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Via E-File

September 11, 2015

Public Utilities Commission of Ohio
PUCO Docketing
180 E. Broad Street, 10th Floor
Columbus, Ohio 43215

In re: Case Nos. 14-1693-EL-RDR and 14-1694-EL-AAM

Dear Sir/Madam:

Please find attached the DIRECT TESTIMONY AND EXHIBITS OF STEPHEN J. BARON, LANE KOLLEN and ALAN S. TAYLOR on behalf of the OHIO ENERGY GROUP for filing in the above-referenced matter.

Copies have been served on all parties on the attached certificate of service. Please place this document of file.

Respectfully yours,

Michael L. Kurtz, Esq.
Kurt J. Boehm, Esq.
Jody Kyler Cohn, Esq.
BOEHM, KURTZ & LOWRY

MLKkew
Encl.
Cc: Certificate of Service

Greta See, Attorney Examiner @ Greta.see@puc.state.oh.us
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CERTIFICATE OF SERVICE

I hereby certify that true copy of the foregoing was served by electronic mail this 11th day of September, 2015 to the following:

Michael L. Kurtz, Esq.
Kurt J. Boehm, Esq.
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BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider	**) Case No. 14-1693-EL-RDR**
In the Matter of the Application of Ohio Power Company for Approval of Certain Accounting Authority	**) Case No. 14-1694-EL-AAM**

DIRECT TESTIMONY

AND EXHIBITS

OF

LANE KOLLEN

ON BEHALF OF THE
THE OHIO ENERGY GROUP

J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA

September 2015

BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider	)	**Case No. 14-1693-EL-RDR**
In the Matter of the Application of Ohio Power Company for Approval of Certain Accounting Authority	)	**Case No. 14-1694-EL-AAM**

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In the Matter of the Application of Ohio Power Company for Approval of Certain Accounting Authority	)))	**Case No. 14-1694-EL-AAM**

DIRECT TESTIMONY OF LANE KOLLEN

I. QUALIFICATIONS AND SUMMARY

Q. Please state your name and business address.

A. My name is Lane Kollen. My business address is J. Kennedy and Associates, Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

Q. Please state your occupation and employer.

A. I am a utility rate and planning consultant holding the position of Vice President and Principal with the firm of Kennedy and Associates.

Q. Please describe your education and professional experience.

A. I earned a Bachelor of Business Administration in Accounting degree and a Master of Business Administration degree from the University of Toledo. I also earned a Master of Arts degree from Luther Rice University. I am a Certified Public Accountant, with a practice license, a Certified Management Accountant, and a Chartered Global Management Accountant. In addition, I am a member of several professional organizations.

I have been an active participant in the utility industry for more than thirty years, as a consultant in the industry since 1983 and as an employee of The Toledo Edison Company from 1976 to 1983. I have testified as an expert witness on planning, ratemaking, accounting, finance, and tax issues in proceedings before regulatory commissions and courts at the federal and state levels on more than two hundred occasions, including several proceedings involving Ohio Power Company ("the Company") before the Public Utilities Commission of Ohio ("Commission"). My qualifications and regulatory appearances are further detailed in my Exhibit___ (LK-1).

Q. On whose behalf are you testifying?

A. I am testifying on behalf of The Ohio Energy Group ("OEG"), a group of large industrial customers served by Ohio Power Company ("AEP Ohio" or "Company"). The members of OEG who take service from the Company are: AK Steel Corporation, ArcelorMittal USA, E.I. duPont de Nemours and Company, Ford Motor Company, Linde, Inc., POET Biorefining, Praxair Inc., TimkenSteel Corporation and Worthington Industries.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to make recommendations regarding the credits or charges that the Company seeks to pass through the PPA Rider established by the Commission in Case No. 13-2385-EL-SSO ("ESP III"). In particular, I will address cost of service components in the proposed Affiliated Purchase Power Agreement ("Affiliate PPA" or "PPA") between the Company and AEP Generation Resources ("AEPGR").

Q. Please summarize your testimony.

A. Although the Company does not seek approval of the PPA itself, the calculation of the costs included in the PPA, as well as other terms and conditions set forth in the PPA, affect the credits or charges that will be flowed through the PPA Rider.

The Commission has held that the PPA Rider is authorized under Ohio law as a financial limitation on shopping that will stabilize retail rates. If it approves the PPA Rider, then the Commission should impose conditions on AEP Ohio to ensure that costs reflected in the PPA Rider are just and reasonable. Through this conditional approval process, the Commission is effectively negotiating the terms of the PPA with AEPGR on behalf of retail consumers.

I recommend that the Commission condition its approval of the Rider on changes to the terms of the PPA that will ensure that the costs incurred pursuant to the PPA reflect cost of service principles. I also recommend that the Commission expressly reserve the right to review and make adjustments to the costs included in the PPA Rider to ensure that rates are just and reasonable.

My recommendations will improve the economics of the PPA Rider by clarifying the calculations and reducing the costs that will be incurred by the Company and reflected in the Rider. The following table summarizes the adjustments that I recommend and the estimated effects on the annual costs that were projected by AEP Ohio

AEP Ohio PPA Forecast
OEG Recommended Annual Revenue Requirement Adjustments
Based on Annual Costs Projected for 2016
$ Millions

	Amount
Rate Base	
Increase Accumulated Depreciation by Removing SFAS 143 ARO Adjustment Booked in 2003	(7)
Remove ARO Amounts Included in Plant Accounts	(5)
Remove Plant Held for Future Use - Amount Not Shown in Pearce WPs	-
Remove Construction Work In Progress	(2)
Remove Cash Working Capital	(2)
Reduce Prepaid Pension Asset for the Co-Owner Shares of the Conesville and Cardinal Plants	(2)
Operating Expenses	
Decrease Depreciation Expense by Removing SFAS 143 ARO Adjustment Booked in 2003	(3)
Add Recovery of Future Retirement/Dismantling Costs	-
Total Annual Revenue Requirement Adjustments Recommended by OEG	(22)

In addition to the adjustments shown on the preceding table, OEG has proposed a return on equity ("ROE") flex-down that would reduce any charge through the PPA Rider related to the Affiliate PPA costs. I have quantified the effects of each 1.0% return on equity at $12.2 million using the Company's estimate of rate base in 2016 and at $10.9 million using the rate base after the adjustments that I recommend.

The adjustments that I recommend will reduce the PPA Rider charges in the early years and increase the credits or reduce the charges in the latter years compared to the amounts estimated by AEP Ohio. I compare AEP Ohio's estimates under the weather normalized load scenario to the estimates reflecting my recommended adjustments on the following table. I have not reflected the effects of the OEG ROE flex-down proposal on this table.

AEP Ohio PPA Forecast
Comparison of Net PPA Rider Credit / (Charge) excl. PJM CP, including CO2 Tax
Original PPA Units and OVEC Operating Costs
Before and After OEG Recommended Adjustments
Dollars in Millions - Nominal

	AEP Ohio Pierce Estimates Credit/(Charge)	With OEG Adjustments Credit/(Charge)
Oct - Dec 2015	(50)	(44)
2016	(49)	(27)
2017	(26)	(4)
2018	15	37
2019	16	38
2020	34	56
2021	85	107
2022	(8)	14
2023	6	28
2024	7	28

In addition to the adjustments summarized in the preceding tables, it is necessary to ensure that the PPA itself is drafted so that the costs are determined in a formulaic manner with specific accounts and adjustments identified. The inclusion of a formula rate in the PPA will reduce future misunderstandings and disagreements and minimize any audit adjustments to the costs that are included by the Company in the PPA Rider.

II. OVERVIEW OF AFFILIATE PPA

Q. Please describe the proposed Affiliate PPA.

A. The Company proposes an Affiliate PPA with AEPGR that would extend for the lives of certain coal-fired generation assets located at the Conesville, Cardinal, Stuart and Zimmer plant sites.[1] The Company provided the planned retirement dates for these assets by unit in Exhibit KDP-1 Page 7. The Company proposes that it purchase the capacity and energy from AEPGR on a cost-of-service basis pursuant to the Affiliate PPA and then resell it into the PJM markets. The net revenues or cost will be flowed through to the Company's retail customers through a credit or charge in the PPA Rider.

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[1]The Company provided a draft of the proposed PPA in response to IEU RPD-1-002 Supplemental Attachment 1. I have attached a copy of the Company's response and proposed PPA as my Exhibit___(LK-2).

The proposed Affiliate PPA has not yet been executed, with the Company and AEPGR "reserving the right to propose changes or modifications to the PPA based on the outcome of either this proceeding or related proceedings."[2] The Commission should condition its approval of the PPA Rider to changes in the terms and conditions of the PPA.

Q. Should the Commission set the life of the PPA to 15 years as proposed by Mr. Baron and limit the recovery of costs pursuant to the PPA to the physical and economic operation of the units?

A. Yes. Setting the life of the PPA to 15 years will ensure that the contract is considered a "rental" for the usage of the generation assets for a limited period of time similar to a lease rather than a transfer of ownership with responsibility for all costs of the units. If the units cease to operate, then the Company, and more importantly, its retail customers, should not be obligated to pay for the remaining net book value. Nor should they be required to pay for any retirement-related costs beyond the prorata share of these costs for the years during which the units actually provided service pursuant to the PPA.

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[2] *Id.*

Q. Should the Commission ensure that the Company and AEPGR do not make substantive revisions to the PPA without seeking the approval of the Commission?

A. Yes. The Commission should require the Company to seek approval for any substantive changes to the PPA that affect the costs that will be incorporated in the PPA Rider. As proposed, the PPA allows the Company and AEPGR to revise the PPA without seeking the approval of the Commission or FERC.[3] For example, the Company actually could terminate the PPA unilaterally without the Commission's approval. As proposed, this would trigger the requirement to pay AEPGR the net book value and the retirement related costs associated with the PPA units at that time, and the costs would be imposed on retail customers through the PPA Rider.[4] This unreasonable outcome could be avoided if AEP Ohio is prohibited from agreeing to any PPA changes without PUCO approval.

Q. Should the Commission also ensure that it conditions its approval on retaining all rights to review, audit and regulate the costs included in the PPA Rider?

A. Yes. This is an essential safeguard for retail customers. The Commission should ensure that the costs incorporated in the Rider are just and reasonable.

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[3] Company response to OEG INT-3-002, a copy of which I have attached as my Exhibit___(LK-3).

[4] Exhibit KDP-1 Page 5.

Q. Please describe the "pricing" terms for these purchases set forth in the proposed Affiliate PPA.

A. Sections 5.1 through 5.7 establish the pricing based on six categories of costs, all of which are referred to as "Payments," rather than as "costs": 1) Fuel Payment, 2) O&M Payment, 3) Depreciation Payment, 4) Capacity Payment, 5) Tax Reimbursement Payment, and 6) Other Miscellaneous Payment.

Sections 5.2 through 5.7 generally describe the costs included in each of the six categories, but do not source the costs or other data to FERC accounts or other financial records, such as income statements, balance sheets or any other specific financial records maintained by AEPGR. Sections 5.2 through 5.7 do not set forth any formulaic calculations or the specific data inputs into those formulaic calculations.

Q. Is the lack of a specific formula rate in the PPA a problem?

A. Yes. The PPA does not include specific formulas or accounts for the determination of costs. This could lead to disagreements and misunderstandings on the costs that will be included in the PPA Rider. The use of a formula rate in the PPA will benefit AEP Ohio and consumers. Both parties will be better served if there is clarity and certainty.

Q. What is your recommendation regarding the need for a formula rate in the PPA?

A. I recommend that the Commission require the Company to restate the pricing provisions in a formulaic manner, specifying specific accounts for the data inputs to the formulas and specifying other requirements or limitations on the costs that may be included. AEP utilizes formula rates on a regular basis for its cost based wholesale sales. In fact, in the Commission's recently completed State Compensation Mechanism capacity pricing case (10-2929-EL-UNC), a cost of service formula rate served as the basis for the Company's filing.

Q. Do Dr. Pearce's workpapers provide a reasonable starting point to restate the pricing provisions in a formulaic manner?

A. Yes. However, Dr. Pearce's workpapers do not include the specific accounts used for the data inputs to the formulas, so these would need to be added, the formulas would need to be reduced to writing, the calculations of all adjustments would need to be included in the formulas, and certain modifications would be required so that the calculations conform with cost of service principles and Commission precedent.

