel and purchased power, provided that the costs are prudently incurred. The Public Utilities Commission of Ohio must ensure, as part of its regulation to ensure reasonable rates for Ohio customers, that the costs were prudently incurred before the Commission can approve recovery of costs under a fuel adjustment clause (FAC). In order to properly investigate the costs incurred, the Commission may conduct or direct that an audit be performed. The guidelines set out below are intended to provide guidance throughout the audit process. **The FAC is the mechanism that will be used to recover prudently incurred fuel, purchased power, and other miscellaneous expenses, as articulated under the utility's standard service offer (SSO). An auditor shall verify compliance with the FAC conditions, terms and calculations as approved by the Commission for each utility under the utility's SSO. An auditor must also verify that costs are allowable under the FAC approved for the SSO.** However, appropriate discretion on the part of the auditor will be essential in order to conduct an audit in conformance with specific requirements set forth by different standard service offerings. The electric utility shall bear the cost of the audit and shall cooperate with the auditor during the course of its audit.

II. Audit Standards

A. Management/Performance Audit

(1) Purpose

The purpose of the Management/Performance Audit Standards for the Fuel Adjustment Clause is to provide uniform standards and specifications as guidelines for conducting a FAC management/performance audit. The FAC management/performance audit program is only a guide and should not be used to the exclusion of the auditor's initiative, imagination, and thoroughness.

(2) Objectives

Unless otherwise ordered by the Commission, the objectives of the FAC management/performance audit program are as follows:

- (a) Ascertain the fuel procurement and emission allowance management policies and practices followed by the company and determine whether such procedures are practical and reasonable.

- (b) Ascertain the procedures utilized by the company to assure that lowest reasonable prices at the time of purchase are paid for fuel and purchased power, emission allowances and environmental reagents.
 - (c) Determine whether the policies followed by the company assure fuel supplies at reasonable prices.
 - (d) Evaluate the economic efficiency of the fuel procurement and utilization practice.
 - (e) Identify specific as for improvement of organizational and management practices to ensure fuel operations of the company at the lowest reasonable overall cost.
- (3) Audit standards

The FAC management/performance audit provided by these guidelines shall be conducted in accordance with the "Government Auditing Standards, July 2007 Revision and any subsequent updates to those standards.

(4) Scope of the FAC management /performance audit

- (a) The FAC management/performance audit shall consist of a management/performance audit and a follow-up performance audit. The auditor shall conduct the audit for the time period established by the Commission

The auditor shall conduct a detailed management/performance audit with respect to at least one area of the company's fuel cost and renewable energy practices. Practices to be considered for the performance audit assessment shall include, but not be limited to, the following:

- (i) Procedures employed to assure the quality of delivered fuel as contracted.
- (ii) Procedures employed to assure that lowest reasonable overall prices are paid for fuel purchased in the spot market.
- (iii) Policies followed to assure a fuel supply at reasonable prices.
- (iv) Policies followed to assure the most economical purchases of power.

- (v) Practices employed to effectively negotiate long-term contracts.

(b) Follow-up performance audit

The auditor shall conduct a follow-up performance audit to determine whether the recommendations developed in previous management/performance audits and those determined to be reasonable in a FAC hearing have been effectively implemented by the company.

(5) Minimum review requirements

At minimum, the auditor shall review the following:

- (a) Fuel procurement policies and practices.
- (b) The company's long-term fuel supply contracts and amendments to the contracts.
- (c) Arrangements with fuel suppliers owned or controlled, in whole or in part, by the company.
- (d) Environmental compliance with Title IV of the Clean Air Act Amendments of 1990.
- (e) The system dispatcher's policies for power purchases, interchanges, and sales for resale.

(6) Audit procedures for fuel procurement

The procedures that the auditor shall follow in analyzing and evaluating the company's fuel procurement practices and policies include, but are not limited to, the following:

- (a) A review the company's fuel procurement policies, procedures, and practices.
- (b) Assess the company's organizational ability to procure fuel and provide reliable electric service at the lowest reasonable overall cost.
- (c) Analyze the fuel purchasing department's formal procedures for purchasing fuel, contract negotiation, and fuel contract administration as follows:
 - (i) Determine whether the terms of each fuel supply contract contain a price escalation provision.
 - (i i) Review any contract amendments that contain a price escalation provision and review

correspondence on the amendment negotiations,
including the basis for such amendments.

- (iii) Evaluate the delivery performance of the fuel supplier for each long term fuel supply contract, including: evaluating the consequences of a supplier's failure to deliver; analyzing the consequences of a supplier's bankruptcy; reviewing a utility's policies and procedures employed to monitor and/or track the supplier's finances which could threaten performance of the contract; determining whether force majeure had been appropriately invoked; and, determining whether the utility responded appropriately after being notified of a force majeure event.
- (iv) Determine whether the company must buy spot coal at a higher price than that contained in a long-term fuel supply contract if the fuel supplier does not fulfill its obligations.
- (v) If the company jointly owns a generating plant, determine which company has responsibility for fuel procurement and how the fuel procurement policies are determined between the owners.
- (vi) Review the terms and conditions of fuel supply contracts for affiliate and non-affiliate fuel companies.
- (vii) Review affiliate performance compared to the performance of non-affiliates in relation to the fuel procurement functions.
- (viii) Determine how the acquisition and purchased power cost of fuel supplied to the electric utility by an affiliate company compares to the acquisition of fuel supplied to the electric utility by a non-affiliate company
- (ix) Determine the impact on fuel costs associated with major plant outages.

- (d) Review management of the company to evaluate the following:
 - (i) Whether management has set limits for long-term or short-term fuel supply contracts in terms of years or price.
 - (ii) Determine if the company has a policy that limits the types of transactions it would use to secure long-term fuel supply contracts.
 - (iii) If the company secures long-term fuel supply contracts by purchasing coal lands, turn key operations, purchasing a coal company, or some other means.
 - (iv) Establish whether restrictions are placed upon the amount of capital which the company considers appropriate to put upfront for operations listed in Section (iii) above.
 - (v) If legal issues relative to the purchase of such operations listed above in Section (iii), have been explored.
 - (vi) Verify whether turn-key operations have been explored and if so, on what basis the company proceeded.
 - (vii) Evaluate whether limits result from cash flow problems, capital availability problems, or other such factors.
 - (viii) If fuel procurement policies have changed over time due to economic conditions.
 - (ix) Verify that economic efficiency was the determinative criteria for purchasing fuel supplies.
 - (x) Identify whether there are any restraints on operational efficiency imposed by environmental regulation, legislation, or operating requirement.
 - (xi) Examine the company's fuel transportation policies and procedures to determine if the company maintains the optimal mix of transportation resources necessary for fuel to be delivered reliably and at the most cost effective price, including an examination of demurrage costs incurred.
- (e) Review with the fuel purchasing agent for the company:
 - (i) What the agent believes to be the company's primary criteria for coal purchasing.

- (ii) What the agent considers to be the most important factors in dealing with coal companies.
 - (iii) How the agent begins negotiations for a long-term fuel supply contract.
 - (iv) What areas of responsibility the agent has and what responsibilities are supervised.
 - (v) How the agent assures that the established criteria are met.
 - (vi) What checks are run and how the performance and overall compliance with applicable lawful standards, such as OSHA and water quality standards, of coal companies with which the company deals are evaluated.
 - (vii) How the agent assures that the coal company is giving the best price and that the company is dealing with the coal company in an appropriate business posture.
 - (viii) Whether the agent often deals with the same fuel supply sources.
 - (ix) How the agent obtains current information on coal and the coal industry
 - (x) What ongoing educational programs have been established
- (f) Review practices employed to manage the increased level of volatility in fuel prices, including risk management practices that include hedging programs and the use of other risk mitigation instruments.

(7) Audit procedures for station visitation

The objective of the station visitation is to review the company's coal processing procedure from the receipt of the coal to the disposition of fly ash. When conducting the station visitation, the auditor shall follow the procedures set forth below:

- (a) Obtain a description of the company's coal receiving procedures and controls for shortages, overages, or other discrepancies, and do the following:
 - (i) Determine how the coal is weighed as received.
 - (i i) Determine how freight bills and car number discrepancies are handled.

- (iii) Determine how damaged cars are checked and who initiates claims for shortages.
 - (iv) Review the month and cutoff procedure.
 - (v) Note any situations where the company does not follow the described procedure.
- (b) Obtain a description of the company's coal sampling procedures, and do the following:
 - (i) Determine the frequency of coal sampling.
 - (ii) Determine how the coal samples are identified.
 - (iii) Determine what control is exercised over forwarding coal samples to the laboratory.
 - (iv) Determine how a representative coal sample is selected for each fuel supplier.
 - (v) Obtain copies of receiving data for one-month during the FAC audit period to compare with purchasing and accounting records.
 - (vi) Evaluate the reliability of the company's laboratory conducting the coal testing.
- (c) Obtain a description of the company's laboratory procedures for testing coal samples, and do the following:
 - (i) Determine how coal samples are received and identified.
 - (ii) Identify any problems encountered in following the testing procedures.
 - (iii) Determine whether the testing methods are acceptable.
 - (iv) Determine how unusual results are handled.
 - (v) Obtain copies of laboratory sampling reports for one-month during the FAC audit period to compare with purchasing and accounting records.

- (vi) Determine how the company assures that all samples are received and actually tested.
- (d) Obtain a description of the company's procedure for handling coal from the stockpile to the firebox or boiler, and do the following.
 - (i) Examine the scale calibrating logs for conformity with the described procedure.
 - (ii) Determine what procedure is followed when coal scales are inoperable.
 - (iii) Review the month-end cutoff procedure.
 - (iv) Obtain copies of consumption data for one-month during the FAC audit period to compare with accounting and generation records.
- (e) Obtain a description of the company's procedure for taking physical inventories of coal and fuel oil, and do the following:
 - (i) Determine the frequency of the physical inventories.
 - (ii) Determine how density tests are performed and whether the samples are accurate.
 - (iii) Determine how cutoff data are established, who controls the data, and how often cutoffs are established.
 - (iv) Review the working papers on physical inventories and trace an adjustment to the general books, including fuel stock and consumption records.
 - (v) Review how the company treats physical inventory adjustments in the fuel component calculation and examine related reporting.
 - (vi) Determine whether the company complies with the commission's approved procedures from physical inventory adjustments.

- (vii) Examine the reasonableness of the fuel inventory policies and plans of the company.
 - (f) Discuss with the station manager all procedure descriptions.
 - (g) Determine levels of review applicable to the operating statistics.
 - (h) Examine station reports and note any reviews, comments, or investigations.
 - (i) Obtain copies of the station reports sent to the company's general office for incorporation into company statistics and trace the reports to the statistics.
- (8) Audit procedures for environmental compliance with Title IV of the Clean Air Act Amendments of 1990, the Clean Air Interstate Rule (CAIR), and any future replacement rule for CAIR.

The auditor shall review matters involving the implementation of the company's environmental compliance plan, including, but not limited to, the following:

- (a) Review the policies for receiving emissions data from jointly-owned plants.
- (b) Review the manner in which Continuous Emissions Monitoring (CEM) results are communicated to those areas responsible for making decisions regarding allowance transactions.
- (c) Review the company's policies and procedures as they relate to the following items:
 - (i) Utilizing emission allowances to maximize its use of Ohio coal, consistent with least-cost principles.
 - (ii) Monitoring the emission allowance market.
 - (iii) Forecasting of emission allowance values.
 - (iv) Sales and purchases of allowances.
 - (v) Incorporating emission allowances into dispatching and fuel procurement decisions.

- (d) Identify any environmental standards or regulations that significantly affect the economic efficiency of the company's fuel utilization.
 - (e) Review all allowance transactions in which the company participated during the audit period, as well as foregone transactions; including gains and losses on emission allowance transactions and the basis for allocating such gains and losses.
 - (f) Review the basis for the level of any contingency and/or banked reserves held, the sources of funding and the utility's plans for such reserves, if held.
 - (g) Review the utility's actions to maximize the conservation of allowances associated with DSM and EE programs which pass the total resource cost (TRC) test.
 - (h) Review the appropriateness of the company's allocation of emission allowances among companies within its system.
 - (i) Determine whether modifications to the allowance inventory were correctly computed.
 - (j) Review the appropriateness of emission allowance distribution for the operating utility of jointly-owned units.
 - (k) Review the utility's actions to maximize its conservation of emission allowances associated with DSM and EE programs which pass the TRC test.
 - (lf) Such other matters as the Commission may direct to be investigated or reviewed.
- (9) Audit procedures for purchased power and sales for resale policy evaluation.

The procedures which the auditor shall follow in reviewing the company's power purchases and sales for resale policies include, but are not limited to, the following:

- (a) Obtain a description of the policies followed by the system dispatcher in purchasing power and making sales for resale, and determine the following:

- (i) Whether economic power, including economic energy, is purchased the most advantageous periods.
 - (ii) How emergency energy is purchased.
 - (iii) The basis on which emergency energy sales are priced.
 - (iv) Whether the company supplies a proper share of stabilizing power to its interconnected systems.
 - (b) Review the company's procedures for assuring that economic efficiency is the determinative criteria for power purchases, sales for resale, and fuel utilization.
 - (c) Evaluate the company's endeavors to purchase power or generate energy at a fuel cost significantly less than higher priced power under a contract or interconnection agreement.
- (10) Audit report

The auditor shall prepare a management/performance audit report to be filed with the Commission that includes, at a minimum, all of the following.

- (a) Description of the scope and objectives utilized in conducting the FAC audit including verification of compliance with the FAC conditions, terms and calculations as approved by the Commission for each utility under the utility's SSO. An auditor must also verify that costs are allowable under the FAC approved for the SSO.
- (b) Description of the methodology utilized in conducting the FAC audit.
- (c) An objective presentation of the findings, facts, and conclusions in a clear and concise manner.
- (d) Include only the findings, facts, and conclusions that are adequately supported in the audit report or in the auditor's working papers (which may include supporting schedules or cross referencing of issues).
- (e) A primary emphasis upon both improvement ~~rather than criticism~~ and, where appropriate, a critique of the past practices.
- (f) An identification and explanation of any issues, areas, or questions that need further examination.

- (g) Specific recommendations and, when possible, an estimate of the savings to be realized by implementing the recommendations.
- (h) An identification of areas that are well-managed and a notification of any improvements.
- (i) An evaluation of management decisions in light of the conditions, circumstances, and available information, that was known or should have been known, at the time the decisions were made.

(B) Financial Audit

(1) Purpose

The purpose of the Financial Audit Standards for the FAC is to provide uniform standards and specifications as guidelines for conducting a FAC financial audit. The FAC financial audit is only a guide and should not be used to the exclusion of the auditor's initiative, imagination, and thoroughness.

(2) Objectives

Unless otherwise ordered by the Commission, the objectives of the FAC financial audit program are as follows:

- (a) Determine that the company procedures in place and that are being followed regarding the following activities:
 - (i) Processing of fuel receipt and consumption transactions.
 - (ii) Processing of energy purchase and sale transactions.
 - (iii) Processing of emission allowance purchases, swaps, and sales.
 - (iv) Accurately calculating the FAC rate, including compliance with the Commission's financial audit guidelines.
- (b) Verify the arithmetic accuracy of fuel component and other allowable amounts passed through the FAC rate to the company's customers. Verify that any fuel procured for which costs are charged through the FAC rate to the company's customers was used to serve those customers
- (c) Verify the arithmetic accuracy of the company's calculation of the FAC rate.
- (d) Verify the proper FAC rates are applied to customer's bills.

- (e) Review the procedures and control for assembly and reporting of information in the FAC forms.
- (f) Determine whether the company is following procedures for processing fuel data and whether the procedures are reasonable.
- (g) Determine whether the fuel delivered to the company meets quality and quantity specifications.
- (h) Determine whether the company correctly reported payments made for acquisition and delivery costs of fuel.
- (i) Calculate the difference between actual net revenues and actual net fuel costs

(3) Audit standards

The FAC financial audit provided by these guidelines shall be conducted in accordance with generally accepted auditing standards established by the American Institute of Certified Public Accountants.

(4) Scope of the FAC financial audit

The auditor shall conduct a financial audit for the audit period established by the Commission. In addition to the objectives stated above, the auditor shall determine, at minimum, the following:

- (a) The difference, if any, between the total billed charges and those that should have been billed for the period excluding the effect of any commission findings from the current management/performance or financial audits.
- (b) Whether the recommendations developed in previous financial audits have been effectively implemented by the company.

(5) Minimum review requirements

The auditor's review shall include, but not be limited to, a review of the following procedures:

- (a) Fuel procurement not under long-term contracts.
- (b) Accounting for fuel receipts, testing, and payments.
- (c) Weighing, testing, and reporting coal burned.
- (d) Amortizing nuclear fuel costs corresponding to nuclear generated energy.
- (e) Recording purchases and interchanges and sales for resale.
- (f) Accounting treatment of emission allowances.

- (g) Calculating the FAC rate, including an evaluation of the company's compliance with the Commission's audit guidelines, and their application to customer bills.
- (6) Audit procedures for fuel procurement

The procedures that the auditor shall follow in reviewing the company's fuel procurement practices and policies include, but are not limited to, the following:

- (a) Review the company's fuel procurement procedures manual and written instructions for purchasing fuel and determine whether the procedures are being followed.
- (b) Obtain the company's fuel supply contracts and review specifications for (1) the following:
 - (ii) Total and periodic amount of fuel to be supplied.
 - (iii) Pricing provisions, including extent to which the contract is a cost plus profit contract, if its duration exceeds one year.
 - (iv) Contract audit provisions.
- (c) Review the quality specifications in each coal contract and determine whether the company's payments reflect adjustments for calorific value when the weighted average calorific value of fuel received differs from that stated in the contract.
- (d) Review the company's procedures for verifying price escalations and contract amendments.
- (e) Determine whether the price escalation provisions were correctly computed.
- (f) Review the results of any fuel contract audits.
- (g) If the company jointly owns a generating plant, determine whether fuel accountability transfers among companies are properly recorded.
- (h) Determine that any deferred fuel amounts comply with commission ordered treatment.

(7) Audit procedures for activities in the emission allowance market

The procedures which the auditor shall follow in reviewing the electric utility's activities in the emission allowance market are:

- (a) Determine the appropriateness of the company's allocation of emission allowances among companies within its system.
- (b) Determine whether modifications to the allowance inventory were correctly computed.
- (c) Determine the appropriateness of emission allowance distribution for the operating utility of jointly owned units.
- (d) Such other matters as the Commission or its Staff may direct be investigated or reviewed.

(8) Audit procedures for processing coal orders

The procedures which the auditor shall follow in reviewing the processing of coal orders by the company include, but are not limited to, the following:

- (a) Obtain a brief description of the company's procedure for processing fuel purchase orders.
- (b) Obtain purchase orders for one month's fuel procurement during the FAC audit period and complete the following.
 - (i) Relate and reconcile the purchase orders to fuel requirements.
 - (ii) Examine any changes to the purchase order and obtain explanations for unusual changes.
 - (iii) Compare the purchase orders to approved purchased requisitions.
- (c) Obtain cash vouchers for one month during the FAC audit period and complete the following:
 - (i) Compare the invoice to the purchase order.
 - (ii) Trace the invoice quantities to the received reports.
 - (iii) Trace the invoices to the fuel ledger.
 - (iv) Trace adjustments for British thermal units from the laboratory to the adjustment's application to payment

- (d) For several days during the FAC audit period, obtain daily reports on the error conditions from matching invoices and receiving reports, note the errors' disposition, and review any unusual items.
 - (e) Obtain freight cash vouchers from two to five days of coal receipts during the FAC audit period, compare the freight cash vouchers to the coal received reports and the fuel ledger, and note any differences.
 - (f) Obtain two cash vouchers each for barging the coal unloading during the FAC audit period, compare the tonnage to the unloading reports, and trace the terms and rates of the cash vouchers to the contract's purchase order, and to the fuel ledger.
 - (g) Obtain a description of the company's procedures for preparing monthly fuel analysis reports.
 - (h) Test such procedures by tracing adjustments from the fuel analysis reports to the payment invoices.
 - (i) Review all pending or approved retroactive escalations.
 - (j) Obtain purchase orders for two additional months during the FAC audit period and explain any unusual changes from the month reviewed under paragraphs (B)(8)(b) of these guidelines.
 - (k) Correlate coal orders with contracts to validate consistency.
 - (l) Summarize all discrepancies and suggestions resulting from the FAC audit and discuss them with officials of the company.
- (9) Audit procedures for purchased power and sales for resale.

The procedures which the auditor shall follow in reviewing the company's power purchases are:

- (a) Obtain a description of the procedures followed by the system dispatcher in purchasing power and sales for resale and determine:
 - (i) Whether economic power, including economy energy, is properly reported based on the company's interconnection agreement.
 - (ii) The basis for purchasing emergency power.

- (b) Review the procedures for reporting purchase power transactions to ensure they include sufficient information to complete the FAC forms.
 - (c) Verify purchased power transactions to related invoice, paid cash voucher, or cash receipts.
- (10) Audit procedures for reviewing the FAC rate.

The procedures which the auditor shall follow in reviewing the FAC rate charged by the company include, but are not limited to, the following:

- (a) Obtain for the FAC audit period copies of all monthly, semiannual, and annual reports filed with the Commission,
- (b) Obtain copies of the company's working papers for computing the FAC rates charged during the FAC audit period, verify the accuracy of the calculations, including reconciliation adjustments, and trace the costs shown on the working papers to their sources.
- (c) Compare the FAC rate calculations in the working papers with the reports filed with the Commission.
- (d) Determine whether the company's calculations of the FAC rates comply with these guidelines.
- (e) Determine whether the company's estimated data in calculating the FAC rates are reasonable.
- (f) Determine the method for calculating the average cost of fuel consumed.
- (g) Identify the first billing cycle in the next current period to which a new FAC rate will be applied.
- (h) Compare the costs included in the company's FAC rate calculations with the most recent historical levels of such costs and present those findings in the audit report.

(11) Audit report

The auditor shall prepare a financial audit report to be filed:

- (a) State the scope and objectives of the FAC audit.
- (b) State the standards utilized in conducting the FAC audit.

- (c) Objectively present findings, facts, and conclusions in a clear and concise manner.
- (d) Include ~~only the~~ findings, facts, and conclusions that are adequately supported in the audit report and ~~or~~ in the auditor's working papers (which may include supporting schedules or cross referencing of issues).
- (e) State specific recommendations, if any, and, ~~when possible, an estimate of the savings to be realized by implementing the recommendations.~~ that management can undertake involving potential cost savings, improvements in productivity, or enhancements to operational efficiencies, if any, and, when possible, an estimate of the savings to be realized by implementing the recommendations.
- (f) Place primary emphasis upon both improvement rather than criticism and, where appropriate, a critique of the past practices.
- (g) An identification and explanation of any issues, areas, or questions that need further examination.

FILE**OCC EXHIBIT** _____

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

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

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

**PUBLIC VERSION
DIRECT TESTIMONY**

of
EMILY S. MEDINE

ON BEHALF OF THE
OFFICE OF THE OHIO CONSUMERS' COUNSEL
10 West Broad St., Suite 1800
Columbus, OH 43215

PUCO

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October 31, 2008

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EXHIBITS:

- Exhibit EVA-1
- Exhibit EVA-2
- Exhibit EVA-3
- Exhibit EVA-4
- Exhibit EVA-5
- Exhibit EVA-6
- Exhibit EVA-7
- Exhibit EVA-8
- Exhibit EVA-9
- Exhibit EVA-10
- Exhibit EVA-11 Redacted
- Exhibit EVA-12 Redacted
- Exhibit EVA-13 Redacted

ATTACHMENTS:

- Attachment EVA-A
- Attachment EVA-B Redacted

*Public Version of the Direct Testimony of Emily S. Medine
On Behalf of the Office of the Ohio Consumers' Counsel
PUCO Case No 08-917-EL-SSO et al.*

1 **I. INTRODUCTION**

2 **Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 **A1. My name is Emily S. Medine. My business address is Energy Ventures Analysis,**
4 **Inc. ("EVA"), 1800 Beechwood Boulevard, Pittsburgh, PA 15217-1703.**

6 **Q2. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

7 **A2. My testimony is presented on behalf of the Office of the Ohio Consumers'**
8 **Counsel.**

10 **Q3. WHAT IS YOUR EDUCATION AND EXPERIENCE?**

11 **A3. My resume is attached as Attachment EVA-A. I have performed over 30**
12 **management audits of fuel procurement activities on behalf of regulatory**
13 **commissions, consumer advocates, intervenors, and utilities themselves. On**
14 **behalf of the Public Utilities Commission of Ohio ("PUCO"), I have been**
15 **involved in 11 prior management audits of the Ohio Power Company ("OP") and**
16 **the Columbus Southern Power Company ("CSP"). On behalf of the West**
17 **Virginia Consumer Advocate Division, I filed testimony in 2006 and 2007 related**
18 **to the Expanded Net Energy Cost ("ENEC") filing of Appalachian Power**
19 **Company ("APCO"), a company affiliated with AEP.**

20

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

2 **A4.** I was retained by the Office of the Ohio Consumers' Counsel to analyze the use
3 of the Black-Scholes model to assess the reasonableness of the Provider of Last
4 Resort ("POLR") charge filed with the Companies' ESP; to review the fuel
5 adjustment clause ("FAC") filing presented in the CSP's and OP's ("the
6 Companies") Electric Security Plan ("ESP") filing, and to provide
7 recommendations regarding the scope for the future FAC audits.