III. THE CALCULATION OF COSTS IN AEP OHIO'S WORKPAPERS SHOULD BE CORRECTED

Q. Please generally describe your disagreements with the calculations of costs reflected in AEP Ohio's workpapers.

A. I have numerous disagreements in the calculations of costs reflected in Dr. Pearce's workpapers. None of these calculations are specified in the PPA itself. Yet, Dr. Pearce's workpapers provide evidence of the methodology that AEPGR will use to calculate the costs. Some of these calculations do not reflect cost of service principles or Commission precedent.

The Commission should condition its approval of the PPA Rider on the correction of these calculations, as well as modifications to the Definitions in Section 1.1 and the Pricing provisions in Sections 5.2 through 5.7 of the PPA that control these calculations to ensure that the costs included in the PPA Rider are consistent with cost of service principles and are just and reasonable.

Q. Please explain why the accumulated depreciation included on AEPGR's books is significantly understated.

A. In 2003, the Company reversed all amounts included in accumulated depreciation that were previously accrued for retirement/dismantling costs for its generation assets, except for ARO amounts, when it adopted Statement of Financial

Accounting Standards ("SFAS") No. 143.[5] The Company also discontinued all accruals for future retirement/dismantlement costs of its generation assets and all accruals for interim retirement costs in the depreciation rates and expenses. The Company records no depreciation expense or any other expense for future retirement/dismantlement costs. It records actual interim retirement costs to account 506 *Miscellaneous Steam Power Expenses.*[6] In 2003, Ohio Power Company and Columbus Southern Power Company were affiliates, but separate utilities. Now they are a single combined utility.

Ohio Power Company and Columbus Southern Power Company took the reductions in accumulated depreciation as increases to income in 2003. Ohio Power Company took $213.9 million to income and Columbus Southern Power Company took $49.0 million to income, or a combined increase of $262.9 million to income that year for the two utilities.[7] AEP retained that increase to income for its shareholders. Neither utility refunded these amounts to its retail customers.

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[5] I have attached a copy of the relevant pages from the Ohio Power Company 2003 FERC Form 1 as my Exhibit___(LK-4) and from the Columbus Southern Power Company 2003 Form 1 as my Exhibit___(LK-5).

[6] Company response to OEG INT-3-008, a copy of which I have attached as my Exhibit___(LK-6).

[7] Refer to my Exhibit___(LK-4) for the relevant pages from the Ohio Power Company 2003 FERC Form 1 to my Exhibit___(LK-5) for the relevant pages from the Columbus Southern Power Company 2003 FERC Form 1.

The reduction in accumulated depreciation was not reversed or restored when the generation assets were transferred to AEPGR. That means that the reduction in accumulated depreciation still is reflected on the accounting books of AEPGR. Consequently, rate base (referred to as FNBV in the proposed PPA) is overstated by the amounts that AEP transferred to income in 2003 related to the generation assets included in the PPA. This affects the Depreciation Payment because there is more undepreciated cost that must be recovered. This results in greater depreciation rates throughout the term of the PPA. It also affects the Capacity Payment because the return on rate base is more than it would have been if the reduction in accumulated depreciation had not occurred.

Q. Should these amounts be added back to accumulated depreciation and used to reduce the FNBV, the Depreciation Payment, and the Capacity Payment?

A. Yes. These were amounts collected from customers when the generation assets were regulated and continued even when the assets were deregulated and the costs still were included in unbundled rates charged to non-shopping and shopping customers. It would be inequitable to require customers to pay for these costs a second time through the Depreciation Payment (return of) and Capacity Payment (return on) and then a third time through the Other Miscellaneous Payment (another return of), which I address in a subsequent section of my testimony.

Q. What is your recommendation?

A. The Commission should direct the Company to increase accumulated depreciation, which reduces the Capacity Payment, and reduce depreciation expense, which reduces the Depreciation Payment, to reverse the effects of this accounting entry. This will reduce the costs calculated in Dr. Pearce's workpapers for 2016 by $10.0 million, consisting of $7.2 million related to the reduction in rate base and $2.8 million for the reduction in depreciation expense. These amounts reflect an allocation of the accounting entry to the generation assets subject to the PPA on the basis of gross plant. The calculations are detailed in my workpapers, which are Competitively Sensitive Confidential.

Q. Please describe the why the Company's proposal to include asset retirement obligations ("ARO") in rate base is an error.

A. Although the AROs were recorded in accordance with accounting requirements, they represent accounting costs that were not financed. Consequently, they have no carrying cost and typically are not included in rate base. The Company correctly excluded the AROs from the calculation of the capacity costs in its filing in Case No. 10-2929-EL-UNC. The Company was unable to justify including these costs in rate base in response to OEG discovery in this case.

Q. What is your recommendation?

A. The Commission should direct the Company to exclude the AROs from rate base, which will reduce the Capacity Payment. This will reduce the costs calculated in

Dr. Pearce's workpapers for 2016 by $5.5 million. I obtained the ARO amounts for each of the units subject to the PPA from the Company's FERC Form 1. The amounts and calculations are detailed in my workpapers, which are Competitively Sensitive Confidential.

Q. Why is it unreasonable to include the entirety of the retirement/dismantling costs in the Miscellaneous Other Payment costs in the last five years of each unit's life?

A. First, the PPA does not transfer ownership of the generation assets or the obligations of ownership, such as retirement/dismantling costs, to the Company and its retail customers. AEPGR retains the same ownership that it had prior to the PPA and that it will have after the PPA. The Company only "rents" the units pursuant to the PPA for a defined term. Consequently, the costs pursuant to the PPA should include no more than a prorata share of the total retirement/dismantling costs based on the term of the PPA compared to the total service lives of the units, except, of course, for amounts that have previously been collected or that are collected in the Depreciation Payment and Capacity Payment. The PPA should not include costs that should have been allocated to the period prior to the start of the PPA or that should be allocated to the period after the end of the PPA.

Second, a portion of the retirement/dismantlement costs already have been collected from Ohio Power Company (and Columbus Southern Company) and its retail customers. They should not be required to pay for the same costs multiple times. To do so would violate a basic tenet of cost of service regulation.

Q. What is your recommendation?

A. The Commission should direct the Company to include only a prorata portion of the estimated retirement/dismantling costs during the last five years of the PPA. For example, if the PPA is for 25% of the useful lives of the units, then only 25% of retirement/dismantling costs would be recoverable. Such recovery would occur during the last five years of the PPA. There should be a true-up to ensure that only costs actually incurred are recovered. I have not quantified this issue because it does not affect the cost of service for the 2015 through 2024 period covered in Dr. Pearce's workpapers and because there is no certainty that the units will be dismantled and/or the site restored or an estimate for these activities if AEPGR ultimately does so.

Q. Please explain why the Company's proposal to include plant held for future use in rate base is an error.

A. The Company included this cost in the calculation of rate base in the PPA, but it does not appear that Mr. Pearce included any plant held for future use in his calculations, perhaps because there is none at this time. The Commission rejected this cost in Case No. 10-2929-EL-UNC and in Case No. 11-352-EL-AIR.

Q. What is your recommendation?

A. The Commission should direct the Company to remove this cost from rate base. If there is any plant held for future use costs, the removal of the costs will reduce the rate base in the calculation of the Capacity Payment.

Q. **Please explain why the Company's proposal to include construction work in progress in rate base is an error.**

A. The Commission rejected similar proposals in Case No. 10-2929-EL-UNC and in Case No. 11-352-EL-AIR.

Q. What is your recommendation?

A. The Commission should direct the Company to remove this cost from rate base, which will reduce the calculation of the Capacity Payment. This will reduce the costs calculated in Dr. Pearce's workpapers for 2016 by $2.0 million,

Q. Please explain why the Company's proposal to include Cash Working Capital in rate base is an error.

A. The Company proposes to include cash working capital ("CWC") in rate base calculated as 1/8 of the sum of the Fuel Payment and the O&M Payment. This proposal is inconsistent with the Commission's use of the lead-lag study approach. The Commission used $0 for CWC in Case No. 10-2929-EL-UNC and in Case No. 11-352-EL-AIR in the absence of a calculation using the lead-lag study approach.

Q. What is your recommendation?

A. The Commission should direct the Company either to remove the CWC cost from the calculation of the Capacity payment or set it to $0 in the absence of a valid calculation of CWC using the lead-lag approach. This will reduce the costs calculated in Dr. Pearce's workpapers for 2016 by $2.2 million,

Q. Please describe the why the prepaid pension asset is in error.

A. The Company failed to reduce the prepaid pension asset for the co-owners' shares of the Conesville and Cardinal plants. This means that the Company inadvertently included costs that belong to the co-owners, not to AEP Ohio. This will reduce the costs calculated in Dr. Pearce's workpapers for 2016 by $2.2 million.

Q. Does this complete your testimony?

A. Yes.

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In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider	)	**Case No. 14-1693-EL-RDR**
In the Matter of the Application of Ohio Power Company for Approval of Certain Accounting Authority	)	**Case No. 14-1694-EL-AAM**

EXHIBITS

OF

LANE KOLLEN

ON BEHALF OF THE
THE OHIO ENERGY GROUP

J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA

September 2015

EXHIBIT ____ (LK-1)

RESUME OF LANE KOLLEN, VICE PRESIDENT

EDUCATION

University of Toledo, BBA
Accounting

University of Toledo, MBA

Luther Rice University, MA

PROFESSIONAL CERTIFICATIONS

Certified Public Accountant (CPA)

Certified Management Accountant (CMA)

PROFESSIONAL AFFILIATIONS

American Institute of Certified Public Accountants

Georgia Society of Certified Public Accountants

Institute of Management Accountants

Mr. Kollen has more than thirty years of utility industry experience in the financial, rate, tax, and planning areas. He specializes in revenue requirements analyses, taxes, evaluation of rate and financial impacts of traditional and nontraditional ratemaking, utility mergers/acquisition and diversification. Mr. Kollen has expertise in proprietary and nonproprietary software systems used by utilities for budgeting, rate case support and strategic and financial planning.

RESUME OF LANE KOLLEN, VICE PRESIDENT

EXPERIENCE

1986 to Present:

J. Kennedy and Associates, Inc.: Vice President and Principal. Responsible for utility stranded cost analysis, revenue requirements analysis, cash flow projections and solvency, financial and cash effects of traditional and nontraditional ratemaking, and research, speaking and writing on the effects of tax law changes. Testimony before Connecticut, Florida, Georgia, Indiana, Louisiana, Kentucky, Maine, Maryland, Minnesota, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Texas, West Virginia and Wisconsin state regulatory commissions and the Federal Energy Regulatory Commission.

1983 to 1986:

Energy Management Associates: Lead Consultant.
Consulting in the areas of strategic and financial planning, traditional and nontraditional ratemaking, rate case support and testimony, diversification and generation expansion planning. Directed consulting and software development projects utilizing PROSCREEN II and ACUMEN proprietary software products. Utilized ACUMEN detailed corporate simulation system, PROSCREEN II strategic planning system and other custom developed software to support utility rate case filings including test year revenue requirements, rate base, operating income and pro-forma adjustments. Also utilized these software products for revenue simulation, budget preparation and cost-of-service analyses.

1976 to 1983:

The Toledo Edison Company: Planning Supervisor.
Responsible for financial planning activities including generation expansion planning, capital and expense budgeting, evaluation of tax law changes, rate case strategy and support and computerized financial modeling using proprietary and nonproprietary software products. Directed the modeling and evaluation of planning alternatives including:

Rate phase-ins.
Construction project cancellations and write-offs.
Construction project delays.
Capacity swaps.
Financing alternatives.
Competitive pricing for off-system sales.
Sale/leasebacks.

CLIENTS SERVED

Industrial Companies and Groups

Air Products and Chemicals, Inc.
Airco Industrial Gases
Alcan Aluminum
Armco Advanced Materials Co.
Armco Steel
Bethlehem Steel
CF&I Steel, L.P.
Climax Molybdenum Company
Connecticut Industrial Energy Consumers
ELCON
Enron Gas Pipeline Company
Florida Industrial Power Users Group
Gallatin Steel
General Electric Company
GPU Industrial Intervenors
Indiana Industrial Group
Industrial Consumers for
Fair Utility Rates - Indiana
Industrial Energy Consumers - Ohio
Kentucky Industrial Utility Customers, Inc.
Kimberly-Clark Company
Lehigh Valley Power Committee
Maryland Industrial Group
Multiple Intervenors (New York)
National Southwire
North Carolina Industrial
Energy Consumers
Occidental Chemical Corporation
Ohio Energy Group
Ohio Industrial Energy Consumers
Ohio Manufacturers Association
Philadelphia Area Industrial Energy
Users Group
PSI Industrial Group
Smith Cogeneration
Taconite Intervenors (Minnesota)
West Penn Power Industrial Intervenors
West Virginia Energy Users Group
Westvaco Corporation

Regulatory Commissions and Government Agencies

Cities in Texas-New Mexico Power Company's Service Territory
Cities in AEP Texas Central Company's Service Territory
Cities in AEP Texas North Company's Service Territory
Georgia Public Service Commission Staff
Kentucky Attorney General's Office, Division of Consumer Protection
Louisiana Public Service Commission Staff
Maine Office of Public Advocate
New York State Energy Office
Office of Public Utility Counsel (Texas)

Utilities

Allegheny Power System
Atlantic City Electric Company
Carolina Power & Light Company
Cleveland Electric Illuminating Company
Delmarva Power & Light Company
Duquesne Light Company
General Public Utilities
Georgia Power Company
Middle South Services
Nevada Power Company
Niagara Mohawk Power Corporation
Otter Tail Power Company
Pacific Gas & Electric Company
Public Service Electric & Gas
Public Service of Oklahoma
Rochester Gas and Electric
Savannah Electric & Power Company
Seminole Electric Cooperative
Southern California Edison
Talquin Electric Cooperative
Tampa Electric
Texas Utilities
Toledo Edison Company

**Expert Testimony Appearances
of
Lane Kollen
as of July 2015**

Date	Case	Jurisdict.	Party	Utility	Subject
10/86	U-17282 Interim	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Cash revenue requirements financial solvency.
11/86	U-17282 Interim Rebuttal	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Cash revenue requirements financial solvency.
12/86	9613	KY	Attorney General Div. of Consumer Protection	Big Rivers Electric Corp.	Revenue requirements accounting adjustments financial workout plan.
1/87	U-17282 Interim	LA 19th Judicial District Ct.	Louisiana Public Service Commission Staff	Gulf States Utilities	Cash revenue requirements, financial solvency.
3/87	General Order 236	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Tax Reform Act of 1986.
4/87	U-17282 Prudence	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Prudence of River Bend 1, economic analyses, cancellation studies.
4/87	M-100 Sub 113	NC	North Carolina Industrial Energy Consumers	Duke Power Co.	Tax Reform Act of 1986.
5/87	86-524-E-SC	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Revenue requirements, Tax Reform Act of 1986.
5/87	U-17282 Case In Chief	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Revenue requirements, River Bend 1 phase-in plan, financial solvency.
7/87	U-17282 Case In Chief Surrebuttal	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Revenue requirements, River Bend 1 phase-in plan, financial solvency.
7/87	U-17282 Prudence Surrebuttal	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Prudence of River Bend 1, economic analyses, cancellation studies.
7/87	86-524 E-SC Rebuttal	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Revenue requirements, Tax Reform Act of 1986.
8/87	9885	KY	Attorney General Div. of Consumer Protection	Big Rivers Electric Corp.	Financial workout plan.
8/87	E-015/GR-87-223	MN	Taconite Intervenors	Minnesota Power & Light Co.	Revenue requirements, O&M expense, Tax Reform Act of 1986.
10/87	870220-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Revenue requirements, O&M expense, Tax Reform Act of 1986.
11/87	87-07-01	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power Co.	Tax Reform Act of 1986.
1/88	U-17282	LA 19th Judicial District Ct.	Louisiana Public Service Commission	Gulf States Utilities	Revenue requirements, River Bend 1 phase-in plan, rate of return.
2/88	9934	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Co.	Economics of Trimble County, completion.
2/88	10064	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Co.	Revenue requirements, O&M expense, capital structure, excess deferred income taxes.

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Date	Case	Jurisdict.	Party	Utility	Subject
5/88	10217	KY	Alcan Aluminum National Southwire	Big Rivers Electric Corp.	Financial workout plan.
5/88	M-87017-1C001	PA	GPU Industrial Intervenors	Metropolitan Edison Co.	Nonutility generator deferred cost recovery.
5/88	M-87017-2C005	PA	GPU Industrial Intervenors	Pennsylvania Electric Co.	Nonutility generator deferred cost recovery.
6/88	U-17282	LA 19th Judicial District Ct.	Louisiana Public Service Commission	Gulf States Utilities	Prudence of River Bend 1 economic analyses, cancellation studies, financial modeling.
7/88	M-87017-1C001 Rebuttal	PA	GPU Industrial Intervenors	Metropolitan Edison Co.	Nonutility generator deferred cost recovery, SFAS No. 92.
7/88	M-87017-2C005 Rebuttal	PA	GPU Industrial Intervenors	Pennsylvania Electric Co.	Nonutility generator deferred cost recovery, SFAS No. 92.
9/88	88-05-25	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power Co.	Excess deferred taxes, O&M expenses.
9/88	10064 Rehearing	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Co.	Premature retirements, interest expense.
10/88	88-170-EL-AIR	OH	Ohio Industrial Energy Consumers	Cleveland Electric Illuminating Co.	Revenue requirements, phase-in, excess deferred taxes, O&M expenses, financial considerations, working capital.
10/88	88-171-EL-AIR	OH	Ohio Industrial Energy Consumers	Toledo Edison Co.	Revenue requirements, phase-in, excess deferred taxes, O&M expenses, financial considerations, working capital.
10/88	8800-355-EI	FL	Florida Industrial Power Users' Group	Florida Power & Light Co.	Tax Reform Act of 1986, tax expenses, O&M expenses, pension expense (SFAS No. 87).
10/88	3780-U	GA	Georgia Public Service Commission Staff	Atlanta Gas Light Co.	Pension expense (SFAS No. 87).
11/88	U-17282 Remand	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Rate base exclusion plan (SFAS No. 71).
12/88	U-17970	LA	Louisiana Public Service Commission Staff	AT&T Communications of South Central States	Pension expense (SFAS No. 87).
12/88	U-17949 Rebuttal	LA	Louisiana Public Service Commission Staff	South Central Bell	Compensated absences (SFAS No. 43), pension expense (SFAS No. 87), Part 32, income tax normalization.
2/89	U-17282 Phase II	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Revenue requirements, phase-in of River Bend 1, recovery of canceled plant.
6/89	881602-EU 890326-EU	FL	Talquin Electric Cooperative	Talquin/City of Tallahassee	Economic analyses, incremental cost-of-service, average customer rates.
7/89	U-17970	LA	Louisiana Public Service Commission Staff	AT&T Communications of South Central States	Pension expense (SFAS No. 87), compensated absences (SFAS No. 43), Part 32.
8/89	8555	TX	Occidental Chemical Corp.	Houston Lighting & Power Co.	Cancellation cost recovery, tax expense, revenue requirements.

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Date	Case	Jurisdict.	Party	Utility	Subject
8/89	3840-U	GA	Georgia Public Service Commission Staff	Georgia Power Co.	Promotional practices, advertising, economic development.
9/89	U-17282 Phase II Detailed	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Revenue requirements, detailed investigation.
10/89	8880	TX	Enron Gas Pipeline	Texas-New Mexico Power Co.	Deferred accounting treatment, sale/leaseback.
10/89	8928	TX	Enron Gas Pipeline	Texas-New Mexico Power Co.	Revenue requirements, imputed capital structure, cash working capital.
10/89	R-891364	PA	Philadelphia Area Industrial Energy Users Group	Philadelphia Electric Co.	Revenue requirements.
11/89 12/89	R-891364 Surrebuttal (2 Filings)	PA	Philadelphia Area Industrial Energy Users Group	Philadelphia Electric Co.	Revenue requirements, sale/leaseback.
1/90	U-17282 Phase II Detailed Rebuttal	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Revenue requirements, detailed investigation.
1/90	U-17282 Phase III	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Phase-in of River Bend 1, deregulated asset plan.
3/90	890319-EI	FL	Florida Industrial Power Users Group	Florida Power & Light Co.	O&M expenses, Tax Reform Act of 1986.
4/90	890319-EI Rebuttal	FL	Florida Industrial Power Users Group	Florida Power & Light Co.	O&M expenses, Tax Reform Act of 1986.
4/90	U-17282	LA 19th Judicial District Ct.	Louisiana Public Service Commission	Gulf States Utilities	Fuel clause, gain on sale of utility assets.
9/90	90-158	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Co.	Revenue requirements, post-test year additions, forecasted test year.
12/90	U-17282 Phase IV	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Revenue requirements.
3/91	29327, et. al.	NY	Multiple Intervenors	Niagara Mohawk Power Corp.	Incentive regulation.
5/91	9945	TX	Office of Public Utility Counsel of Texas	El Paso Electric Co.	Financial modeling, economic analyses, prudence of Palo Verde 3.
9/91	P-910511 P-910512	PA	Allegheny Ludlum Corp., Armco Advanced Materials Co., The West Penn Power Industrial Users' Group	West Penn Power Co.	Recovery of CAAA costs, least cost financing.
9/91	91-231-E-NC	WV	West Virginia Energy Users Group	Monongahela Power Co.	Recovery of CAAA costs, least cost financing.
11/91	U-17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Asset impairment, deregulated asset plan, revenue requirements.

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Date	Case	Jurisdict.	Party	Utility	Subject
12/91	91-410-EL-AIR	OH	Air Products and Chemicals, Inc., Armco Steel Co., General Electric Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Revenue requirements, phase-in plan.
12/91	PUC Docket 10200	TX	Office of Public Utility Counsel of Texas	Texas-New Mexico Power Co.	Financial integrity, strategic planning, declined business affiliations.
5/92	910890-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Revenue requirements, O&M expense, pension expense, OPEB expense, fossil dismantling, nuclear decommissioning.
8/92	R-00922314	PA	GPU Industrial Intervenors	Metropolitan Edison Co.	Incentive regulation, performance rewards, purchased power risk, OPEB expense.
9/92	92-043	KY	Kentucky Industrial Utility Consumers	Generic Proceeding	OPEB expense.
9/92	920324-EI	FL	Florida Industrial Power Users' Group	Tampa Electric Co.	OPEB expense.
9/92	39348	IN	Indiana Industrial Group	Generic Proceeding	OPEB expense.
9/92	910840-PU	FL	Florida Industrial Power Users' Group	Generic Proceeding	OPEB expense.
9/92	39314	IN	Industrial Consumers for Fair Utility Rates	Indiana Michigan Power Co.	OPEB expense.
11/92	U-19904	LA	Louisiana Public Service Commission Staff	Gulf States Utilities /Entergy Corp.	Merger.
11/92	8649	MD	Westvaco Corp., Eastalco Aluminum Co.	Potomac Edison Co.	OPEB expense.
11/92	92-1715-AU-COI	OH	Ohio Manufacturers Association	Generic Proceeding	OPEB expense.
12/92	R-00922378	PA	Armco Advanced Materials Co., The WPP Industrial Intervenors	West Penn Power Co.	Incentive regulation, performance rewards, purchased power risk, OPEB expense.
12/92	U-19949	LA	Louisiana Public Service Commission Staff	South Central Bell	Affiliate transactions, cost allocations, merger.
12/92	R-00922479	PA	Philadelphia Area Industrial Energy Users' Group	Philadelphia Electric Co.	OPEB expense.
1/93	8487	MD	Maryland Industrial Group	Baltimore Gas & Electric Co., Bethlehem Steel Corp.	OPEB expense, deferred fuel, CWIP in rate base.
1/93	39498	IN	PSI Industrial Group	PSI Energy, Inc.	Refunds due to over-collection of taxes on Marble Hill cancellation.
3/93	92-11-11	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power Co	OPEB expense.
3/93	U-19904 (Surrebuttal)	LA	Louisiana Public Service Commission Staff	Gulf States Utilities /Entergy Corp.	Merger.