8

9 **Q5. PLEASE SUMMARIZE YOUR MAJOR FINDINGS.**

10 **A5.** My major findings are as follows:

11 **Provider of Last Resort (POLR)**

12 ▪ The Companies have not demonstrated a need for customers to make a
13 payment related to the POLR obligation as part of the ESP. Nor have they
14 demonstrated the appropriateness of using the Black-Scholes model for this
15 application. As proposed, the Companies' proposal for customers to make a
16 POLR payment should not be approved.

17 **Fuel Adjustment Clause (FAC)**

18 ▪ AEPSC has come through a very difficult period in the coal industry with a
19 reasonable mix of coal contracts and average prices below current market
20 levels. This period demonstrated among other things the importance of
21 portfolio purchasing, contracting with reputable suppliers, and maintaining
22 adequate stockpiles. These policies should be continued and stockpiles

1 should be replenished in 2009 if possible subject to coal availability and
2 pricing.

- 3 • Several existing coal contracts may need to be renegotiated in the context of
4 recent events in the industry which among other things have led to increased
5 production costs which in some cases are now greater than the contract
6 price. Any relief in the form of a price increase must be supported with clear
7 documentation of the associated value and must provide adequate
8 protections to customers in the event of an ultimate default in the
9 obligations.

- 10 • In order to reduce future price volatility, AEPSC may wish to consider some
11 new strategies related to coal procurement for CSP and OP within the
12 context of its portfolio strategy. These new strategies include adding a
13 financial hedging component to coal procurement and more actively
14 managing existing commitments in order to capture potential value for
15 customers.¹ Any new strategies must be fully vetted before they are adopted
16 in order to properly account for any associated risk and credit issues.

- 17 • The current fuel procurement manual is outdated and should be updated and
18 expanded to include among other things policies and procedures regarding
19 hedging and active management of coal commitments.

- 20 • Significant changes to energy markets have occurred since the fuel forecast
21 incorporated in the FAC was prepared. AEPSC should update its fuel

¹ The active management referred in this finding is distinctly different from the active management practiced by Duke Energy Ohio. In this case, active management refers to opportunities to either buy-out or divert contract tonnages that have higher values in other markets when they can be replaced with lower cost tonnages and yield a savings to customers.

1 forecasts to reflect these changes which affect not only the market price of
2 the open positions but also affect freight rates for virtually all deliveries due
3 to lower fuel oil costs. Also, emission allowance values have declined due
4 to the U.S. Court of Appeals for the District of Columbia Circuit's vacatur of
5 the Clean Air Interstate Rule ("CAIR").

- 6 ■ The recent changes to energy markets also brings into question whether in
7 fact there may be periods over the next three years in which fuel costs are
8 over-recovered from customers through the proposed FAC, an event the
9 Companies did not anticipate when the FAC was structured. An interest
10 component payable to customers as part of any over-recoveries should be
11 incorporated in a fashion similar to the carrying charge for any FAC under-
12 recovery as proposed by the Companies in the ESP.

13 FAC Audits

- 14 ■ For close to a decade, the Companies have not recovered fuel and
15 purchased power costs through a regulated cost-based mechanism such as
16 the FAC.² As such, the systems are not in place to produce the reports
17 necessary to perform the management style audits that were part of the
18 Electric Fuel Component ("EFC") process. In anticipation of its quarterly
19 filings and annual audits under the proposed FAC in the ESP, the
20 Companies and their fuel purchasing agent, the American Electric Power
21 Service Corporation (AEPSC)³ should begin preparing the documents that

² The Companies are recovering fuel costs through their existing rates but not based upon actual costs.

³ AEPSC purchases fuel on behalf of all the American Electric Power utilities.

1 will be necessary to provide adequate transparency to insure prudence.
2 AEPSC can look to its filing requirements in Kentucky, West Virginia and
3 other jurisdictions in which its affiliates operate with a fuel adjustment
4 mechanism.
5 ■ The audit of the FAC should at a minimum include the following
6 elements: a review of policies and procedures, a review of contract
7 performance and enforcement, a review of contracting practices, a review
8 of spot procurements, fuel costs, benchmarking of performance, costs and
9 level of purchased power, and a review of inventory management.

10
11 **Q6. WHAT SOURCES OF INFORMATION HAVE YOU USED IN THE**
12 **PREPARATION OF YOUR DIRECT TESTIMONY HERE?**

13 **A6.** I have reviewed the Companies' Application, the direct testimony filed by the
14 Companies and their responses to discovery. I interviewed two company
15 personnel and attended in person or telephonically the depositions of others. I
16 have also relied upon materials obtained from public information sources
17 including the Public Utilities Commission of Ohio, Securities and Exchange
18 Commission and the Energy Information Administration, industry periodicals to
19 which Energy Ventures Analysis, Inc. (EVA) subscribes, and internal EVA
20 databases.

21
22 **Q7. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?**

23 **A7.** The remainder of my testimony is organized as follows:

- 1 • Section 2 provides a review of the proposed charge for the POLR
- 2 requirement.
- 3 • Section 3 provides a summary of the ESP and FAC
- 4 • Section 4 provides an overview of the state of the U.S. coal industry and
- 5 its effects on CSP and OP
- 6 • Section 5 describes CSP and OP system and their coal requirements

7

8 **II. PROVIDER OF LAST RESORT**

9 ***Q8. PLEASE EXPLAIN YOUR UNDERSTANDING OF THE COMPANIES'***

10 ***PROVIDER OF LAST RESORT OBLIGATION.***

11 ***A8.*** Customers can switch away from the Companies and then later return to the

12 Companies for their electric generation requirements.

13

14 ***Q9. HOW DO THE COMPANIES VIEW THIS OBLIGATION?***

15 ***A9.*** According to Witness Baker, this customer flexibility "leaves the Companies in

16 the precarious position of being exposed to losing generation service load when

17 the market price is low but needing to stand ready to begin serving that load again

18 when the market price is high...."⁴

19

⁴ Baker Testimony, Page 26, Lines 7-10.

1 **Q10. DOES WITNESS BAKER ACKNOWLEDGE THAT THERE ARE**
2 **PROTECTIONS FOR POLR OBLIGATIONS FACED BY THE UTILITIES IN**
3 **S.B. 221?**

4 **A10.** Yes but Witness Baker suggests that the Companies do not believe that the
5 Commission and/or the General Assembly will comply with the provisions of
6 S.B. 221 if it results in returning customers paying higher rates.⁵ Witness Baker
7 gives as an example of the return of Ormet into the Companies' service territories,
8 even though the Companies agreed on a voluntary basis to this return.⁶

9
10 **Q11. WHAT DOES WITNESS BAKER PROPOSE REGARDING THE POLR**
11 **OBLIGATION?**

12 **A11.** Witness Baker proposes an annual charge to customers related to the POLR
13 obligation equal to over one-half billion dollars for the three year ESP period.
14 The annual charges are estimated to be \$108.2 million for CSP and \$60.9 million
15 for OP, although they could change based upon actual load.

16
17 **Q12. HOW DID THE COMPANIES DERIVE THESE FIGURES?**

18 **A12.** The Companies used the Black-Scholes option pricing model to derive these
19 figures.

20

⁵ Page 27, Lines 20-22.

⁶ Baker Testimony, Page 29, Lines 7-9.

1 **Q13. WHAT DOES S.B. 221 STATE WITH RESPECT TO RECOVERY OF THE**
2 **POLR OBLIGATION?**

3 **A13.** S.B. 221 is silent on this matter. In the last case that addressed a POLR charge,
4 Case No. 04-169-EL-UNC, the PUCO made it clear that the POLR charge
5 provided to AEP was "based upon the specific circumstances ... in this
6 proceeding. Nothing in this decision is intended to be precedent-setting ..."
7 Moreover, the POLR charge there was related to distinct regional transmission
8 operational costs expected to be incurred during the period the Rate Stabilization
9 Plan ("RSP") was in effect, through December 2008.

10

11 **Q14. WHAT IS THE BLACK-SCHOLES MODEL?**

12 **A14.** The Black-Scholes model was developed in the early 1970's by Fischer Black,
13 Myron Scholes, and Robert Merton when stock options were first traded on the
14 Chicago Board Options Exchange. The purpose of the model was to price the
15 stock options. Black, Scholes and Merton derived a formula, which has become
16 known as the Black-Scholes model that was used to price the options. Notably, in
17 1997, Merton and Scholes received the Nobel Prize in Economics for this work.

18

19 **Q15. WHAT IS A STOCK OPTION?**

20 **A15.** A stock option, also referred to as a call option, is the right to purchase shares of
21 stock at a previously determined strike price. This right to purchase can be
22 exercised for the duration of the contract.

23

1 **Q16. HOW WAS THE BLACK-SCHOLES MODEL DERIVED?**

2 **A16.** The initial formula contains two components. The first component addresses
3 simple return on an investment. The second component essentially addresses the
4 uncertainty of the return which is characterized by volatility. The derived formula
5 is linked to a proposition that stock purchasing is affected by continuous portfolio
6 optimization that reduces the volatility. The resulting formula is a partial
7 differential equation that is used to price the call option in the target portfolio, i.e.,
8 the pricing of the call option.

9
10 **Q17. WHAT ARE THE REQUIRED INPUTS INTO A BLACK-SCHOLES**
11 **MODEL?**

12 **A17.** There are five pieces of information required for its intended purpose, i.e., the
13 valuing of a call option. The five items are as follows: (1) the current price of the
14 stock, (2) the strike price of the option, (3) the amount of time remaining until the
15 option expires, (4) the current interest rate, and (5) the value of the volatility
16 parameter for the stock.

17
18 **Q18. WHAT INPUTS DOES WITNESS BAKER PROPOSE?**

19 **A18.** As noted in Witness Baker's testimony (Pages 31-32), the Companies agree that
20 there are five inputs. However, given the different application, the Companies
21 have taken liberties with regard to each as described below.

22 • With respect to the first input which in the Black-Scholes model is the current
23 price of the stock, the Companies are proposing to use the "competitive

1 benchmark prices discussed in relation to the MRO" as a proxy for the market
2 price of electricity.

3 • With respect to the second input, the strike price of the option, the Companies
4 are proposing to use the first year ESP price contained in its filing as a proxy
5 for the price of an electricity option.⁷

6 • With respect to the amount of time remaining until the option expires, the
7 Companies are proposing to use "Calendar Years 2009-2011".

8 • With respect to the current interest rate, the Companies are proposing to use
9 the "interest rate of the 3 year Treasury note."

10 • With respect to volatility parameter of the stock, the Companies are proposing
11 to use the "volatility of the futures contract for the term 2009-2011."

12
13 **Q19. ARE YOU FAMILIAR WITH THE BLACK-SCHOLES MODEL?**

14 **A19.** Yes.

15
16 **Q20. IN WHAT CONTEXT ARE YOU FAMILIAR WITH THE BLACK-SCHOLES**
17 **MODEL?**

18 **A20.** Coal traders use the Black-Scholes model to value coal options. In several
19 engagements where I either offered fuel procurement advice or audited fuel
20 procurement activities, I supported and/or encouraged the use of an option pricing
21 model, such as the Black-Scholes model, to value the "worth" of the coal options.

22

⁷ Baker Deposition, Page 35.

1 **Q21. CAN YOU PLEASE EXPLAIN WHAT YOU MEAN BY A COAL OPTION?**

2 **A21.** Yes. A coal option is the right of a coal buyer to purchase coal during a fixed
3 period at a set price. For example, if a coal buyer has a coal contract for one
4 million tons per year but has the right to vary the tonnage by plus or minus 20
5 percent, the volume optionality is essentially a call option. In this case, the base
6 tonnage would be 800,000 tons, i.e., minus 20 percent, with a 400,000 ton option.
7 Pricing is determined per the agreement as well as the strike dates. The strike
8 dates are the dates by which the buyer must inform the seller as to its intent
9 regarding the option tonnage.

10

11 **Q22. WHY IS THE BLACK-SCHOLES MODEL AN APPROPRIATE TOOL TO**
12 **EVALUATE COAL OPTIONS?**

13 **A22.** As can be deduced from the prior discussion, the nature of a coal option is very
14 similar to a stock option. There is a known current price, there is a known strike
15 price (usually but not always the same as the current price), and there are defined
16 periods in which the option must be exercised. Volatility is typically measured in
17 these applications not through forward price curves but through historical
18 volatility although forward price curves could be used.

19

20 **Q23. DOES AEPSC USE THE BLACK-SCHOLES MODEL TO EVALUATE COAL**
21 **OPTIONS?**

22 **A23.** No. AEPSC has indicated on more than one occasion that it does not believe the
23 Black-Scholes model is a reliable tool for this purpose.