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Date	Case	Jurisdict.	Party	Utility	Subject
3/93	93-01-EL-EFC	OH	Ohio Industrial Energy Consumers	Ohio Power Co.	Affiliate transactions, fuel.
3/93	EC92-21000 ER92-806-000	FERC	Louisiana Public Service Commission Staff	Gulf States Utilities /Entergy Corp.	Merger.
4/93	92-1464-EL-AIR	OH	Air Products Armco Steel Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Revenue requirements, phase-in plan.
4/93	EC92-21000 ER92-806-000 (Rebuttal)	FERC	Louisiana Public Service Commission	Gulf States Utilities /Entergy Corp.	Merger.
9/93	93-113	KY	Kentucky Industrial Utility Customers	Kentucky Utilities	Fuel clause and coal contract refund.
9/93	92-490, 92-490A, 90-360-C	KY	Kentucky Industrial Utility Customers and Kentucky Attorney General	Big Rivers Electric Corp.	Disallowances and restitution for excessive fuel costs, illegal and improper payments, recovery of mine closure costs.
10/93	U-17735	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	Revenue requirements, debt restructuring agreement, River Bend cost recovery.
1/94	U-20647	LA	Louisiana Public Service Commission Staff	Gulf States Utilities Co.	Audit and investigation into fuel clause costs.
4/94	U-20647 (Surrebuttal)	LA	Louisiana Public Service Commission Staff	Gulf States Utilities Co.	Nuclear and fossil unit performance, fuel costs, fuel clause principles and guidelines.
4/94	U-20647 (Supplemental Surrebuttal)	LA	Louisiana Public Service Commission Staff	Gulf States Utilities Co.	Audit and investigation into fuel clause costs.
5/94	U-20178	LA	Louisiana Public Service Commission Staff	Louisiana Power & Light Co.	Planning and quantification issues of least cost integrated resource plan.
9/94	U-19904 Initial Post-Merger Earnings Review	LA	Louisiana Public Service Commission Staff	Gulf States Utilities Co.	River Bend phase-in plan, deregulated asset plan, capital structure, other revenue requirement issues.
9/94	U-17735	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	G&T cooperative ratemaking policies, exclusion of River Bend, other revenue requirement issues.
10/94	3905-U	GA	Georgia Public Service Commission Staff	Southern Bell Telephone Co.	Incentive rate plan, earnings review.
10/94	5258-U	GA	Georgia Public Service Commission Staff	Southern Bell Telephone Co.	Alternative regulation, cost allocation.
11/94	U-19904 Initial Post-Merger Earnings Review (Rebuttal)	LA	Louisiana Public Service Commission Staff	Gulf States Utilities Co.	River Bend phase-in plan, deregulated asset plan, capital structure, other revenue requirement issues.
11/94	U-17735 (Rebuttal)	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	G&T cooperative ratemaking policy, exclusion of River Bend, other revenue requirement issues.
4/95	R-00943271	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Revenue requirements. Fossil dismantling, nuclear decommissioning.

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Date	Case	Jurisdict.	Party	Utility	Subject
6/95	3905-U Rebuttal	GA	Georgia Public Service Commission	Southern Bell Telephone Co.	Incentive regulation, affiliate transactions, revenue requirements, rate refund.
6/95	U-19904 (Direct)	LA	Louisiana Public Service Commission Staff	Gulf States Utilities Co.	Gas, coal, nuclear fuel costs, contract prudence, base/fuel realignment.
10/95	95-02614	TN	Tennessee Office of the Attorney General Consumer Advocate	BellSouth Telecommunications, Inc.	Affiliate transactions.
10/95	U-21485 (Direct)	LA	Louisiana Public Service Commission Staff	Gulf States Utilities Co.	Nuclear O&M, River Bend phase-in plan, base/fuel realignment, NOL and AltMin asset deferred taxes, other revenue requirement issues.
11/95	U-19904 (Surrebuttal)	LA	Louisiana Public Service Commission Staff	Gulf States Utilities Co. Division	Gas, coal, nuclear fuel costs, contract prudence, base/fuel realignment.
11/95 12/95	U-21485 (Supplemental Direct) U-21485 (Surrebuttal)	LA	Louisiana Public Service Commission Staff	Gulf States Utilities Co.	Nuclear O&M, River Bend phase-in plan, base/fuel realignment, NOL and AltMin asset deferred taxes, other revenue requirement issues.
1/96	95-299-EL-AIR 95-300-EL-AIR	OH	Industrial Energy Consumers	The Toledo Edison Co., The Cleveland Electric Illuminating Co.	Competition, asset write-offs and revaluation, O&M expense, other revenue requirement issues.
2/96	PUC Docket 14965	TX	Office of Public Utility Counsel	Central Power & Light	Nuclear decommissioning.
5/96	95-485-LCS	NM	City of Las Cruces	El Paso Electric Co.	Stranded cost recovery, municipalization.
7/96	8725	MD	The Maryland Industrial Group and Redland Genstar, Inc.	Baltimore Gas & Electric Co., Potomac Electric Power Co., and Constellation Energy Corp.	Merger savings, tracking mechanism, earnings sharing plan, revenue requirement issues.
9/96 11/96	U-22092 U-22092 (Surrebuttal)	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	River Bend phase-in plan, base/fuel realignment, NOL and AltMin asset deferred taxes, other revenue requirement issues, allocation of regulated/nonregulated costs.
10/96	96-327	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corp.	Environmental surcharge recoverable costs.
2/97	R-00973877	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Stranded cost recovery, regulatory assets and liabilities, intangible transition charge, revenue requirements.
3/97	96-489	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Environmental surcharge recoverable costs, system agreements, allowance inventory, jurisdictional allocation.
6/97	TO-97-397	MO	MCI Telecommunications Corp., Inc., MCImetro Access Transmission Services, Inc.	Southwestern Bell Telephone Co.	Price cap regulation, revenue requirements, rate of return.

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Date	Case	Jurisdict.	Party	Utility	Subject
6/97	R-00973953	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Restructuring, deregulation, stranded costs, regulatory assets, liabilities, nuclear and fossil decommissioning.
7/97	R-00973954	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Restructuring, deregulation, stranded costs, regulatory assets, liabilities, nuclear and fossil decommissioning.
7/97	U-22092	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Depreciation rates and methodologies, River Bend phase-in plan.
8/97	97-300	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co., Kentucky Utilities Co.	Merger policy, cost savings, surcredit sharing mechanism, revenue requirements, rate of return.
8/97	R-00973954 (Surrebuttal)	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Restructuring, deregulation, stranded costs, regulatory assets, liabilities, nuclear and fossil decommissioning.
10/97	97-204	KY	Alcan Aluminum Corp. Southwire Co.	Big Rivers Electric Corp.	Restructuring, revenue requirements, reasonableness.
10/97	R-974008	PA	Metropolitan Edison Industrial Users Group	Metropolitan Edison Co.	Restructuring, deregulation, stranded costs, regulatory assets, liabilities, nuclear and fossil decommissioning, revenue requirements.
10/97	R-974009	PA	Penelec Industrial Customer Alliance	Pennsylvania Electric Co.	Restructuring, deregulation, stranded costs, regulatory assets, liabilities, nuclear and fossil decommissioning, revenue requirements.
11/97	97-204 (Rebuttal)	KY	Alcan Aluminum Corp. Southwire Co.	Big Rivers Electric Corp.	Restructuring, revenue requirements, reasonableness of rates, cost allocation.
11/97	U-22491	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Allocation of regulated and nonregulated costs, other revenue requirement issues.
11/97	R-00973953 (Surrebuttal)	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Restructuring, deregulation, stranded costs, regulatory assets, liabilities, nuclear and fossil decommissioning.
11/97	R-973981	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Restructuring, deregulation, stranded costs, regulatory assets, liabilities, fossil decommissioning, revenue requirements, securitization.
11/97	R-974104	PA	Duquesne Industrial Intervenors	Duquesne Light Co.	Restructuring, deregulation, stranded costs, regulatory assets, liabilities, nuclear and fossil decommissioning, revenue requirements, securitization.
12/97	R-973981 (Surrebuttal)	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Restructuring, deregulation, stranded costs, regulatory assets, liabilities, fossil decommissioning, revenue requirements.
12/97	R-974104 (Surrebuttal)	PA	Duquesne Industrial Intervenors	Duquesne Light Co.	Restructuring, deregulation, stranded costs, regulatory assets, liabilities, nuclear and fossil decommissioning, revenue requirements, securitization.
1/98	U-22491 (Surrebuttal)	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Allocation of regulated and nonregulated costs, other revenue requirement issues.

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Date	Case	Jurisdict.	Party	Utility	Subject
2/98	8774	MD	Westvaco	Potomac Edison Co.	Merger of Duquesne, AE, customer safeguards, savings sharing.
3/98	U-22092 (Allocated Stranded Cost Issues)	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Restructuring, stranded costs, regulatory assets, securitization, regulatory mitigation.
3/98	8390-U	GA	Georgia Natural Gas Group, Georgia Textile Manufacturers Assoc.	Atlanta Gas Light Co.	Restructuring, unbundling, stranded costs, incentive regulation, revenue requirements.
3/98	U-22092 (Allocated Stranded Cost Issues) (Surrebuttal)	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Restructuring, stranded costs, regulatory assets, securitization, regulatory mitigation.
10/98	97-596	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric Co.	Restructuring, unbundling, stranded costs, T&D revenue requirements.
10/98	9355-U	GA	Georgia Public Service Commission Adversary Staff	Georgia Power Co.	Affiliate transactions.
10/98	U-17735	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	G&T cooperative ratemaking policy, other revenue requirement issues.
11/98	U-23327	LA	Louisiana Public Service Commission Staff	SWEPCO, CSW and AEP	Merger policy, savings sharing mechanism, affiliate transaction conditions.
12/98	U-23358 (Direct)	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Allocation of regulated and nonregulated costs, tax issues, and other revenue requirement issues.
12/98	98-577	ME	Maine Office of Public Advocate	Maine Public Service Co.	Restructuring, unbundling, stranded cost, T&D revenue requirements.
1/99	98-10-07	CT	Connecticut Industrial Energy Consumers	United Illuminating Co.	Stranded costs, investment tax credits, accumulated deferred income taxes, excess deferred income taxes.
3/99	U-23358 (Surrebuttal)	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Allocation of regulated and nonregulated costs, tax issues, and other revenue requirement issues.
3/99	98-474	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co.	Revenue requirements, alternative forms of regulation.
3/99	98-426	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Revenue requirements, alternative forms of regulation.
3/99	99-082	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co.	Revenue requirements.
3/99	99-083	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Revenue requirements.
4/99	U-23358 (Supplemental Surrebuttal)	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Allocation of regulated and nonregulated costs, tax issues, and other revenue requirement issues.
4/99	99-03-04	CT	Connecticut Industrial Energy Consumers	United Illuminating Co.	Regulatory assets and liabilities, stranded costs, recovery mechanisms.

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Date	Case	Jurisdict.	Party	Utility	Subject
4/99	99-02-05	Ct	Connecticut Industrial Utility Customers	Connecticut Light and Power Co.	Regulatory assets and liabilities, stranded costs, recovery mechanisms.
5/99	98-426 99-082 (Additional Direct)	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co.	Revenue requirements.
5/99	98-474 99-083 (Additional Direct)	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Revenue requirements.
5/99	98-426 98-474 (Response to Amended Applications)	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co., Kentucky Utilities Co.	Alternative regulation.
6/99	97-596	ME	Maine Office of Public Advocate	Bangor Hydro-Electric Co.	Request for accounting order regarding electric industry restructuring costs.
6/99	U-23358	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Affiliate transactions, cost allocations.
7/99	99-03-35	CT	Connecticut Industrial Energy Consumers	United Illuminating Co.	Stranded costs, regulatory assets, tax effects of asset divestiture.
7/99	U-23327	LA	Louisiana Public Service Commission Staff	Southwestern Electric Power Co., Central and South West Corp, American Electric Power Co.	Merger Settlement and Stipulation.
7/99	97-596 Surrebuttal	ME	Maine Office of Public Advocate	Bangor Hydro-Electric Co.	Restructuring, unbundling, stranded cost, T&D revenue requirements.
7/99	98-0452-E-GI	WV	West Virginia Energy Users Group	Monongahela Power, Potomac Edison, Appalachian Power, Wheeling Power	Regulatory assets and liabilities.
8/99	98-577 Surrebuttal	ME	Maine Office of Public Advocate	Maine Public Service Co.	Restructuring, unbundling, stranded costs, T&D revenue requirements.
8/99	98-426 99-082 Rebuttal	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co.	Revenue requirements.
8/99	98-474 98-083 Rebuttal	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Revenue requirements.
8/99	98-0452-E-GI Rebuttal	WV	West Virginia Energy Users Group	Monongahela Power, Potomac Edison, Appalachian Power, Wheeling Power	Regulatory assets and liabilities.
10/99	U-24182 Direct	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Allocation of regulated and nonregulated costs, affiliate transactions, tax issues, and other revenue requirement issues.

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Date	Case	Jurisdict.	Party	Utility	Subject
11/99	PUC Docket 21527	TX	The Dallas-Fort Worth Hospital Council and Coalition of Independent Colleges and Universities	TXU Electric	Restructuring, stranded costs, taxes, securitization.
11/99	U-23358 Surrebuttal Affiliate Transactions Review	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Service company affiliate transaction costs.
01/00	U-24182 Surrebuttal	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Allocation of regulated and nonregulated costs, affiliate transactions, tax issues, and other revenue requirement issues.
04/00	99-1212-EL-ETP 99-1213-EL-ATA 99-1214-EL-AAM	OH	Greater Cleveland Growth Association	First Energy (Cleveland Electric Illuminating, Toledo Edison)	Historical review, stranded costs, regulatory assets, liabilities.
05/00	2000-107	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	ECR surcharge roll-in to base rates.
05/00	U-24182 Supplemental Direct	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Affiliate expense proforma adjustments.
05/00	A-110550F0147	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy	Merger between PECO and Unicom.
05/00	99-1658-EL-ETP	OH	AK Steel Corp.	Cincinnati Gas & Electric Co.	Regulatory transition costs, including regulatory assets and liabilities, SFAS 109, ADIT, EDIT, ITC.
07/00	PUC Docket 22344	TX	The Dallas-Fort Worth Hospital Council and The Coalition of Independent Colleges and Universities	Statewide Generic Proceeding	Escalation of O&M expenses for unbundled T&D revenue requirements in projected test year.
07/00	U-21453	LA	Louisiana Public Service Commission	SWEPCO	Stranded costs, regulatory assets and liabilities.
08/00	U-24064	LA	Louisiana Public Service Commission Staff	CLECO	Affiliate transaction pricing ratemaking principles, subsidization of nonregulated affiliates, ratemaking adjustments.
10/00	SOAH Docket 473-00-1015 PUC Docket 22350	TX	The Dallas-Fort Worth Hospital Council and The Coalition of Independent Colleges and Universities	TXU Electric Co.	Restructuring, T&D revenue requirements, mitigation, regulatory assets and liabilities.
10/00	R-00974104 Affidavit	PA	Duquesne Industrial Intervenors	Duquesne Light Co.	Final accounting for stranded costs, including treatment of auction proceeds, taxes, capital costs, switchback costs, and excess pension funding.
11/00	P-00001837 R-00974008 P-00001838 R-00974009	PA	Metropolitan Edison Industrial Users Group Penelec Industrial Customer Alliance	Metropolitan Edison Co., Pennsylvania Electric Co.	Final accounting for stranded costs, including treatment of auction proceeds, taxes, regulatory assets and liabilities, transaction costs.

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Date	Case	Jurisdict.	Party	Utility	Subject
12/00	U-21453, U-20925, U-22092 (Subdocket C) Surrebuttal	LA	Louisiana Public Service Commission Staff	SWEPCO	Stranded costs, regulatory assets.
01/01	U-24993 Direct	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Allocation of regulated and nonregulated costs, tax issues, and other revenue requirement issues.
01/01	U-21453, U-20925, U-22092 (Subdocket B) Surrebuttal	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Industry restructuring, business separation plan, organization structure, hold harmless conditions, financing.
01/01	Case No. 2000-386	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co.	Recovery of environmental costs, surcharge mechanism.
01/01	Case No. 2000-439	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Recovery of environmental costs, surcharge mechanism.
02/01	A-110300F0095 A-110400F0040	PA	Met-Ed Industrial Users Group, Penelec Industrial Customer Alliance	GPU, Inc. FirstEnergy Corp.	Merger, savings, reliability.
03/01	P-00001860 P-00001861	PA	Met-Ed Industrial Users Group, Penelec Industrial Customer Alliance	Metropolitan Edison Co., Pennsylvania Electric Co.	Recovery of costs due to provider of last resort obligation.
04/01	U-21453, U-20925, U-22092 (Subdocket B) Settlement Term Sheet	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Business separation plan: settlement agreement on overall plan structure.
04/01	U-21453, U-20925, U-22092 (Subdocket B) Contested Issues	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Business separation plan: agreements, hold harmless conditions, separations methodology.
05/01	U-21453, U-20925, U-22092 (Subdocket B) Contested Issues Transmission and Distribution Rebuttal	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Business separation plan: agreements, hold harmless conditions, separations methodology.
07/01	U-21453, U-20925, U-22092 (Subdocket B) Transmission and Distribution Term Sheet	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Business separation plan: settlement agreement on T&D issues, agreements necessary to implement T&D separations, hold harmless conditions, separations methodology.

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Date	Case	Jurisdict.	Party	Utility	Subject
10/01	14000-U	GA	Georgia Public Service Commission Adversary Staff	Georgia Power Company	Revenue requirements, Rate Plan, fuel clause recovery.
11/01	14311-U Direct Panel with Bolin Killings	GA	Georgia Public Service Commission Adversary Staff	Atlanta Gas Light Co	Revenue requirements, revenue forecast, O&M expense, depreciation, plant additions, cash working capital.
11/01	U-25687 Direct	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Revenue requirements, capital structure, allocation of regulated and nonregulated costs, River Bend uprate.
02/02	PUC Docket 25230	TX	The Dallas-Fort Worth Hospital Council and the Coalition of Independent Colleges and Universities	TXU Electric	Stipulation. Regulatory assets, securitization financing.
02/02	U-25687 Surrebuttal	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Revenue requirements, corporate franchise tax, conversion to LLC, River Bend uprate.
03/02	14311-U Rebuttal Panel with Bolin Killings	GA	Georgia Public Service Commission Adversary Staff	Atlanta Gas Light Co.	Revenue requirements, earnings sharing plan, service quality standards.
03/02	14311-U Rebuttal Panel with Michelle L. Thebert	GA	Georgia Public Service Commission Adversary Staff	Atlanta Gas Light Co.	Revenue requirements, revenue forecast, O&M expense, depreciation, plant additions, cash working capital.
03/02	001148-EI	FL	South Florida Hospital and Healthcare Assoc.	Florida Power & Light Co.	Revenue requirements. Nuclear life extension, storm damage accruals and reserve, capital structure, O&M expense.
04/02	U-25687 (Suppl. Surrebuttal)	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Revenue requirements, corporate franchise tax, conversion to LLC, River Bend uprate.
04/02	U-21453, U-20925 U-22092 (Subdocket C)	LA	Louisiana Public Service Commission	SWEPCO	Business separation plan, T&D Term Sheet, separations methodologies, hold harmless conditions.
08/02	EL01-88-000	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	System Agreement, production cost equalization, tariffs.
08/02	U-25888	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc. and Entergy Louisiana, Inc.	System Agreement, production cost disparities, prudence.
09/02	2002-00224 2002-00225	KY	Kentucky Industrial Utilities Customers, Inc.	Kentucky Utilities Co., Louisville Gas & Electric Co.	Line losses and fuel clause recovery associated with off-system sales.
11/02	2002-00146 2002-00147	KY	Kentucky Industrial Utilities Customers, Inc.	Kentucky Utilities Co., Louisville Gas & Electric Co.	Environmental compliance costs and surcharge recovery.
01/03	2002-00169	KY	Kentucky Industrial Utilities Customers, Inc.	Kentucky Power Co.	Environmental compliance costs and surcharge recovery.

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Date	Case	Jurisdict.	Party	Utility	Subject
04/03	2002-00429 2002-00430	KY	Kentucky Industrial Utilities Customers, Inc.	Kentucky Utilities Co., Louisville Gas & Electric Co.	Extension of merger surcredit, flaws in Companies' studies.
04/03	U-26527	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Revenue requirements, corporate franchise tax, conversion to LLC, capital structure, post-test year adjustments.
06/03	EL01-88-000 Rebuttal	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	System Agreement, production cost equalization, tariffs.
06/03	2003-00068	KY	Kentucky Industrial Utility Customers	Kentucky Utilities Co.	Environmental cost recovery, correction of base rate error.
11/03	ER03-753-000	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	Unit power purchases and sale cost-based tariff pursuant to System Agreement.
11/03	ER03-583-000, ER03-583-001, ER03-583-002 ER03-681-000, ER03-681-001 ER03-682-000, ER03-682-001, ER03-682-002 ER03-744-000, ER03-744-001 (Consolidated)	FERC	Louisiana Public Service Commission	Entergy Services, Inc., the Entergy Operating Companies, EWO Marketing, L.P, and Entergy Power, Inc.	Unit power purchases and sale agreements, contractual provisions, projected costs, levelized rates, and formula rates.
12/03	U-26527 Surrebuttal	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Revenue requirements, corporate franchise tax, conversion to LLC, capital structure, post-test year adjustments.
12/03	2003-0334 2003-0335	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co., Louisville Gas & Electric Co.	Earnings Sharing Mechanism.
12/03	U-27136	LA	Louisiana Public Service Commission Staff	Entergy Louisiana, Inc	Purchased power contracts between affiliates, terms and conditions.
03/04	U-26527 Supplemental Surrebuttal	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Revenue requirements, corporate franchise tax, conversion to LLC, capital structure, post-test year adjustments.
03/04	2003-00433	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co.	Revenue requirements, depreciation rates, O&M expense, deferrals and amortization, earnings sharing mechanism, merger surcredit, VDT surcredit.
03/04	2003-00434	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Revenue requirements, depreciation rates, O&M expense, deferrals and amortization, earnings sharing mechanism, merger surcredit, VDT surcredit.

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Date	Case	Jurisdict.	Party	Utility	Subject
03/04	SOAH Docket 473-04-2459 PUC Docket 29206	TX	Cities Served by Texas-New Mexico Power Co.	Texas-New Mexico Power Co.	Stranded costs true-up, including valuation issues, ITC, ADIT, excess earnings.
05/04	04-169-EL-UNC	OH	Ohio Energy Group, Inc.	Columbus Southern Power Co. & Ohio Power Co.	Rate stabilization plan, deferrals, T&D rate increases, earnings.
06/04	SOAH Docket 473-04-4555 PUC Docket 29526	TX	Houston Council for Health and Education	CenterPoint Energy Houston Electric	Stranded costs true-up, including valuation issues, ITC, EDIT, excess mitigation credits, capacity auction true-up revenues, interest.
08/04	SOAH Docket 473-04-4555 PUC Docket 29526 (Suppl Direct)	TX	Houston Council for Health and Education	CenterPoint Energy Houston Electric	Interest on stranded cost pursuant to Texas Supreme Court remand.
09/04	U-23327 Subdocket B	LA	Louisiana Public Service Commission Staff	SWEPCO	Fuel and purchased power expenses recoverable through fuel adjustment clause, trading activities, compliance with terms of various LPSC Orders.
10/04	U-23327 Subdocket A	LA	Louisiana Public Service Commission Staff	SWEPCO	Revenue requirements.
12/04	Case Nos. 2004-00321, 2004-00372	KY	Gallatin Steel Co.	East Kentucky Power Cooperative, Inc., Big Sandy Recc, et al.	Environmental cost recovery, qualified costs, TIER requirements, cost allocation.
01/05	30485	TX	Houston Council for Health and Education	CenterPoint Energy Houston Electric, LLC	Stranded cost true-up including regulatory Central Co. assets and liabilities, ITC, EDIT, capacity auction, proceeds, excess mitigation credits, retrospective and prospective ADIT.
02/05	18638-U	GA	Georgia Public Service Commission Adversary Staff	Atlanta Gas Light Co.	Revenue requirements.
02/05	18638-U Panel with Tony Wackerly	GA	Georgia Public Service Commission Adversary Staff	Atlanta Gas Light Co.	Comprehensive rate plan, pipeline replacement program surcharge, performance based rate plan.
02/05	18638-U Panel with Michelle Thebert	GA	Georgia Public Service Commission Adversary Staff	Atlanta Gas Light Co.	Energy conservation, economic development, and tariff issues.
03/05	Case Nos. 2004-00426, 2004-00421	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co., Louisville Gas & Electric	Environmental cost recovery, Jobs Creation Act of 2004 and §199 deduction, excess common equity ratio, deferral and amortization of nonrecurring O&M expense.
06/05	2005-00068	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Environmental cost recovery, Jobs Creation Act of 2004 and §199 deduction, margins on allowances used for AEP system sales.
06/05	050045-EI	FL	South Florida Hospital and Healthcare Assoc.	Florida Power & Light Co.	Storm damage expense and reserve, RTO costs, O&M expense projections, return on equity performance incentive, capital structure, selective second phase post-test year rate increase.