1

2 **Q24. DO YOU BELIEVE THAT THE COMPANIES SHOULD BE**
3 **COMPENSATED FOR THE POLR OBLIGATION BASED UPON THE**
4 **FILINGS CONTAINED IN THE ESP?**

5 **A24. No.**

6

7 **Q25. PLEASE EXPLAIN YOUR REASONS.**

8 **A25. There are two reasons which underlie my conclusion:**

- 9 • Unlike the discrete costs identified as POLR costs in Case No. 04-169-EL-
10 UNC, the Companies here have not identified any specific costs they are
11 incurring related to the POLR obligation.
- 12 • The Companies have not provided the support appropriate for a proposed \$0.5
13 billion charge to customers over the three-year ESP period.

14

15 **Q26. PLEASE EXPLAIN YOUR REASON THAT THE COMPANIES ARE NOT**
16 **INCURRING COSTS RELATED TO THE POLR OBLIGATION.**

17 **A26. Witness Baker does not quantify in his testimony any calculation of what he**
18 **believes is the cost of the POLR obligation other than a general statement that**
19 **"the costs of AEP's POLR obligation can be best understood in light of**
20 **potentially having to buy high and sell low."**⁸

21

⁸ Baker Testimony, Page 30.

1 A careful reading of his testimony shows that while Witness Baker recognizes
2 there are protections the Companies with respect to the POLR obligation, his real
3 concern is that despite "limited protections" provided in the "context of shopping
4 rules ... that would appear to shield the Companies from some costs associated
5 with providing the flexibility ... in practice (they) might not." The example
6 provided by Witness Baker relates to the provision that states if a government
7 aggregation does not pay for standby service, the "customers of that government
8 aggregation who return to the utility for generation service will be required to pay
9 the market price of power incurred by the utility to serve the customer" for at least
10 two years. Witness Baker states that he "simply" does "not believe that the
11 PUCO and/or the General Assembly and Governor will sit back and fail to
12 intervene while residential customers are forced into paying those rates." In other
13 words, despite the Companies' legal and regulatory protections regarding POLR
14 exposure, Witness Baker argues for compensation because he does not believe
15 that these protections will be enforced. For the PUCO to agree with Witness
16 Baker's argument, it would in effect have to reach the same conclusions.

17
18 ***Q27. DO THE FAC PROVISIONS OF THE ESP PROVIDE ANY COST***
19 ***PROTECTION RELATED TO THE POLR OBLIGATION?***

20 ***A27.*** Yes. Under the FAC provisions, the Companies will recover the costs included in
21 Account 555. According Witness Nelson, "(t)his account records the cost of
22 electricity purchased including transactions under the AEP Power Pool. It
23 includes both energy and demand or capacity charges." Witness Baker confirmed

1 that if the Companies fulfilled their POLR obligations through purchased power,
2 the related purchased power costs would be recoverable through the FAC.⁹

3
4 **Q28. DID THE COMPANIES PERFORM ANY ANALYSIS OF SHOPPING**
5 **BEHAVIOR?**

6 **A28.** There is no indication that the Companies performed any analysis of shopping
7 behavior. In Witness Baker's evidence, the Companies confirmed that there has
8 been virtually no customer switching in the previous eight years.¹⁰ Witness Baker
9 was asked whether he expected customer switching to increase in the future. He
10 indicated he did not know.¹¹

11
12 **Q29. WITNESS BAKER REFERRED TO ORMET. IS THE ORMET**
13 **EXPERIENCE RELEVANT TO THE DISCUSSION OF THE POLR**
14 **OBLIGATION?**

15 **A29.** I do not believe it is. Ormet did not switch providers. Rather it left OP's service
16 territory. Ormet's return to the Companies' service territories was the result of a
17 voluntary agreement with the Companies. The Companies would not have had a
18 POLR obligation to Ormet absent this agreement because it was not part of the
19 Companies' service territory.

20

⁹ Baker Deposition, Page 18.

¹⁰ Baker Testimony, Page 33, Lines 7-9.

¹¹ Baker Deposition, Page 38.

1 **Q30. PLEASE EXPLAIN YOUR CONCLUSION THAT THE COMPANIES HAVE**
2 **NOT PROVIDED ADEQUATE SUPPORT FOR THE \$0.5 BILLION THEY**
3 **ARE PROPOSING TO CHARGE CUSTOMERS.**

4 **A30.** To state the obvious, \$0.5 billion is an enormous amount of money. Further, the
5 money is not for a physical asset that provides a potential long-term benefit for
6 customers but for what the Companies are stating is the risk they are assuming
7 under the POLR obligation. The Companies have neither provided sufficient
8 justification that they are in fact assuming a risk nor that if they are assuming a
9 risk that the Black-Scholes model is the appropriate tool for measuring this risk.

10

11 **Q31. IF THE PUCO DETERMINES THAT THE COMPANIES SHOULD BE**
12 **COMPENSATED FOR POLR OBLIGATIONS, IS THE BLACK-SCHOLES**
13 **MODEL APPROPRIATE TO USE TO PRICE THE POLR PAYMENT?**

14 **A31.** No.

15

16 **Q32. PLEASE EXPLAIN WHY YOU BELIEVE THAT THE BLACK-SCHOLES**
17 **MODEL IS NOT APPROPRIATE FOR THIS PURPOSE.**

18 **A32.** As noted above, in order to utilize the Black-Scholes model for this purpose, the
19 Companies have had to take great liberties with respect to how the inputs were
20 defined. Further, how each of these inputs is defined is a subjective judgment, not
21 as prescribed by the model. For example, the Companies used competitive
22 benchmark prices discussed in relation to the MRO as the option price and the
23 first year ESP price as the strike price. Neither of these numbers is known at this

1 time. Further, it is not clear that the ESP price which the Companies have used as
2 the strike price includes any of the non-bypassable costs.¹² Second, switching is
3 unlikely to occur whenever market pricing is below ESP pricing which is a
4 fundamental presumption of the model. (Options are always exercised when they
5 are in the money in the stock market.) The reason switching may not always
6 occur is that switching requires a level of transparency that may exist and that
7 there may be costs associated with the switching (e.g., cancellation penalties).
8 Further, if a returning customer is part of a government aggregation, it is not
9 eligible for the ESP price for at least a period of two years. This complexity
10 cannot be captured in the Black-Scholes model.

11

12 ***Q33. ARE YOU SAYING THAT FOR THIS APPLICATION THERE IS TOO***
13 ***MUCH SUBJECTIVITY INVOLVED IN DEFINING THE INPUTS?***

14 ***A33.*** Yes. The Companies essentially confirmed the subjectivity involved in the
15 definition of inputs when Witness Baker indicated the model had to be run an
16 "indeterminate" amount of times before settling on the inputs included in the
17 filing.¹³

18

¹² Witness Baker testified in his deposition that the ESP did not include the FAC deferrals (Page 117). The Companies have proposed a number of non-bypassable costs which the PUCO may include as is, may adjust, or may reject.

¹³ Baker Response to OCC Interrogatory Request 5-117.

1 **Q34. DO OTHER UTILITIES USE THE BLACK-SCHOLES MODEL TO VALUE**
2 **THEIR POLR OBLIGATIONS?**

3 **A34.** I am not aware of any utilities that use the Black-Scholes model for this purpose.
4 More importantly, Witness Baker is not aware of any other utilities that use the
5 Black-Scholes model for this purpose.¹⁴
6

7 **III. THE ESP AND THE FAC**

8 **Q35. WHAT IS THE ESP?**

9 **A35.** In April 2008, the Ohio legislature enacted, and on May 1, 2008 the Governor of
10 Ohio signed, Amended Substitute Senate Bill 221 (S.B. 221) which amended the
11 electric restructuring law in Ohio. It required utilities to adjust their rates by
12 filing an ESP which at the utility's option could include a fuel adjustment
13 mechanism. Utilities also had the option to file a Market Rate Offer ("MRO").
14 S.B. 221 gives the PUCO the authority to either approve or modify each utility's
15 ESP request. In July 2008, CSP and OP filed an ESP with the PUCO. The
16 Companies requested an annual increase that customers would pay for the years
17 2009 through 2011 but proposed to cap the increase in each year at around 15
18 percent. The Companies proposed to defer fuel cost under-recoveries for future
19 recovery during the period 2012 through 2018. The Companies also requested the
20 right to charge customers for risks related to the POLR obligation.
21

¹⁴ Baker Deposition, Page 29 and Response to OCC Interrogatory Request 5-111.

1 **Q36. PLEASE DESCRIBE THE FAC.**

2 **A36.** The FAC is the Fuel Adjustment Clause, and is the mechanism that will be used
3 to recover prudently incurred fuel, purchased power, and other miscellaneous
4 expenses. As Witness Nelson stated in his testimony, the FAC will include the
5 following:

- 6 • Account 501 (Fuel) – the cost of fuel and transportation for generating
7 electricity
- 8 • Account 502 (Steam Expenses) – the cost of material and expenses used in the
9 production of steam including the cost of chemicals used in environmental
10 controls
- 11 • Account 509 (Allowances) – the cost of emission allowances related to
12 emissions of sulfur dioxide (SO₂) and nitrous oxide (NO_x)
- 13 • Account 518 (Nuclear Fuel Expense) – the amortized cost of the nuclear fuel
14 assemblies which is not relevant at this time for CSP or OP
- 15 • Account 547 (Non-Steam Fuel) – the cost of fuel used in non-steam
16 applications such as simple cycle gas peaking plants
- 17 • Account 555 (Purchased Power) – the cost of purchased electricity including
18 both energy and demand or capacity charges
- 19 • Account 507 (Rents) – the costs associated with purchase contracts or unit
20 power sales that have to be recorded as a lease per accounting rules
- 21 • Account 557 (Other Expenses) – the cost of renewable energy credits to meet
22 the renewable requirements of S.B. 221

- 1 • Accounts 411.8 and 411.9 (Gains and Losses from Disposition of Allowance)
- 2 – the gains or losses from the sale of emission allowances
- 3 • Other Accounts – the costs associated with items allowed to be recovered
- 4 under the FAC not included in the above

5

6 ***Q37. HOW DOES THE FAC OPERATE AS PART OF THE COMPANIES' ESP***
7 ***PLAN?***

8 ***A37.*** The Companies propose that the items to be recovered by the FAC be cost-based.
9 The 2009 FAC costs are estimates that would be traced up on either quarterly or
10 annually. Regular audits of these costs would be conducted to confirm their
11 prudence. Under the ESP proposed by the Companies, the Companies do not
12 believe that actual FAC can be recovered given the 15 percent cap on rate
13 increases and have proposed a three year phase-in. The Companies have
14 estimated that at the end of three year period there would still be substantial
15 under-recovery of FAC costs which they propose to amortize for recovery from
16 customers over a seven-year period beginning in 2012.

17

18 ***Q38. WHAT ARE THE COMPANIES PROPOSING WITH RESPECT TO THE***
19 ***CARRYING CHARGES ON THE OVER- AND UNDER-RECOVERIES?***

20 ***A38.*** According to the testimony of Witness Assante, "the Companies are proposing a
21 carrying cost on the unrecovered balance of the deferred incremental FAC costs at
22 their weighted average cost of capital (WACC) rate over the entire ten-year
23 phase-in plan period in order to recover from customers the cost of financing their

1 deferred unrecovered FAC costs.”¹⁵ The Companies do not propose to pay
2 interest to customers regarding over-recovery of costs, even though the
3 Companies propose to collect interest from customers regarding under-recoveries.
4

5 ***Q39. HOW DOES THE FAC COMPARE TO THE OLD ELECTRIC FUEL***
6 ***COMPONENT (“EFC”)?***

7 ***A39.*** The FAC includes all elements in the old EFC and more. The additions, which
8 are listed and quantified in Witness Nelson’s Exhibits PJN-2 (for CSP) and PJN-5
9 (for OP) include ash handling, fuel handling, renewable energy credits, pool
10 capacity, pool energy, and emission control chemicals. According to Witness
11 Nelson’s testimony, the additional elements comprise 21 percent and 11 percent,
12 respectively, of CSP’s and OP’s estimated 2009 FAC.
13

14 ***IV. STATE OF THE COAL INDUSTRY***

15 ***Q40. PLEASE DESCRIBE THE CHANGES TO THE U.S. COAL MARKET SINCE***
16 ***THE MIDDLE OF 2007.***

17 ***A40.*** Since the middle of 2007, the changes to the U.S. coal industry have been
18 profound. As shown in Exhibit EVA-1, by the middle of 2007 a global
19 supply/demand imbalance emerged causing a sharp increase in global steam coal
20 prices. The increase in prices made U.S. steam coals competitive in the global
21 market. This was a reversal in a recent trend in which overseas exports of steam

¹⁵ Page 8, Lines 6-9.

1 coal had declined to about three million tons and imports of steam coal had
2 increased to over 30 million tons. (Exhibit EVA-2)

3
4 By the end of 2007, not only was there a marked increase in U.S. steam coal
5 exports but the price of U.S. steam coals started to be priced by the global steam
6 coal price. The result was more than a doubling in Appalachian steam coal prices.
7 Prices for other bituminous coals also increased as demand for these coals
8 increased both in order to backfill the exports of Appalachian coals and, in some
9 cases, for moving into the export market themselves.

10
11 **Q41. WHAT CAUSED THE GLOBAL SUPPLY/DEMAND IMBALANCE?**

12 **A41.** Simply, the coal supply/demand imbalance was caused by global demand growth
13 outpacing global supply growth. The global thermal coal market has increased by
14 over 250 million metric tons since 2000 and over 100 million metric tons since
15 2004, as shown in Exhibit EVA-3. Most of the increase has been in the Pacific
16 Rim although imports to the U.S. also increased significantly during this period.
17 This rapid rate of growth in demand has, of course, been accompanied by a rapid
18 rate of growth in supply. As shown in Exhibit EVA-4, the supply increases were
19 dominated by Indonesia which has gone from virtually nothing in 1990 to almost
20 200 million metric tons in 2007. Also significant during this period was Australia
21 which maintained a significant presence despite losing its position as largest
22 thermal coal exporter. China, too, had significant effects on global supply. The
23 China story is particularly relevant to much of the recent change as the growth in

1 domestic consumption within China is what decreased the amount of Chinese coal
2 available to export.

3
4 **Q42. ARE THERE OTHER FACTORS TO THE SUPPLY IMBALANCE BESIDES**
5 **DEMAND GROWTH?**

6 **A42.** Yes. There are a number of factors, the two most important of which relate to the
7 metallurgical coal market and area-specific supply problems. With respect to the
8 former, strong economic growth increased the global demand for metallurgical
9 coal particularly in Asia. Limited metallurgical coal supply increased the
10 premium for metallurgical coals to record levels and made it advantageous for
11 "cross-over" coals to move from steam to metallurgical markets. In addition, the
12 high premiums created enormous incentives for exporting metallurgical coals
13 preferentially over steam coals. Therefore, where infrastructure constraints (rail or
14 terminal) limited exports, metallurgical coals were exported before steam coals
15 thereby compounding the tightness in the steam coal market.

16
17 With respect to specific supply problems, there have been numerous supply issues
18 over this period. The most significant include reduced exports from South Africa
19 due to domestic power shortages which curtailed operations at export coal mines
20 and depleted utility stockpiles which forced diversion of some export coals;
21 infrastructure constraints in Australia which required a quota system; heavy rains
22 and flooding in the first quarter of 2007 which created force majeure situations in

1 Queensland, Australia and Indonesia; and reduced exports from Russia also due to
2 infrastructure problems.

3
4 **Q43. ARE THERE ANY OTHER REASONS FOR THE INCREASE IN PRICES?**

5 **A43.** Yes. The weakness of the U.S. dollar has also caused coal prices to increase
6 because global coal trade is U.S. dollar-denominated which makes the value of
7 the U.S. dollar relative to other currencies very significant. The most important
8 relationship is with the Australian dollar as Australia is the largest exporter of
9 coal and Australian producers need higher prices when the U.S. dollar is weak to
10 realize the same price at the mine. As shown in Exhibit EVA-5, the U.S. dollar
11 declined in value against the Australian dollar, the Canadian dollar, and the Euro
12 since 2002 with brief periods of strengthening during this period.

13
14 **Q44. WHAT IS THE CURRENT STATE OF THE INDUSTRY?**

15 **A44.** A market adjustment started in July 2008. As with the increase, there are multiple
16 factors causing the adjustment including increased strength of the U.S. dollar,
17 declining freight rates, and declining commodity prices. It has become
18 increasingly clear in recent weeks that we are in the midst of a global economic
19 recession which will reduce demand growth (and possibly demand) for both
20 thermal and metallurgical coals.

1 **Q45. WHAT DOES THIS MEAN FOR THE PRICING OF U.S. COALS?**

2 **A45.** As shown on Exhibit EVA-6, Appalachian coal prices have dropped by over 20
3 percent. There have been smaller price declines for Illinois Basin and western
4 bituminous coals.

5
6 **Q46. WHAT IS THE CURRENT EXPECTATION FOR U.S. COAL PRICES IN**
7 **2009?**

8 **A46.** The biggest unknown for U.S. coal prices is the expected duration and magnitude
9 of the current economic recession. The reason this is important is that if global
10 coal prices fall to a level where U.S. coals are no longer competitive in the global
11 market, the price for U.S. coals will fall because it will be based upon the
12 domestic supply/demand balance. Domestic demand growth has been very
13 modest and is below current supply levels which have been recently expanded to
14 support higher exports.

15
16 **Q47. WILL COAL PRICES RETURN TO PRE-SURGE LEVELS IF U.S. COALS**
17 **CEASE BEING COMPETITIVE IN THE GLOBAL MARKET?**

18 **A47.** I do not think that will happen because there has been a step increase in coal
19 production costs. As a result, pre-surge pricing would cause many coal mines to
20 operate at cash losses. Also, important to short-term pricing is the stockpile level
21 of Central Appalachian coals at electric utility power plants. As shown on Exhibit
22 EVA-7, electric utility stockpiles of Central Appalachia coals are not only below
23 normal but the year-on-year decline in stockpile levels was about 10 million tons.

1 This means that in order to maintain current stockpile levels, shipments have to
2 increase by about 10 million tons. If utilities are to replenish their stockpiles to
3 normal levels, shipments will have to be higher still.

4
5 **Q48. COULD PRICES REBOUND FROM CURRENT LEVELS AND REACH**
6 **NEW PEAKS?**

7 **A48.** Of course, anything is possible but that does not seem to be the likely scenario at
8 the moment because of the global economic recession. If demand growth for both
9 steam and metallurgical coals slows down, the development of other international
10 supplies is likely to catch up and the U.S. is likely to revert to being a modest
11 exporter of steam coal.

12
13 **Q49. WHAT HAPPENED TO THE POWDER RIVER BASIN DURING THIS**
14 **PERIOD?**

15 **A49.** The largest coal supply region in the U.S. is the Powder River Basin ("PRB").
16 The PRB, located in northern Wyoming and southern Montana, produces a low
17 sulfur, sub-bituminous coal. This coal is relatively low cost to produce occurring
18 in thick seams located relatively close to the surface. Most PRB coal moves to
19 utility power plants. Initially, it moved to plants specifically designed for this
20 coal. However, in the last 20 years, PRB has displaced other coals in many power
21 plants due to both its low cost and low sulfur content which has allowed a marked
22 reduction in SO₂ emissions without additional pollution control equipment.

1 The PRB currently has excess supply, partly in response to expectations regarding
2 the construction of a large number of new coal-fired power plants designed for
3 this coal. In the last three years, many of these plants have been cancelled or
4 deferred due to permitting and other problems. The largest single reduction was
5 the loss of six GW of planned PRB capacity (which could have consumed over 25
6 million tons in and of themselves) when TXU agreed to cancel eight plants in
7 order to obtain approval for its sale to Kohlberg Kravis Roberts & Co. and Texas
8 Pacific Group.

9
10 **Q50. WHY DIDN'T THE PRB COAL MOVE EAST GIVEN THE TIGHTNESS IN**
11 **EASTERN COAL MARKETS?**

12 **A50.** As noted above, PRB coals have been displacing eastern coals for many years.
13 The easy displacements, i.e., the displacements that could occur without
14 significant expense, were achieved a long time ago. The remaining displacements
15 took time and often required capital expenditures to achieve.¹⁶ There is no
16 question that the recent market disturbance has encouraged a number of utilities to
17 further explore PRB displacement opportunities. However, there was insufficient
18 switching/testing to consume the excess supply, thereby keeping prices low. The
19 softness in the price is seen most clearly in the prompt prices¹⁷.

20
¹⁶ The types of capital expenditures required to convert to PRB coals primarily relate to coal handling equipment as PRB coals are dustier and have a lower heat content.

¹⁷ Prompt prices generally refer to current prices for coal delivery within the next quarter.

1 **Q51. ARE THERE ANY OTHER FACTORS IN THE CURRENT MARKET THAT**
2 **ARE RELEVANT FOR THE CURRENT PROCEEDING?**

3 **A51.** Yes. In July 2008, CAIR was vacated by the U.S. Court of Appeals for the
4 District of Columbia Circuit.¹⁸ This followed an earlier decision which vacated
5 the Clean Air Mercury Rule. As compliance with CAIR was scheduled to
6 commence 2010, utilities had already completed their planning and many of the
7 planned scrubber retrofits have already been completed or are under construction.
8 American Electric Power ("AEP"), like most other utilities, want to proceed with
9 their schedules of environmental retrofit because of a presumption that CAIR, or a
10 new law or regulations requiring retrofits will be instituted.

11
12 **Q52. WHAT IS AEP'S ANNOUNCED POSITION REGARDING ITS**
13 **INVESTMENTS IN ENVIRONMENTAL CONTROLS?**

14 **A52.** AEP initially indicated that it had no plans to change its schedule for
15 environmental projects. However, recently, AEP Chairman, President and CEO
16 Michael Morris "warned that if credit does not loosen up, environmental retrofits
17 could be delayed."¹⁹ Any delays could affect the timing and amount of
18 environmental investments.

19

¹⁸ CAIR was challenged on several grounds by a number of states, electric utility companies, and other parties. The primary issues were (1) the validity of EPA's regional trading program, (2) the extent to which EPA considered whether upwind states both contributed to and interfered with downwind states' ability to maintain compliance with air quality standards, (3) SO₂ and NO_x budgets, and (4) forfeiture of SO₂ allowances. The Court vacated CAIR because it determined that EPA had overstepped its authority and the flaws were too numerous to remand only portions of CAIR back to the EPA for revision.

¹⁹ SNL Report, October 14, 2008.

1 **Q53. ARE THERE ANY OTHER CONSEQUENCES TO THE VACATION OF**
2 **CAIR IN THE CURRENT ESP CASE?**

3 **A53.** Yes. Proceeds from the disposition of allowances flows through the FAC. The
4 Companies had expected substantial returns from these sales. The vacatur of
5 CAIR caused a collapse in SO₂ and NO_x emission allowance pricing. (Exhibit
6 EVA-8) The forecasts in the FAC have not been updated since the fall in
7 emission allowance values.

8
9 **Q54. HOW DO THE CHANGES TO CAIR AFFECT THE COMPANIES' ESP**
10 **FILINGS?**

11 **A54.** As noted above, the immediate effects of the vacatur of CAIR are a reduction in
12 emission allowance prices which primarily affects Accounts 441.8 and 411.9, i.e.,
13 the gains and losses from the disposition of emission allowances. The change in
14 SO₂ emission allowance values will also have some impact on coal pricing and
15 could affect coal choices, as higher sulfur coals for non-scrubbed plants may
16 become a more attractive alternative, subject to the specific emission limit for that
17 plant. Finally, the vacatur of CAIR could change the timing and operation of
18 some pollution control equipment, which in turn could affect FAC costs related to
19 Account 502 (Emission Control Chemicals) and the level of capitalized
20 investments in 2009, 2010, and 2011 for which the Companies are proposing to
21 receive recovery through the non-FAC portion of the standard service offer.
22

1 **Q55. DO YOU HAVE ANY SPECIFIC RECOMMENDATIONS REGARDING THE**
2 **ENVIRONMENTAL CONTROL EXPENDITURES IN THE ESP?**

3 **A55.** Given the uncertainty and timing of future expenditures, I would recommend that
4 capital recovery of environmental expenditures be cost-based as they are installed.
5

6 **V. OVERVIEW OF CSP, OP AND AEPSC FUEL PROCUREMENT**

7 **Q56. PLEASE DESCRIBE CSP, OP AND AEP.**

8 **A56.** CSP and OP are wholly-owned subsidiaries of AEP, headquartered in Columbus,
9 Ohio.
10

11 **Q57. PLEASE DESCRIBE CSP'S AND OP'S POWER PLANTS.**

12 **A57.** The coal-fired power plants owned by CSP and OP are listed on Exhibit EVA-8.
13

14 CSP operates two coal-fired power plants in Ohio. The Conesville station consists
15 of four operating units. Conesville 4 is jointly owned with Duke Energy Ohio and
16 Dayton Power and Light. The other three units are fully owned by CSP. Units 5
17 and 6 are scrubbed. A scrubber is being retrofit on Unit 4. There are no plans to
18 scrub Unit 3; rather there is a plan to retire the unit in 2012. CSP also has a small
19 coal unit at Picway. CSP also operates the Conesville Coal Preparation Plant
20 which was built in 1985 to wash local trucked coal for primarily Conesville units
21 1-4.
22

1 OP operates five coal-fired power plants but also has ownership interests in Amos
2 and Sporn (which are operated by Appalachian Power ("APCO")). The Gavin
3 unit is fully scrubbed. Amos 3, Cardinal 1 and Mitchell have been or are recently
4 being retrofit with scrubbers. There are long-term plans to retrofit Muskingum
5 River 5 and Sporn 5. The only OP station which remains unscrubbed without any
6 plans to do so is Kammer.