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Date	Case	Jurisdict.	Party	Utility	Subject
08/05	31056	TX	Alliance for Valley Healthcare	AEP Texas Central Co.	Stranded cost true-up including regulatory assets and liabilities, ITC, EDIT, capacity auction, proceeds, excess mitigation credits, retrospective and prospective ADIT.
09/05	20298-U	GA	Georgia Public Service Commission Adversary Staff	Atmos Energy Corp.	Revenue requirements, roll-in of surcharges, cost recovery through surcharge, reporting requirements.
09/05	20298-U Panel with Victoria Taylor	GA	Georgia Public Service Commission Adversary Staff	Atmos Energy Corp.	Affiliate transactions, cost allocations, capitalization, cost of debt.
10/05	04-42	DE	Delaware Public Service Commission Staff	Artesian Water Co.	Allocation of tax net operating losses between regulated and unregulated.
11/05	2005-00351 2005-00352	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co., Louisville Gas & Electric	Workforce Separation Program cost recovery and shared savings through VDT surcredit.
01/06	2005-00341	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	System Sales Clause Rider, Environmental Cost Recovery Rider. Net Congestion Rider, Storm damage, vegetation management program, depreciation, off-system sales, maintenance normalization, pension and OPEB.
03/06	PUC Docket 31994	TX	Cities	Texas-New Mexico Power Co.	Stranded cost recovery through competition transition or change.
05/06	31994 Supplemental	TX	Cities	Texas-New Mexico Power Co.	Retrospective ADFIT, prospective ADFIT.
03/06	U-21453, U-20925, U-22092	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Jurisdictional separation plan.
03/06	NOPR Reg 104385-OR	IRS	Alliance for Valley Health Care and Houston Council for Health Education	AEP Texas Central Company and CenterPoint Energy Houston Electric	Proposed Regulations affecting flow- through to ratepayers of excess deferred income taxes and investment tax credits on generation plant that is sold or deregulated.
04/06	U-25116	LA	Louisiana Public Service Commission Staff	Entergy Louisiana, Inc.	2002-2004 Audit of Fuel Adjustment Clause Filings. Affiliate transactions.
07/06	R-00061366, Et. al.	PA	Met-Ed Ind. Users Group Pennsylvania Ind. Customer Alliance	Metropolitan Edison Co., Pennsylvania Electric Co.	Recovery of NUG-related stranded costs, government mandated program costs, storm damage costs.
07/06	U-23327	LA	Louisiana Public Service Commission Staff	Southwestern Electric Power Co.	Revenue requirements, formula rate plan, banking proposal.
08/06	U-21453, U-20925, U-22092 (Subdocket J)	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Jurisdictional separation plan.
11/06	05CVH03-3375 Franklin County Court Affidavit	OH	Various Taxing Authorities (Non-Utility Proceeding)	State of Ohio Department of Revenue	Accounting for nuclear fuel assemblies as manufactured equipment and capitalized plant.

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12/06	U-23327 Subdocket A Reply Testimony	LA	Louisiana Public Service Commission Staff	Southwestern Electric Power Co.	Revenue requirements, formula rate plan, banking proposal.
03/07	U-29764	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc., Entergy Louisiana, LLC	Jurisdictional allocation of Entergy System Agreement equalization remedy receipts.
03/07	PUC Docket 33309	TX	Cities	AEP Texas Central Co.	Revenue requirements, including functionalization of transmission and distribution costs.
03/07	PUC Docket 33310	TX	Cities	AEP Texas North Co.	Revenue requirements, including functionalization of transmission and distribution costs.
03/07	2006-00472	KY	Kentucky Industrial Utility Customers, Inc.	East Kentucky Power Cooperative	Interim rate increase, RUS loan covenants, credit facility requirements, financial condition.
03/07	U-29157	LA	Louisiana Public Service Commission Staff	Cleco Power, LLC	Permanent (Phase II) storm damage cost recovery.
04/07	U-29764 Supplemental and Rebuttal	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc., Entergy Louisiana, LLC	Jurisdictional allocation of Entergy System Agreement equalization remedy receipts.
04/07	ER07-682-000 Affidavit	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	Allocation of intangible and general plant and A&G expenses to production and state income tax effects on equalization remedy receipts.
04/07	ER07-684-000 Affidavit	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	Fuel hedging costs and compliance with FERC USOA.
05/07	ER07-682-000 Affidavit	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	Allocation of intangible and general plant and A&G expenses to production and account 924 effects on MSS-3 equalization remedy payments and receipts.
06/07	U-29764	LA	Louisiana Public Service Commission Staff	Entergy Louisiana, LLC, Entergy Gulf States, Inc.	Show cause for violating LPSC Order on fuel hedging costs.
07/07	2006-00472	KY	Kentucky Industrial Utility Customers, Inc.	East Kentucky Power Cooperative	Revenue requirements, post-test year adjustments, TIER, surcharge revenues and costs, financial need.
07/07	ER07-956-000 Affidavit	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Storm damage costs related to Hurricanes Katrina and Rita and effects of MSS-3 equalization payments and receipts.
10/07	05-UR-103 Direct	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Company, Wisconsin Gas, LLC	Revenue requirements, carrying charges on CWIP, amortization and return on regulatory assets, working capital, incentive compensation, use of rate base in lieu of capitalization, quantification and use of Point Beach sale proceeds.

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10/07	05-UR-103 Surrebuttal	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Company, Wisconsin Gas, LLC	Revenue requirements, carrying charges on CWIP, amortization and return on regulatory assets, working capital, incentive compensation, use of rate base in lieu of capitalization, quantification and use of Point Beach sale proceeds.
10/07	25060-U Direct	GA	Georgia Public Service Commission Public Interest Adversary Staff	Georgia Power Company	Affiliate costs, incentive compensation, consolidated income taxes, §199 deduction.
11/07	06-0033-E-CN Direct	WV	West Virginia Energy Users Group	Appalachian Power Company	IGCC surcharge during construction period and post-in-service date.
11/07	ER07-682-000 Direct	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	Functionalization and allocation of intangible and general plant and A&G expenses.
01/08	ER07-682-000 Cross-Answering	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	Functionalization and allocation of intangible and general plant and A&G expenses.
01/08	07-551-EL-AIR Direct	OH	Ohio Energy Group, Inc.	Ohio Edison Company, Cleveland Electric Illuminating Company, Toledo Edison Company	Revenue requirements.
02/08	ER07-956-000 Direct	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	Functionalization of expenses, storm damage expense and reserves, tax NOL carrybacks in accounts, ADIT, nuclear service lives and effects on depreciation and decommissioning.
03/08	ER07-956-000 Cross-Answering	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	Functionalization of expenses, storm damage expense and reserves, tax NOL carrybacks in accounts, ADIT, nuclear service lives and effects on depreciation and decommissioning.
04/08	2007-00562, 2007-00563	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co., Louisville Gas and Electric Co.	Merger surcredit.
04/08	26837 Direct Bond, Johnson, Thebert, Kollen Panel	GA	Georgia Public Service Commission Staff	SCANA Energy Marketing, Inc.	Rule Nisi complaint.
05/08	26837 Rebuttal Bond, Johnson, Thebert, Kollen Panel	GA	Georgia Public Service Commission Staff	SCANA Energy Marketing, Inc.	Rule Nisi complaint.
05/08	26837 Suppl Rebuttal Bond, Johnson, Thebert, Kollen Panel	GA	Georgia Public Service Commission Staff	SCANA Energy Marketing, Inc.	Rule Nisi complaint.

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Date	Case	Jurisdict.	Party	Utility	Subject
06/08	2008-00115	KY	Kentucky Industrial Utility Customers, Inc.	East Kentucky Power Cooperative, Inc.	Environmental surcharge recoveries, including costs recovered in existing rates, TIER.
07/08	27163 Direct	GA	Georgia Public Service Commission Public Interest Advocacy Staff	Atmos Energy Corp.	Revenue requirements, including projected test year rate base and expenses.
07/08	27163 Taylor, Kollen Panel	GA	Georgia Public Service Commission Public Interest Advocacy Staff	Atmos Energy Corp.	Affiliate transactions and division cost allocations, capital structure, cost of debt.
08/08	6680-CE-170 Direct	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Power and Light Company	Nelson Dewey 3 or Colombia 3 fixed financial parameters.
08/08	6680-UR-116 Direct	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Power and Light Company	CWIP in rate base, labor expenses, pension expense, financing, capital structure, decoupling.
08/08	6680-UR-116 Rebuttal	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Power and Light Company	Capital structure.
08/08	6690-UR-119 Direct	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Public Service Corp.	Prudence of Weston 3 outage, incentive compensation, Crane Creek Wind Farm incremental revenue requirement, capital structure.
09/08	6690-UR-119 Surrebuttal	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Public Service Corp.	Prudence of Weston 3 outage, Section 199 deduction.
09/08	08-935-EL-SSO, 08-918-EL-SSO	OH	Ohio Energy Group, Inc.	First Energy	Standard service offer rates pursuant to electric security plan, significantly excessive earnings test.
10/08	08-917-EL-SSO	OH	Ohio Energy Group, Inc.	AEP	Standard service offer rates pursuant to electric security plan, significantly excessive earnings test.
10/08	2007-00564, 2007-00565, 2008-00251 2008-00252	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co., Kentucky Utilities Company	Revenue forecast, affiliate costs, depreciation expenses, federal and state income tax expense, capitalization, cost of debt.
11/08	EL08-51	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Spindletop gas storage facilities, regulatory asset and bandwidth remedy.
11/08	35717	TX	Cities Served by Oncor Delivery Company	Oncor Delivery Company	Recovery of old meter costs, asset ADFIT, cash working capital, recovery of prior year restructuring costs, levelized recovery of storm damage costs, prospective storm damage accrual, consolidated tax savings adjustment.
12/08	27800	GA	Georgia Public Service Commission	Georgia Power Company	AFUDC versus CWIP in rate base, mirror CWIP, certification cost, use of short term debt and trust preferred financing, CWIP recovery, regulatory incentive.
01/09	ER08-1056	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Entergy System Agreement bandwidth remedy calculations, including depreciation expense, ADIT, capital structure.
01/09	ER08-1056 Supplemental Direct	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Blytheville leased turbines; accumulated depreciation.

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02/09	EL08-51 Rebuttal	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Spindletop gas storage facilities regulatory asset and bandwidth remedy.
02/09	2008-00409 Direct	KY	Kentucky Industrial Utility Customers, Inc.	East Kentucky Power Cooperative, Inc.	Revenue requirements.
03/09	ER08-1056 Answering	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Entergy System Agreement bandwidth remedy calculations, including depreciation expense, ADIT, capital structure.
03/09 04/09	U-21453, U-20925 U-22092 (Sub J) Direct Rebuttal	LA	Louisiana Public Service Commission Staff	Entergy Gulf States Louisiana, LLC	Violation of EGSI separation order, ETI and EGSL separation accounting, Spindletop regulatory asset.
04/09	2009-00040 Direct-Interim (Oral)	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corp.	Emergency interim rate increase; cash requirements.
04/09	PUC Docket 36530	TX	State Office of Administrative Hearings	Oncor Electric Delivery Company, LLC	Rate case expenses.
05/09	ER08-1056 Rebuttal	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Entergy System Agreement bandwidth remedy calculations, including depreciation expense, ADIT, capital structure.
06/09	2009-00040 Direct-Permanent	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corp.	Revenue requirements, TIER, cash flow.
07/09	080677-EI	FL	South Florida Hospital and Healthcare Association	Florida Power & Light Company	Multiple test years, GBRA rider, forecast assumptions, revenue requirement, O&M expense, depreciation expense, Economic Stimulus Bill, capital structure.
08/09	U-21453, U-20925, U-22092 (Subdocket J) Supplemental Rebuttal	LA	Louisiana Public Service Commission	Entergy Gulf States Louisiana, LLC	Violation of EGSI separation order, ETI and EGSL separation accounting, Spindletop regulatory asset.
08/09	8516 and 29950	GA	Georgia Public Service Commission Staff	Atlanta Gas Light Company	Modification of PRP surcharge to include infrastructure costs.
09/09	05-UR-104 Direct and Surrebuttal	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Company	Revenue requirements, incentive compensation, depreciation, deferral mitigation, capital structure, cost of debt.
09/09	09AL-299E	CO	CF&I Steel, Rocky Mountain Steel Mills LP, Climax Molybdenum Company	Public Service Company of Colorado	Forecasted test year, historic test year, proforma adjustments for major plant additions, tax depreciation.
09/09	6680-UR-117 Direct and Surrebuttal	WI	Wisconsin Industrial Energy Group	Wisconsin Power and Light Company	Revenue requirements, CWIP in rate base, deferral mitigation, payroll, capacity shutdowns, regulatory assets, rate of return.