7
8 ***Q58. WHAT IS THE SOURCE OF COAL SUPPLIED TO APCO'S POWER***
9 ***PLANTS?***

10 ***A58.*** The reported purchases for the 12 months ending May 2008 are summarized in
11 Exhibit EVA-9. The purchase profiles of the various operating companies are
12 strikingly different. Virtually all of the coals purchased for Amos and Sporn were
13 from Central Appalachia. Virtually all of the coals purchased for CSP were Ohio
14 coals which are the most competitive given their location and delivery options.
15 OP is dominated by coals from Northern Appalachia coals although it continues
16 to burn modest quantities from Central Appalachia and the Powder River Basin.

17
18 ***Q59. WHO PURCHASES CSP'S AND OP'S COAL?***

19 ***A59.*** AEPSC purchases coal for CSP and OP. AEPSC also purchases coal for
20 Appalachian Power, Indiana Michigan Power, Kentucky Power, and
21 Southwestern Electric Power. AEPSC annually procures about 75 million tons of
22 coal.

1 **Q60. WHAT PROCEDURES DOES AEPSC FOLLOW IN THE PURCHASE OF**
2 **ITS COAL?**

3 **A60. AEPSC has a policies and procedures manual which guides its fuel procurement**
4 **activities. The manual, which was last updated in September 2004, provides**
5 **information on AEPSC organization and procurement procedures and policies.**
6 **EVA recommends that the policies and procedures manual be expanded to**
7 **include the following:**

- 8 a. Specific portfolio targets for each utility system,
 - 9 b. Specific obligations to use competitive solicitations *except* in unique
10 circumstances with such unique circumstances to be well documented,
 - 11 c. Specific factors that will be used to evaluate bids received under
12 competitive solicitations,
 - 13 d. Procedures to be implemented in response to a declaration of *force*
14 *majeure*,
 - 15 e. Policies related to the use of physical and financial hedges,
 - 16 f. Procedures that will insure that the procurements for each utility are not
17 compromised by procurements for the other affiliate utilities,
 - 18 g. Procedures related to the coal inventory process, and
 - 19 h. Code of conduct requirements for procurement personnel.
- 20

1 **Q61. WHAT ARE THE TARGET INVENTORY LEVELS FOR THE COMPANIES'**
2 **PLANTS?**

3 **A61.** AEPSC has established "normal" and "winter" inventory targets for each of its
4 plants, which are listed on Exhibit EVA-11. AEPSC represents that it has
5 determined these inventory levels to be appropriate for providing reliable supply
6 in the context of potential disruptions related to transportation, labor, weather, and
7 maintenance.

8
9 **Q62. HOW HAS AEPSC COMPLIED WITH THE INVENTORY TARGETS?**

10 **A62.** AEPSC has not done so well in the last 12 months. As shown in Exhibit EVA-10,
11 at the end of October 2007 inventory levels at the CSP and OP plants were
12 actually running slightly above target amounts. Inventory levels declined through
13 this period primarily due to problems within the industry. As of the end of
14 September 2008, inventory levels are running [BEGIN CONFIDENTIAL] ■
15 ■ [END CONFIDENTIAL] targets. The performance by plant has
16 not been uniform as shown on Attachment EVA-B.

17
18 **Q63. ARE YOU FINDING FAULT WITH THE COMPANIES FOR THEIR**
19 **INVENTORY PERFORMANCE?**

20 **A63.** No. As previously discussed, the last 12 months have been exceedingly difficult
21 ones for U.S. utilities. Supply disruptions are one of the major reasons why
22 utilities maintain inventory levels. The bottom line is that while inventory levels
23 have fallen below target levels, the fact is AEP has been able to maintain adequate

1 coal deliveries to the plants to keep the power plants operating. Further, through
2 compliance with inventory targets at the beginning of the period, AEP was better
3 positioned to do so.
4

5 **Q64. DO YOU HAVE ANY RECOMMENDATIONS REGARDING INVENTORY**
6 **LEVELS?**

7 **A64.** Yes. I recommend that AEP work to replenish its stock in 2009 subject to coal
8 availability and pricing. As noted above, by having stockpiles at target levels
9 provides a cushion in the event of a supply disruption and limits potential costs
10 associated with possible coal conservation efforts.²⁰
11

12 **Q65. HOW DOES AEPSC PURCHASE COAL?**

13 **A65.** AEPSC buys coal under a combination of contracts and spot procurements. A
14 typical Request for Proposal ("RFP") requests bids for a wide range of coals and
15 give bidders the option to bid for spot and/or multi-year contract business.
16 AEPSC does not have a specific schedule when RFP's are issued.
17

²⁰ In 2005, disruptions to deliveries from the PRB occurred as a result of problems with the Joint Line. Many utilities were forced into what was referred to as coal conservation because of reduced shipments. The coal conservation efforts include purchasing power and removing plants from dispatch, both of which were much higher in cost.

1 **Q66. WHAT CONTRACTS CURRENTLY COMPRISE CSP'S AND OP'S**
2 **PORTFOLIO?**

3 **A66.** The Companies are parties to a number of coal supply agreements, the basic terms
4 of which are summarized in Exhibit EVA-12. Note that I compiled this list as it
5 was not part of the Companies' testimony.

6
7 **Q67. DO YOU HAVE ANY GENERAL COMMENTS REGARDING THE**
8 **CONTRACT PORTFOLIO?**

9 **A67.** Yes. AEP's policy of purchasing their coal requirements through a contract
10 portfolio has served to mitigate the impact of the prolonged price event that
11 started in the second half of 2007.

12
13 **Q68. WHAT WOULD YOU SAY WERE THE "BIG" CONTRACTING EVENTS OF**
14 **THE LAST YEAR?**

15 **A68.** It has been a very difficult year for AEPSC with respect to coal. As previously
16 discussed, less coal was available in the market because of diversions to the
17 export market. Further, pricing was extremely volatile making it difficult to get
18 coal producers to "hold" their price even once it was offered. As difficult as
19 buying coal has been, what has been even more difficult is contract performance.
20 The two primary issues related to contract performance are (1) realizing deliveries
21 of coal purchased at pre-surge pricing and (2) concerns related to the fragility of
22 supplier finances which could threaten contract performance.

23

1 **Q69. WHAT HAPPENS TO A COAL CONTRACT IF THE SELLER FILES FOR**
2 **PROTECTION UNDER CHAPTER 11 OF THE BANKRUPTCY CODE?**

3 **A69.** My experience is that coal sales agreements are executory contracts and as such
4 the party filing for Chapter 11 protection has the right to assume or reject the
5 agreements as part of the bankruptcy process. What typically happens is that
6 sellers immediately reject any coal sales agreements which are priced below
7 market.

8
9 **Q70. IF COAL PRICES WERE WAY UP, WHY IS BANKRUPTCY A CONCERN?**

10 **A70.** Prompt coal prices were up but prompt prices are only relevant with respect to
11 new sales, i.e., open positions. Like utilities, coal sellers employ portfolio
12 marketing strategies such that they sell their coal under a combination of long,
13 medium, and short-term contracts. Pricing under the medium and long-term
14 agreements tends to be fixed and/or tied to inflation indices and will not be
15 directly affected by a large increase in market price.
16
17 The problem for many coal producers, however, is costs tend to react to market
18 prices. Costs increase when prices are high because labor rates are bid up by
19 competitors, productivity tends to go down with less management pressure on
20 performance combined with increased production of higher cost coals. There are
21 also cost increases for materials, supplies, and equipment as the market bids of
22 prices due to the greater demand. Unfortunately, cost inflation affects all parties

1 regardless of what their sales portfolio look like. In other words, costs go up even
2 when the contract prices do not.
3

4 **Q71. DID ANY COAL COMPANIES FILE FOR BANKRUPTCY IN 2007 AND**
5 **2008?**

6 **A71.** Yes. The largest bankruptcy was that of Black Diamond Mining Company, LLC
7 ("Black Diamond"), a Central Appalachia coal producer. Black Diamond had
8 sold coal to several customers at a price that did not allow it to recover its cash
9 costs and pay its debt service. There were bankruptcies of several other small
10 producers as well.
11

12 **Q72. WERE ANY OF CSP'S OR OP'S CONTRACTS REPUDIATED IN**
13 **BANKRUPTCY?**

14 **A72.** Not to the best of my knowledge. However, AEPSC indicated that more than one
15 supplier was experiencing economic hardship and had spoken to AEPSC about
16 the possibility of a bankruptcy filing.
17

18 **Q73. HOW DID AEPSC ADDRESS SUPPLIER PROBLEMS REGARDING**
19 **COSTS?**

20 **A73.** AEPSC indicated a multi-prong approach. Its first step was to independently
21 confirm supplier representations regarding costs. Concurrently, AEPSC evaluated
22 the consequences of a supplier failure, i.e., a bankruptcy. In other words, AEPSC
23 explored the cost of replacing the coal versus the cost of providing a price

1 adjustment. Finally, AEPSC worked to insure that any price concessions would
2 help to preserve its position in the long term.

3
4 **Q74. DO YOU HAVE ANY COMMENTS ABOUT AEPSC'S ACTIVITIES IN THIS**
5 **AREA?**

6 **A74.** Yes. I support AEPSC's efforts in this area and concur that had these suppliers
7 not received some price relief and filed for bankruptcy, the costs to CSP and OP
8 customers would have been much greater. That being said, I am concerned that
9 any additional payments above the contract price be done in such a manner as to
10 protect CSP and OP customers in the long-term by securing the viability of these
11 varying sources of supply. I recommend that the Commission closely scrutinize
12 this issue in the context of the Companies' annual filings.

13
14 **Q75. DID YOU RECEIVE ADEQUATE DATA TO REVIEW CONTRACT**
15 **PERFORMANCE?**

16 **A75.** No. I did not have adequate data to perform the review. AEPSC responded to an
17 interrogatory request regarding performance issues that it was monitoring
18 performance. Additional detail was provided in an interview with AEPSC
19 personnel in which the primary performance issue, i.e., delivery of contract
20 tonnage with prices below market, was discussed. I am comfortable that AEPSC
21 is appropriately managing the situation and the Companies will receive full
22 contract amounts. For the upcoming FAC audits, AEPSC should be required to

1 provide documentation of supplier performance and the actions AEPSC has taken
2 to insure full receipt of contract volumes.
3

4 **Q76. DO YOU BELIEVE THERE MAY BE OPPORTUNITIES FOR AEPSC TO**
5 **REDUCE FUEL COSTS USING DIFFERENT STRATEGIES?**

6 **A76.** Yes. AEPSC has not used financial hedges or indexed purchases which can be
7 financially hedged for any CSP and OP coal purchases for 2009.²¹ AEPSC
8 indicated that its practice is to receive regulatory approval in the relevant
9 jurisdictions before using these instruments. Given the recent volatility in price,
10 the use of financial instruments and/or contracts based upon indexed pricing may
11 provide a mechanism for both reducing price volatility and for following the
12 market down. A second strategy which AEPSC does not currently consider is the
13 arbitrage of its positions. This second strategy is one in which AEPSC could
14 "trade" a coal it has under contract that may have more value to a third party for
15 an equivalent coal at a lower price. Providing the dollars flow through the FAC,
16 this strategy can yield large benefits to customers if any of the current contract
17 commitments are for coals that can "cross-over" to the metallurgical coal market.
18

²¹ AEPSC did buy hedges for APCO in 2007 which they ultimately assigned to Sporn. As those hedges were profitable, a portion of the receipts came to OP through its joint ownership.

1 **Q77. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO THESE NEW**
2 **COAL PROCUREMENT STRATEGIES?**

3 **A77.** As noted above, I recommend that AEPSC develop and seek approval for the use
4 of financial instruments in the procurement of coals for CSP and OP. I also
5 recommend that AEPSC look for arbitrage opportunities that will benefit the
6 customers of CSP and OP.

7
8 **Q78. HOW IS THE TRANSPORTATION OF THE COAL ARRANGED?**

9 **A78.** Except for coal delivered by truck, the transportation of which is the
10 responsibility of the seller, AEPSC arranges for the transportation of the coal
11 from the mine or river terminal to CSP's and OP's plants. All of the barging is
12 handled by AEP River Operations, a subsidiary of AEP, at cost-based rates.

13
14 **Q79. DID YOU REVIEW THE RAIL AGREEMENTS?**

15 **A79.** Yes.

16
17 **Q80. WHAT IS THE STATUS OF THE RAIL AGREEMENTS?**

18 **A80.** Coal is shipped by rail to the CSP and OP plants under five rail contracts. There
19 are separate contracts for Amos, Conesville, Mitchell, and Muskingum River.
20 With the exception of one contract which expires at the end of 2009, the contracts
21 have several years to run. There is also a multi-year agreement for shipments
22 from the Powder River Basin. As with the coal supply agreements, the portfolio
23 strategy has helped protect CSP and OP customers from recent rail increases.