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Date	Case	Jurisdict.	Party	Utility	Subject
10/09	09A-415E Answer	CO	Cripple Creek & Victor Gold Mining Company, et al.	Black Hills/CO Electric Utility Company	Cost prudence, cost sharing mechanism.
10/09	EL09-50 Direct	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Waterford 3 sale/leaseback accumulated deferred income taxes, Entergy System Agreement bandwidth remedy calculations.
10/09	2009-00329	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Company, Kentucky Utilities Company	Trimble County 2 depreciation rates.
12/09	PUE-2009-00030	VA	Old Dominion Committee for Fair Utility Rates	Appalachian Power Company	Return on equity incentive.
12/09	ER09-1224 Direct	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Hypothetical versus actual costs, out of period costs, Spindletop deferred capital costs, Waterford 3 sale/leaseback ADIT.
01/10	ER09-1224 Cross-Answering	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Hypothetical versus actual costs, out of period costs, Spindletop deferred capital costs, Waterford 3 sale/leaseback ADIT.
01/10	EL09-50 Rebuttal Supplemental Rebuttal	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Waterford 3 sale/leaseback accumulated deferred income taxes, Entergy System Agreement bandwidth remedy calculations.
02/10	ER09-1224 Final	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Hypothetical versus actual costs, out of period costs, Spindletop deferred capital costs, Waterford 3 sale/leaseback ADIT.
02/10	30442 Wackerly-Kollen Panel	GA	Georgia Public Service Commission Staff	Atmos Energy Corporation	Revenue requirement issues.
02/10	30442 McBride-Kollen Panel	GA	Georgia Public Service Commission Staff	Atmos Energy Corporation	Affiliate/division transactions, cost allocation, capital structure.
02/10	2009-00353	KY	Kentucky Industrial Utility Customers, Inc., Attorney General	Louisville Gas and Electric Company, Kentucky Utilities Company	Ratemaking recovery of wind power purchased power agreements.
03/10	2009-00545	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Company	Ratemaking recovery of wind power purchased power agreement.
03/10	E015/GR-09-1151	MN	Large Power Interveners	Minnesota Power	Revenue requirement issues, cost overruns on environmental retrofit project.
03/10	EL10-55	FERC	Louisiana Public Service Commission	Entergy Services, Inc., Entergy Operating Cos	Depreciation expense and effects on System Agreement tariffs.
04/10	2009-00459	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Company	Revenue requirement issues.

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Date	Case	Jurisdict.	Party	Utility	Subject
04/10	2009-00458, 2009-00459	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Company, Louisville Gas and Electric Company	Revenue requirement issues.
08/10	31647	GA	Georgia Public Service Commission Staff	Atlanta Gas Light Company	Revenue requirement and synergy savings issues.
08/10	31647 Wackerly-Kollen Panel	GA	Georgia Public Service Commission Staff	Atlanta Gas Light Company	Affiliate transaction and Customer First program issues.
08/10	2010-00204	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Company, Kentucky Utilities Company	PPL acquisition of E.ON U.S. (LG&E and KU) conditions, acquisition savings, sharing deferral mechanism.
09/10	38339 Direct and Cross-Rebuttal	TX	Gulf Coast Coalition of Cities	CenterPoint Energy Houston Electric	Revenue requirement issues, including consolidated tax savings adjustment, incentive compensation FIN 48; AMS surcharge including roll-in to base rates; rate case expenses.
09/10	EL10-55	FERC	Louisiana Public Service Commission	Entergy Services, Inc., Entergy Operating Cos	Depreciation rates and expense input effects on System Agreement tariffs.
09/10	2010-00167	KY	Gallatin Steel	East Kentucky Power Cooperative, Inc.	Revenue requirements.
09/10	U-23327 Subdocket E Direct	LA	Louisiana Public Service Commission	SWEPCO	Fuel audit: S02 allowance expense, variable O&M expense, off-system sales margin sharing.
11/10	U-23327 Rebuttal	LA	Louisiana Public Service Commission	SWEPCO	Fuel audit: S02 allowance expense, variable O&M expense, off-system sales margin sharing.
09/10	U-31351	LA	Louisiana Public Service Commission Staff	SWEPCO and Valley Electric Membership Cooperative	Sale of Valley assets to SWEPCO and dissolution of Valley.
10/10	10-1261-EL-UNC	OH	Ohio OCC, Ohio Manufacturers Association, Ohio Energy Group, Ohio Hospital Association, Appalachian Peace and Justice Network	Columbus Southern Power Company	Significantly excessive earnings test.
10/10	10-0713-E-PC	WV	West Virginia Energy Users Group	Monongahela Power Company, Potomac Edison Power Company	Merger of First Energy and Allegheny Energy.
10/10	U-23327 Subdocket F Direct	LA	Louisiana Public Service Commission Staff	SWEPCO	AFUDC adjustments in Formula Rate Plan.
11/10	EL10-55 Rebuttal	FERC	Louisiana Public Service Commission	Entergy Services, Inc., Entergy Operating Cos	Depreciation rates and expense input effects on System Agreement tariffs.

**Expert Testimony Appearances
of
Lane Kollen
as of July 2015**

Date	Case	Jurisdict.	Party	Utility	Subject
12/10	ER10-1350 Direct	FERC	Louisiana Public Service Commission	Entergy Services, Inc. Entergy Operating Cos	Waterford 3 lease amortization, ADIT, and fuel inventory effects on System Agreement tariffs.
01/11	ER10-1350 Cross-Answering	FERC	Louisiana Public Service Commission	Entergy Services, Inc., Entergy Operating Cos	Waterford 3 lease amortization, ADIT, and fuel inventory effects on System Agreement tariffs.
03/11 04/11	ER10-2001 Direct Cross-Answering	FERC	Louisiana Public Service Commission	Entergy Services, Inc., Entergy Arkansas, Inc.	EAI depreciation rates.
04/11	U-23327 Subdocket E	LA	Louisiana Public Service Commission Staff	SWEPCO	Settlement, incl resolution of S02 allowance expense, var O&M expense, sharing of OSS margins.
04/11 05/11	38306 Direct Suppl Direct	TX	Cities Served by Texas-New Mexico Power Company	Texas-New Mexico Power Company	AMS deployment plan, AMS Surcharge, rate case expenses.
05/11	11-0274-E-GI	WV	West Virginia Energy Users Group	Appalachian Power Company, Wheeling Power Company	Deferral recovery phase-in, construction surcharge.
05/11	2011-00036	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corp.	Revenue requirements.
06/11	29849	GA	Georgia Public Service Commission Staff	Georgia Power Company	Accounting issues related to Vogtle risk-sharing mechanism.
07/11	ER11-2161 Direct and Answering	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and Entergy Texas, Inc.	ETI depreciation rates; accounting issues.
07/11	PUE-2011-00027	VA	Virginia Committee for Fair Utility Rates	Virginia Electric and Power Company	Return on equity performance incentive.
07/11	11-346-EL-SSO 11-348-EL-SSO 11-349-EL-AAM 11-350-EL-AAM	OH	Ohio Energy Group	AEP-OH	Equity Stabilization Incentive Plan; actual earned returns; ADIT offsets in riders.
08/11	U-23327 Subdocket F Rebuttal	LA	Louisiana Public Service Commission Staff	SWEPCO	Depreciation rates and service lives; AFUDC adjustments.
08/11	05-UR-105	WI	Wisconsin Industrial Energy Group	WE Energies, Inc.	Suspended amortization expenses; revenue requirements.
08/11	ER11-2161 Cross-Answering	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and Entergy Texas, Inc.	ETI depreciation rates; accounting issues.
09/11	PUC Docket 39504	TX	Gulf Coast Coalition of Cities	CenterPoint Energy Houston Electric	Investment tax credit, excess deferred income taxes; normalization.
09/11	2011-00161 2011-00162	KY	Kentucky Industrial Utility Consumers, Inc.	Louisville Gas & Electric Company, Kentucky Utilities Company	Environmental requirements and financing.

Expert Testimony Appearances
of
Lane Kollen
as of July 2015

Date	Case	Jurisdict.	Party	Utility	Subject
10/11	11-4571-EL-UNC 11-4572-EL-UNC	OH	Ohio Energy Group	Columbus Southern Power Company, Ohio Power Company	Significantly excessive earnings.
10/11	4220-UR-117 Direct	WI	Wisconsin Industrial Energy Group	Northern States Power-Wisconsin	Nuclear O&M, depreciation.
11/11	4220-UR-117 Surrebuttal	WI	Wisconsin Industrial Energy Group	Northern States Power-Wisconsin	Nuclear O&M, depreciation.
11/11	PUC Docket 39722	TX	Cities Served by AEP Texas Central Company	AEP Texas Central Company	Investment tax credit, excess deferred income taxes; normalization.
02/12	PUC Docket 40020	TX	Cities Served by Oncor	Lone Star Transmission, LLC	Temporary rates.
03/12	11AL-947E Answer	CO	Climax Molybdenum Company and CF&I Steel, L.P. d/b/a Evraz Rocky Mountain Steel	Public Service Company of Colorado	Revenue requirements, including historic test year, future test year, CACJA CWIP, contra-AFUDC.
03/12	2011-00401	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Company	Big Sandy 2 environmental retrofits and environmental surcharge recovery.
4/12	2011-00036 Direct Rehearing Supplemental Direct Rehearing	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corp.	Rate case expenses, depreciation rates and expense.
04/12	10-2929-EL-UNC	OH	Ohio Energy Group	AEP Ohio Power	State compensation mechanism, CRES capacity charges, Equity Stabilization Mechanism
05/12	11-346-EL-SSO 11-348-EL-SSO	OH	Ohio Energy Group	AEP Ohio Power	State compensation mechanism, Equity Stabilization Mechanism, Retail Stability Rider.
05/12	11-4393-EL-RDR	OH	Ohio Energy Group	Duke Energy Ohio, Inc.	Incentives for over-compliance on EE/PDR mandates.
06/12	40020	TX	Cities Served by Oncor	Lone Star Transmission, LLC	Revenue requirements, including ADIT, bonus depreciation and NOL, working capital, self insurance, depreciation rates, federal income tax expense.
07/12	120015-EI	FL	South Florida Hospital and Healthcare Association	Florida Power & Light Company	Revenue requirements, including vegetation management, nuclear outage expense, cash working capital, CWIP in rate base.
07/12	2012-00063	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corp.	Environmental retrofits, including environmental surcharge recovery.
09/12	05-UR-106	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Electric Power Company	Section 1603 grants, new solar facility, payroll expenses, cost of debt.
10/12	2012-00221 2012-00222	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Company, Kentucky Utilities Company	Revenue requirements, including off-system sales, outage maintenance, storm damage, injuries and damages, depreciation rates and expense.

**Expert Testimony Appearances
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as of July 2015**

Date	Case	Jurisdict.	Party	Utility	Subject
10/12	120015-EI Direct	FL	South Florida Hospital and Healthcare Association	Florida Power & Light Company	Settlement issues.
11/12	120015-EI Rebuttal	FL	South Florida Hospital and Healthcare Association	Florida Power & Light Company	Settlement issues.
10/12	40604	TX	Steering Committee of Cities Served by Oncor	Cross Texas Transmission, LLC	Policy and procedural issues, revenue requirements, including AFUDC, ADIT – bonus depreciation & NOL, incentive compensation, staffing, self-insurance, net salvage, depreciation rates and expense, income tax expense.
11/12	40627 Direct	TX	City of Austin d/b/a Austin Energy	City of Austin d/b/a Austin Energy	Rate case expenses.
12/12	40443	TX	Cities Served by SWEPCO	Southwestern Electric Power Company	Revenue requirements, including depreciation rates and service lives, O&M expenses, consolidated tax savings, CWIP in rate base, Turk plant costs.
12/12	U-29764	LA	Louisiana Public Service Commission Staff	Entergy Gulf States Louisiana, LLC and Entergy Louisiana, LLC	Termination of purchased power contracts between EGSL and ETI, Spindletop regulatory asset.
01/13	ER12-1384 Rebuttal	FERC	Louisiana Public Service Commission	Entergy Gulf States Louisiana, LLC and Entergy Louisiana, LLC	Little Gypsy 3 cancellation costs.
02/13	40627 Rebuttal	TX	City of Austin d/b/a Austin Energy	City of Austin d/b/a Austin Energy	Rate case expenses.
03/13	12-426-EL-SSO	OH	The Ohio Energy Group	The Dayton Power and Light Company	Capacity charges under state compensation mechanism, Service Stability Rider, Switching Tracker.
04/13	12-2400-EL-UNC	OH	The Ohio Energy Group	Duke Energy Ohio, Inc.	Capacity charges under state compensation mechanism, deferrals, rider to recover deferrals.
04/13	2012-00578	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Company	Resource plan, including acquisition of interest in Mitchell plant.
05/13	2012-00535	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corporation	Revenue requirements, excess capacity, restructuring.
06/13	12-3254-EL-UNC	OH	The Ohio Energy Group, Inc., Office of the Ohio Consumers' Counsel	Ohio Power Company	Energy auctions under CBP, including reserve prices.
07/13	2013-00144	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Company	Biomass renewable energy purchase agreement.
07/13	2013-00221	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corporation	Agreements to provide Century Hawesville Smelter market access.
10/13	2013-00199	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corporation	Revenue requirements, excess capacity, restructuring.