1 **Q81. DID YOU REVIEW THE FORECAST OF FUEL COSTS PROVIDED BY**
2 **THE COMPANIES?**

3 **A81.** Yes.
4

5 **Q82. DO YOU BELIEVE IT ACCURATELY REFLECTS EXPECTED FUEL**
6 **COSTS FOR 2009?**

7 **A82.** No. I believe that the forecast of fuel costs provided by the Companies may
8 overstate expected fuel expenditures for two reasons.

- 9 • There has been a recent marked decline in coal and oil prices. As a result, the
10 open coal position and virtually all freight rates should be lower than what
11 was contained in the forecast. Given the data provided to review, it is difficult
12 to estimate the magnitude of the impact of the market retrenchment.
- 13 • Also, I would presume that a number of contract suppliers under-shipped
14 volumes in 2008 although I do not have the data to support this. These
15 shipments, which are all probably below market, should be substantially made
16 up in 2009 which should also reduce the average price.
17

18 **Q83. SHOULD THE COMPANIES UPDATE THEIR FORECAST OF FUEL**
19 **COSTS?**

20 **A83.** There have been many changes since the Companies developed their forecast. I
21 believe an update is appropriate so that the best numbers are used to establish
22 initial FAC costs.

1 **Q84. DO YOU AGREE WITH THE COMPANIES' PROPOSAL REGARDING**
2 **OVER- AND UNDER-RECOVERIES OF FUEL COSTS?**

3 **A84.** I do not have a comment on the proposed carrying charge for under-recovery. I
4 simply propose that, as a matter of fairness, whatever is adopted for under-
5 recoveries should also be applied for over-recoveries. The Companies' proposal
6 is asymmetrical, where the Companies are protected in the circumstance of under-
7 collecting costs from consumers but consumers are not protected where they have
8 overpaid costs to the Companies.

9
10 **Q85. ARE THERE ANY OTHER ITEMS FROM YOUR REVIEW THAT YOU**
11 **WISH TO RAISE?**

12 **A85.** Yes. As part of my standard fuel review, I examine physical inventory surveys
13 because they are an important element in the fuel procurement process even if
14 stockpile adjustments do not flow through the FAC. The reason I think they are
15 important is that they provide an indication of the performance of scales, samplers
16 and the like.

17
18 **Q86. WHAT DID YOU FIND IN YOUR REVIEW?**

19 **A86.** I found two potentially relevant items. First, AEP no longer uses the PUCO's
20 mandatory physical inventory adjustment approach which permitted book
21 adjustments only if there the surveys produced sequential errors in the same
22 direction. Further, the adjustments were only for 50 percent of the difference up
23 to six percent. The physical inventory adjustments are now conducted per the

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On Behalf of the Office of the Ohio Consumers' Counsel
PUCO Case No 08-917-EL-SSO et al.*

1 provision of Accounting Bulletin No. 4 which provides for full adjustments to be
2 made following each survey.

3
4 The second item was an adjustment larger than I had ever seen before. [BEGIN
5 CONFIDENTIAL] [REDACTED]

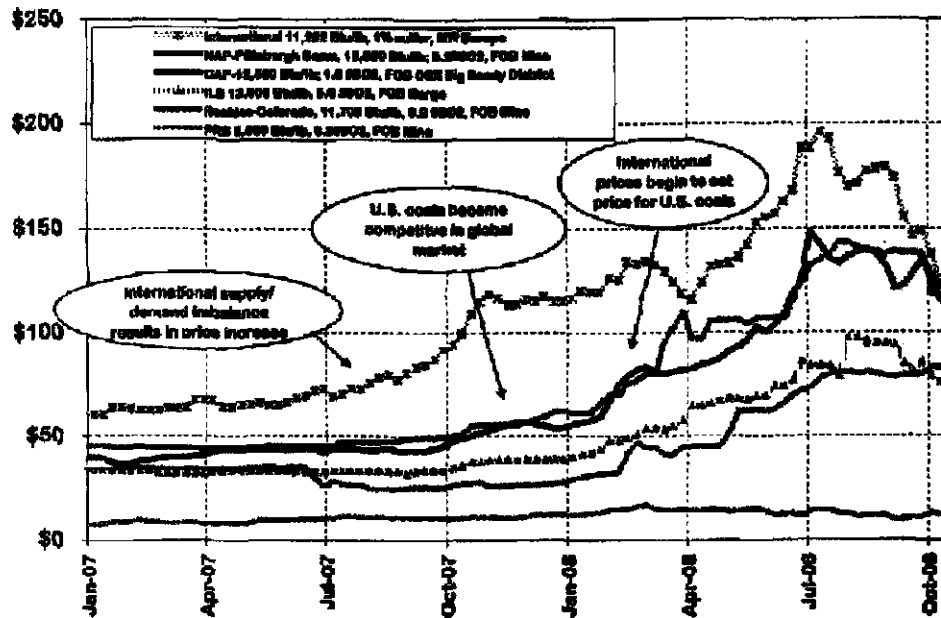
6 [REDACTED]
7 [REDACTED] [END

8 CONFIDENTIAL] The discrepancy was attributed to scale problems, which may
9 be true, however, it seems quite incredible that plant personnel would not have
10 been able to "see" this discrepancy much sooner than it was discovered in a
11 physical inventory survey. The importance of accurate scales cannot be over-
12 stated in determining plant performance. Further, if the "pay" scales are weighing
13 heavy, this discrepancy could have resulted in a substantial over-payment to coal
14 suppliers.

15
16 **Q87. DOES THIS CONCLUDE YOUR TESTIMONY?**

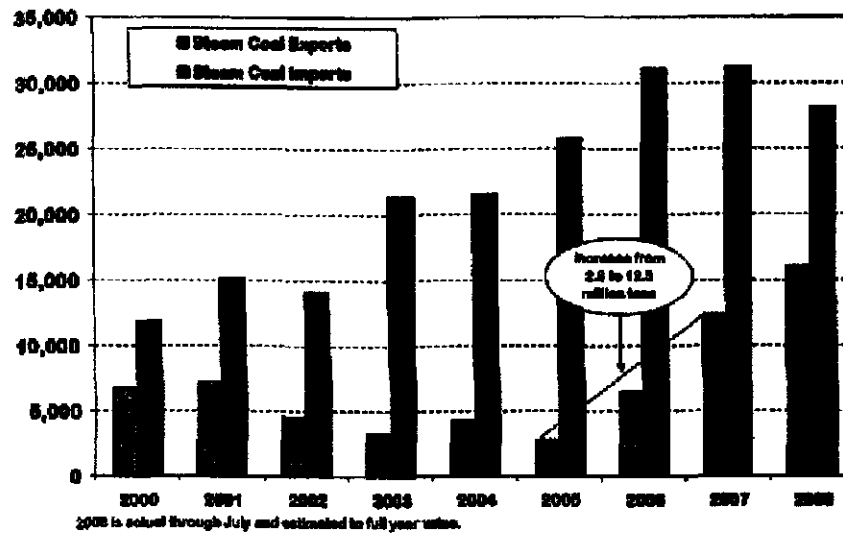
17 **A87.** Yes. However, I reserve the right to incorporate new information that may
18 subsequently become available. I also reserve the right to supplement my
19 testimony in the event that AEP submits new or corrected financial or other data
20 in connection with this proceeding.

HISTORICAL COAL PRICES (\$/Ton)



Source: EVA, Energy Argus, Platts

East/Gulf Steam Coal Exports and Imports (1,000 Tons)



Source: EVA, U.S. Department of Commerce

GLOBAL THERMAL SEABORNE COAL TRADE (Million Tonnes)

Exhibit EVA-3

Importer	1990	1995	2000	2005	2006	2007	2008E	07 v. 06	08 v 07
Japan	31.4	49.8	66.4	96.1	91.4	100.7	106.1	10.2%	5.4%
Europe	83.3	99.8	121.8	150.9	173.8	159.8	165.5	-8.1%	3.6%
Israel	4.1	6.7	10.4	12.4	12.4	12.5	12.6	0.8%	0.0%
South Korea	11.6	26.0	42.3	56.1	59.0	65.6	71.0	11.2%	8.2%
Hong Kong	8.9	9.1	8.1	10.8	11.4	12.3	12.2	7.9%	-0.8%
Taiwan	14.8	23.9	38.1	51.3	52.3	56.7	53.9	6.6%	-3.2%
USA	2.4	6.5	11.2	27.6	32.9	33.0	29.0	0.3%	-12.1%
China	1.1	1.3	1.8	18.9	33.6	44.8	37.4	33.3%	-16.5%
Other	21.8	27.0	46.3	75.1	103.8	108.8	129.5	4.8%	19.0%
TOTAL	179.4	249.7	344.2	508.2	570.8	593.2	617.1	4.0%	4.0%

Source: SSY

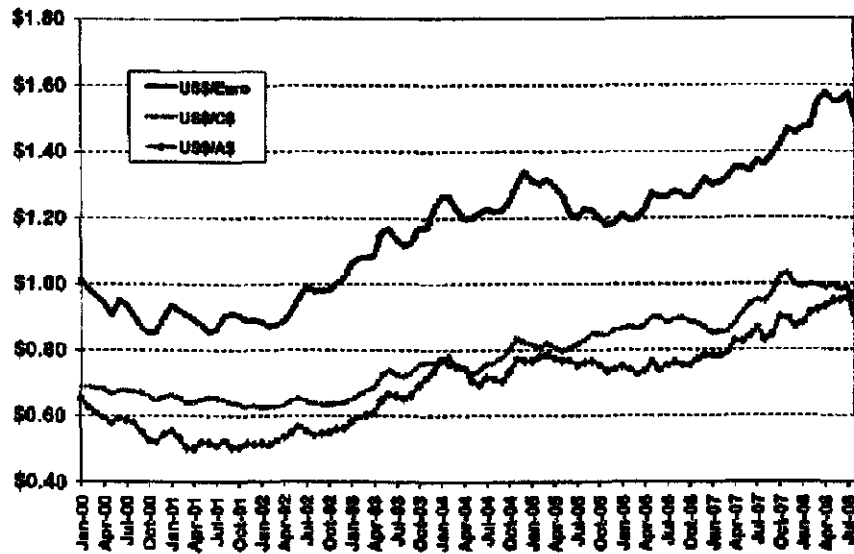
Exhibit EVA-4

GLOBAL THERMAL SEABORNE COAL TRADE (Million Tonnes)

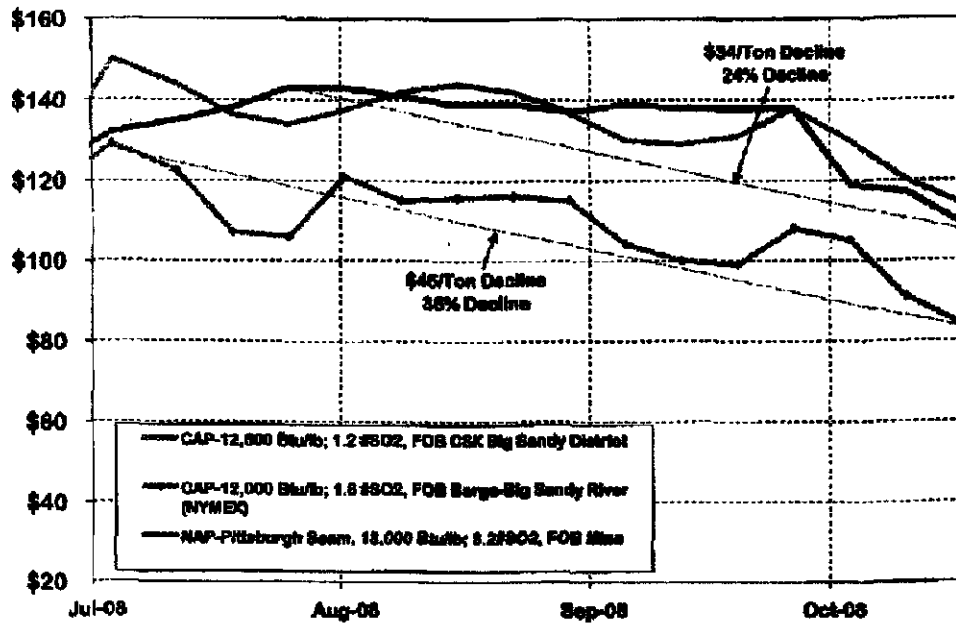
Exporter	1990	1998	2000	2005	2006	2007	2008E	07 v. 06	06 v. 07
Indonesia	4.4	31.3	57.1	128.7	183.0	185.0	211.2	6.0%	8.3%
Australia	49.5	62.1	87.1	111.7	113.1	112.8	116.8	-0.4%	3.7%
South Africa	46.0	55.6	68.1	70.0	67.8	67.2	59.0	-0.9%	-12.2%
Colombia	13.7	18.7	34.0	54.8	58.3	64.7	70.3	11.0%	8.7%
China	13.7	24.1	48.8	68.4	58.9	50.8	47.4	-14.1%	-8.3%
USA	28.3	28.2	9.8	5.4	5.8	10.3	15.4	74.6%	49.5%
Poland	6.5	13.1	15.3	13.6	10.1	6.6	5.8	-34.7%	-12.1%
Canada	3.9	5.4	3.6	1.1	2.6	3.8	3.6	46.2%	-5.3%
Other	13.5	11.3	20.8	68.7	70.9	82.4	87.6	16.2%	6.3%
TOTAL	179.4	248.7	344.2	508.2	578.6	583.2	617.1	4.0%	4.6%

Source: SSY

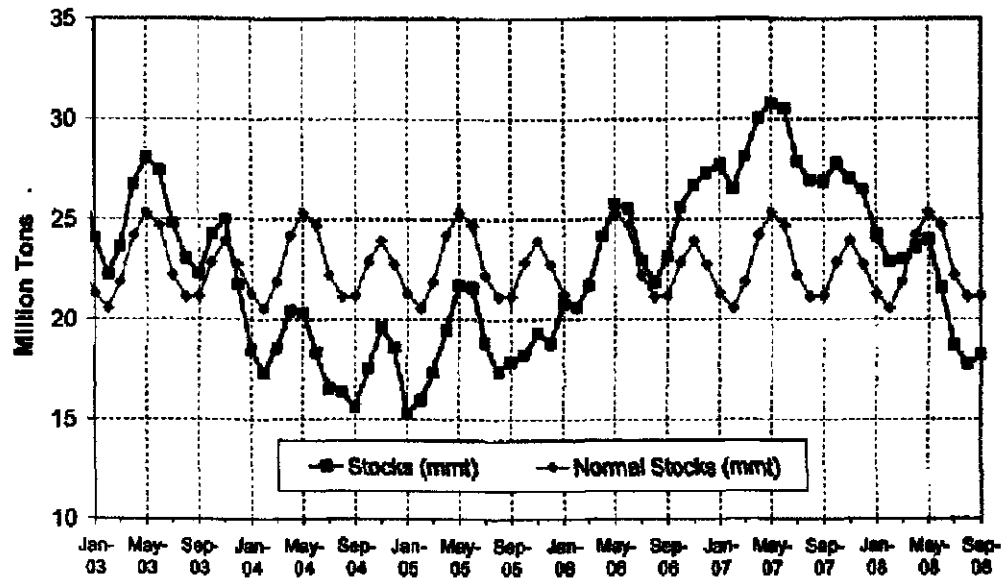
CURRENCY EXCHANGE RATES



RECENT CHANGE IN PROMPT U.S. COAL PRICES (\$/Ton)

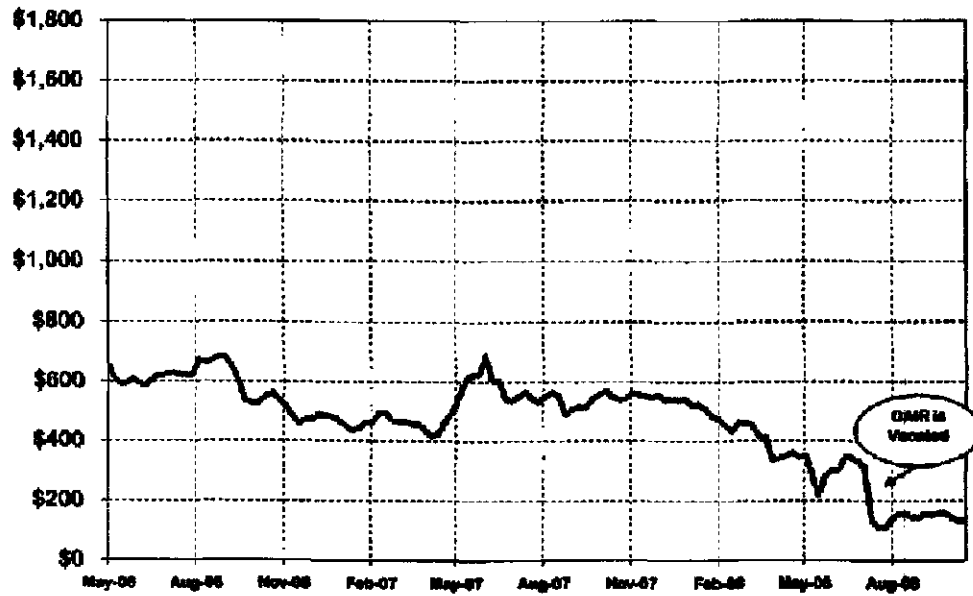


UTILITY STOCKPILES OF CENTRAL APPALACHIAN COAL



Source: COALCAST Stockpile Data Report, September 2008

SO₂ EMISSION ALLOWANCE PRICES (\$/Ton)



ANNUAL NO_x EMISSION ALLOWANCE PRICES (\$/Ton)



CSP AND OP COAL-FIRED POWER PLANTS²²

Former Utility	Plant	Units	ST	Jointly Owned	FGD	FGD Plan	Plant Ret.	Delivery	2007 MW
Columbus Southern Power	Coneville	5-6	OH	Yes	Yes	2009	2012	Rail/Truck	750
	Coneville*	4	OH					Rail/Truck	339
	Coneville	3	OH					Rail/Truck	185
	Pioway	9	OH					Truck	95
Ohio Power	Amos*	3	OH	Yes	Yes	2009	2015	Rail/Barge	867
	Cardinal	1	OH			2008		Rail/Barge	685
	Gavin	1-2	OH			2015		Rail/Barge	2,800
	Muskingum River	5	OH					Rail/Truck	580
	Muskingum River	1-4	OH					Rail/Truck	816
	Kammer	1-3	WV			2007		Barge	615
	Mitchell	1-2	WV					Rail/Barge	1,600
	Sporn	2&4	WV					Barge	300
		Sporn	5			WV		2013	Barge
TOTAL									9,791

* Only owned MW's provided

²² Units that are wholly owned by other utilities at the same stations are not included. This means Amos 1&2 (APCO), Sporn 1&3 (APCO), and Cardinal 2&3 (Buckeye Power) are excluded.

Exhibit EVA-10

**ORIGIN OF COAL SHIPMENTS FOR THE TWELVE MONTHS ENDING MAY
2008 (1,000 Tons)**

Operator	Plant	CAPP	ILLB	Ohio	Other NAPP	PRB	Total
Appalachian Power Co.	Amos	6,930					6,930
	Sporn	2,371				11	2,382
Appalachian Power Co. Total		9,301				11	9,312
Cardinal Operating Co.	Cardinal	2,303		1,138	351	38	3,830
Cardinal Operating Co. Total		2,303		1,138	351	38	3,830
Columbus Southern Power Co.	Conesville			4,182			4,182
	Picway	26		113			139
Columbus Southern Power Co. Total		26		4,295			4,321
Ohio Power Co.	Gavin	119	28	5,546	958	5	6,654
	Kammer	232			1,103	394	1,729
	Mitchell (OPC)	478		10	3,173	254	3,935
	Muskingum River	953	40	1,866	698	34	3,591
Ohio Power Co. Total		1,802	67	7,421	5,932	687	15,908
Total		13,431	67	12,854	6,282	738	33,372

Source: Platts

* Includes 100 percent of Amos, Sporn, Cardinal and Conesville purchases.

Exhibit EVA-11

INVENTORY TARGETS BY PLANT

[BEGIN CONFIDENTIAL]



[END CONFIDENTIAL]

Exhibit EVA-12

[BEGIN CONFIDENTIAL]

(Redacted)

[END CONFIDENTIAL]

Exhibit EVA-13

SUMMARY OF COAL CONTRACTS

[BEGIN CONFIDENTIAL]



[END CONFIDENTIAL]

RESUME OF EMILY S. MEDINE

EDUCATIONAL BACKGROUND

M.P.A. Woodrow Wilson School of Public and International Affairs, Princeton University, 1978
B.A. Geography, Clark University, 1976 (magna cum laude, Phi Beta Kappa)

PROFESSIONAL EXPERIENCE

Current Position

Emily Medine, a Principal, has been with Energy Ventures Analysis since 1987. Her experience includes bankruptcy support, market strategy development, fuel procurement audits, fuel procurement, acquisition and investment analyses, strategic studies and forecasting. She has also provided expert testimony on utility fuel procurement practices. The types of projects in which she is involved are described below:

Fuel Procurement Audits

Manages and performs fuel procurement audits on behalf of regulatory commissions, utility management, and third-party interveners. She has performed over 20 audits of utilities regulated by the Public Utilities Commission of Ohio and testified in a number of proceedings. She also managed two major audits of the fuel procurement practices of PacifiCorp. In 2005, Ms. Medine performed a management/performance audit of the Fuel and Purchased Power costs of the Cincinnati Gas & Electric Company. On behalf of the Consumer Advocate of the State of West Virginia Ms. Medine audited Appalachian Power fuel procurement costs in 2006 and Monongahela Power in 2007.

Fuel Procurement

Develops and implements fuel procurement strategies for utilities and independent power projects. Fuel procurement assistance has ranged from determining an appropriate contract/spot mix to soliciting bids and negotiating purchase agreements. Ms. Medine has negotiated fuel supply agreements for three qualifying facilities (QF's) and has worked on fuel supply arrangements for a number of other plants. Ms. Medine is an advisor to Nova Scotia Power on its fuel procurement activities. Ms. Medine is currently developing the fuel procurement strategy for a new solid-fuel power plant on the Great Lakes.

Forecasting

Develops forecasts of coal demand and prices for alternative coal types and market segments. These forecasts are provided to individual clients and are documented in various COALCAST reports including the regional reports and the Long-Term Regional Coal Price Forecast reports.

Acquisition and Investment

Ms. Medine was the agent for Lexington Coal Company in the sale of its assets in Indiana and Illinois. As part of this engagement, Ms. Medine was responsible for the sale of three mines to Peabody Energy. Ms. Medine also routinely evaluates the economics of potential projects or acquisitions for producers, developers, and industrials. For coal

projects, this includes market and financial forecasts. Ms. Medine completed the sale of six idle mine assets and various other properties.

Bankruptcy Support

Ms. Medine was an advisor to the Horizon Natural Resource companies which operated as a debtor-in-possession in the development of a plan to accomplish reclamation on all permits not sold and transferred as part of the plan of reorganization. For a period of 15 months, Ms. Medine served as Executive Vice President of Centennial Resources, Inc., a debtor-in-possession, as part of EVA's contract to manage this company post-petition. In this capacity, she managed the day-to-day operations of the company as well as serving as the liaison between the company, state and county regulatory agencies, the bankruptcy court, and the lenders. This assignment ended upon the filing of Centennial's plan of reorganization. Ms. Medine had also served as the advisor to secured lenders in another coal industry bankruptcy. In this capacity, she reviewed and developed independent financial forecasts and operating plans of the debtor-in-possession.

Market Strategy Development

Assists clients in the development of marketing strategies on behalf of coal suppliers and transporters. She has helped to identify the high value markets and strategies for obtaining these accounts.

Expert Testimony

Prepares analyses and testimony in support of clients involved in regulatory and legal proceedings. Provides testimony in commission hearings on fuel procurement issues and arbitration proceedings on contract disputes.

Prior Experience

Prior to joining EVA, Ms. Medine held various positions at CONSOL including Assistant District Sales Manager - Chicago Sales Office and Strategic Studies Coordinator. Prior to CONSOL, Ms. Medine was a Project Manager at Energy and Environmental Analysis, Inc. where she directed two large government studies. For the Environmental Protection Agency, Ms. Medine directed an evaluation of the energy, environmental and economic impacts of New Source Performance Standards on Industrial Boilers. For the Department of Energy, Ms. Medine directed an evaluation of the financial impacts of requiring utilities with coal capable boilers to reconvert to coal. Ms. Medine worked as a Research Assistant at Brookhaven National Laboratory while she attended graduate school.

Attachment EVA-B

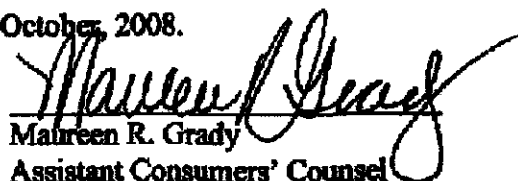
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[END CONFIDENTIAL]

CERTIFICATE OF SERVICE

I hereby certify that a copy of the *Public Version of the Direct Testimony of Emily S. Medine on behalf of the Office of the Ohio Consumers' Counsel*, has been served upon the following parties via regular U.S. Mail service, postage prepaid (and a courtesy copy via electronic transmission) this 31st day of October, 2008.


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