Expert Testimony Appearances
of
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as of July 2015

Date	Case	Jurisdict.	Party	Utility	Subject
12/13	2013-00413	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corporation	Agreements to provide Century Sebree Smelter market access.
01/14	ER10-1350	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Waterford 3 lease accounting and treatment in annual bandwidth filings.
04/14	ER13-432 Direct	FERC	Louisiana Public Service Commission	Entergy Gulf States Louisiana, LLC and Entergy Louisiana, LLC	UP Settlement benefits and damages.
05/14	PUE-2013-00132	VA	HP Hood LLC	Shenandoah Valley Electric Cooperative	Market based rate; load control tariffs.
07/14	PUE-2014-00033	VA	Virginia Committee for Fair Utility Rates	Virginia Electric and Power Company	Fuel and purchased power hedge accounting, change in FAC Definitional Framework.
08/14	ER13-432 Rebuttal	FERC	Louisiana Public Service Commission	Entergy Gulf States Louisiana, LLC and Entergy Louisiana, LLC	UP Settlement benefits and damages.
08/14	2014-00134	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corporation	Requirements power sales agreements with Nebraska entities.
09/14	E-015/CN-12-1163 Direct	MN	Large Power Intervenors	Minnesota Power	Great Northern Transmission Line; cost cap; AFUDC v. current recovery; rider v. base recovery; class cost allocation.
10/14	2014-00225	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Company	Allocation of fuel costs to off-system sales.
10/14	ER13-1508	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Entergy service agreements and tariffs for affiliate power purchases and sales; return on equity.
10/14	14-0702-E-42T 14-0701-E-D	WV	West Virginia Energy Users Group	First Energy-Monongahela Power, Potomac Edison	Consolidated tax savings; payroll; pension, OPEB, amortization; depreciation; environmental surcharge.
11/14	E-015/CN-12-1163 Surrebuttal	MN	Large Power Intervenors	Minnesota Power	Great Northern Transmission Line; cost cap; AFUDC v. current recovery; rider v. base recovery; class allocation.
11/14	05-376-EL-UNC	OH	Ohio Energy Group	Ohio Power Company	Refund of IGCC CWIP financing cost recoveries.
11/14	14AL-0660E	CO	Climax, CF&I Steel	Public Service Company of Colorado	Historic test year v. future test year; AFUDC v. current return; CACJA rider, transmission rider; equivalent availability rider; ADIT; depreciation; royalty income; amortization.
12/14	EL14-026	SD	Black Hills Industrial Intervenors	Black Hills Power Company	Revenue requirement issues, including depreciation expense and affiliate charges.
12/14	14-1152-E-42T	WV	West Virginia Energy Users Group	AEP-Appalachian Power Company	Income taxes, payroll, pension, OPEB, deferred costs and write offs, depreciation rates, environmental projects surcharge.
01/15	9400-YO-100 Direct	WI	Wisconsin Industrial Energy Group	Wisconsin Energy Corporation	WEC acquisition of Integrys Energy Group, Inc.

**Expert Testimony Appearances
of
Lane Kollen
as of July 2015**

Date	Case	Jurisdict.	Party	Utility	Subject
01/15	14F-0336EG 14F-0404EG	CO	Development Recovery Company LLC	Public Service Company of Colorado	Line extension policies and refunds.
02/15	9400-YO-100 Rebuttal	WI	Wisconsin Industrial Energy Group	Wisconsin Energy Corporation	WEC acquisition of Integrys Energy Group, Inc.
03/15	2014-00396	KY	Kentucky Industrial Utility Customers, Inc.	AEP-Kentucky Power Company	Base, Big Sandy 2 retirement rider, environmental surcharge, and Big Sandy 1 operation rider revenue requirements, depreciation rates, financing, deferrals.
03/15	2014-00371 2014-00372	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Company and Louisville Gas and Electric Company	Revenue requirements, staffing and payroll, depreciation rates.
04/15	2014-00450	KY	Kentucky Industrial Utility Customers, Inc. and the Attorney General of the Commonwealth of Kentucky	AEP-Kentucky Power Company	Allocation of fuel costs between native load and off-system sales.
04/15	2014-00455	KY	Kentucky Industrial Utility Customers, Inc. and the Attorney General of the Commonwealth of Kentucky	Big Rivers Electric Corporation	Allocation of fuel costs between native load and off-system sales.
04/15	ER2014-0370	MO	Midwest Energy Consumers' Group	Kansas City Power & Light Company	Affiliate transactions, operation and maintenance expense, management audit.
05/15	PUE-2015-00022	VA	Virginia Committee for Fair Utility Rates	Virginia Electric and Power Company	Fuel and purchased power hedge accounting; change in FAC Definitional Framework.
05/15	EL10-65	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Waterford 3 sale/leaseback ADIT, Bandwidth Formula
06/15	EL10-65	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Accounting for AFUDC Debt, related ADIT.

EXHIBIT ____ (LK-2)

OHIO POWER COMPANY'S RESPONSES TO
INDUSTRIAL ENERGY USERS-OHIO DISCOVERY REQUESTS
PUCO CASE NO. 14-1693-EL-RDR
SUPPLEMENTAL FIRST SET

REQUEST FOR PRODUCTION OF DOCUMENTS

RPD-1-002 Referencing Exhibit KDP-1 at page 5, it is indicated that this Exhibit provides a summary of the major terms of the PPA. Provide a copy of the actual PPA that would be utilized or, if not final, a draft of the PPA.

RESPONSE

The draft contract is undergoing final review and this response will be supplemented soon to provide a copy of the document.

Prepared by: Counsel

SUPPLEMENTAL RESPONSE

The proposed Power Purchase and Sale Agreement (proposed PPA) is enclosed as IEU RPD-1-002 Supplemental Attachment 1. The proposed PPA sets forth the detailed terms of the agreement that was summarized in Exhibit KDP-1 and the proposed PPA controls any conflicts or differences as between the PPA and Exhibit KDP-1. The proposed PPA has not been executed and remains a proposal at this point, with the contracting parties reserving the right to propose changes or modifications to the PPA based on the outcome of either this proceeding or related proceedings.

Prepared by: Counsel

POWER PURCHASE AND SALE AGREEMENT

by and between

[GENCO]

and

OHIO POWER COMPANY

dated as of

_____________, 2014

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POWER PURCHASE AND SALE AGREEMENT

THIS POWER PURCHASE AND SALE AGREEMENT (this "**Agreement**"), dated as of _______, 2014, is by and between [GenCo], a Delaware corporation ("**Seller**"), and OHIO POWER COMPANY, an Ohio corporation ("**Buyer**"). Buyer and Seller are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties.**"

RECITALS

A. Seller, an indirect subsidiary of American Electric Power Company, Inc., with its principal place of business in the State of Ohio, owns or will have an ownership interest in the Ohio based generation facilities shown in Schedule A entitled Ohio Generation Facilities.

B. The Parties desire to enter into a transaction in which Seller sells and Buyer purchases the Capacity, and associated Unit Contingent Energy and Ancillary Services, as delivered or made available from Seller's ownership interest in the generation facilities in Schedule A for a term through the remaining commercial operational life of each of the Schedule A Generation Facilities.

C. The Parties desire to set forth certain terms and conditions applicable to such transaction.

In consideration of mutual covenants and agreements contained herein, the Parties agree as follows:

ARTICLE I

DEFINITIONS

1.1 Defined Terms. Unless otherwise defined herein, the following terms, when used herein, shall have the meaning set forth below:

"**Affected Party**" has the meaning set forth in Section 3.7.

"**Affiliate**" means, with respect to any Person, any other Person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such Person. For this purpose, "control" means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

"**Agreement**" means this Power Purchase and Sale Agreement entered into pursuant to Seller's market based rate authority.

"**Allowance Transfer Deadline**" means the date by which Allowances must be submitted for recordation with the EPA or other relevant Governmental Authority in order to meet the applicable Allowance obligation for the control period immediately preceding that deadline.

"**Allowances**" means emission allowances, emission credits, and any similar rights related to emissions of NO_x, SO_2, CO_2, mercury, particulates or any other substance under any relevant federal, state or local law or recognized by any Governmental Authority or other entity, and all other environmental attributes.

"**Ancillary Services**" means regulation and frequency response services; energy imbalance services; automatic generating control services; spinning, non-spinning, supplemental and replacement reserve services, reactive power and voltage support services, black start services and all other services or products ancillary to the operation of the Facility that are defined as ancillary services in the Transmission Operator's relevant transmission tariff or are commonly sold or saleable, to the extent that the assets comprising the Facilities provide those services or products.

"**Approvals**" means all approvals, permits, licenses, consents, waivers or other authorizations from, notifications to, or filings or registrations with, third parties, including without limitation, Governmental Approvals.

"**Business Day**" means any day except a Saturday, Sunday, or a United States Federal Reserve Bank holiday. A Business Day shall open at 8:00 a.m. and close at 5:00 p.m. local time at the relevant Party's principal place of business. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.

"**Buyer**" has the meaning set forth in the preamble hereto.

"**Buyer's Contractual Capacity**" means Seller's Capacity of the Facilities identified in Schedule A subject to the applicable Facility Operating Agreement, which entitlement is approximately 2,671 MW as of the date set forth in the preamble to this Agreement.

"**Capacity**" means the output level, expressed in MW, that a Facility, or the components of equipment thereof, is capable, as of a given moment, of continuously producing and making available at the Delivery Point, taking into account the operating condition of the equipment at that time, the auxiliary loads, the Facility Operating Agreement and other relevant factors.

"**Capital Improvements Work**" shall mean (i) for wholly owned Seller Facilities, the modeling, studying, engineering, design, procurement, purchasing, construction, inspection, start-up and testing of (a) minor or non-material capital improvements, replacements, repairs or additions to the Facility (b) mutually agreed to costs by both Buyer and Seller for any major or material capital improvements, replacements, repairs or additions to the Facility or (ii) for Seller Facilities that are jointly owned, capital improvements, replacements, repairs or additions to the Facility.

"**Capacity Payment**" has the meaning set forth in Section 5.5.

"**Cardinal Station Agreement**" means the agreement, dated as of January 1, 1968, by and between the Seller, Buckeye Power, Inc. and Cardinal Operating Company, including all amendments and any future amendments thereto.

"Change-in-Law" means, after the date set forth in the preamble to this Agreement, the adoption, imposition, promulgation, change in interpretation or modification by a Governmental Authority of any law, regulation or Governmental Approval, or the issuance of a final and non-appealable order, judgment, award or decree of a Governmental Authority having the effect of the foregoing.

"Change-in-Law Taxes" means, after the date set forth in the preamble to this Agreement, any change (increase or decrease) in Taxes imposed on Seller on (a) the sale or use of fuel for generation of electricity, (b) the sale of Capacity or (c) the production or sale of Energy or Ancillary Services, in any case, resulting from a Change-in-Law.

"Claims" means all claims or actions, threatened or filed and, whether groundless, false, fraudulent or otherwise, that directly or indirectly relate to the subject matter of an indemnity, and the resulting losses, damages, expenses (including reasonable attorneys' fees and disbursements) and court costs, whether incurred by settlement or otherwise, and whether such claims or actions are threatened or filed prior to or after the termination of this Agreement.

"Closing" and **"Closing Date"** means the date upon which the Parties obtain all regulatory approvals for this Agreement.

"Contract Price" means the price to be paid by Buyer to Seller for the purchase of the Buyer's Contractual Capacity and associated Energy and Ancillary Services, as determined in accordance with the provisions of Article V.

"Contract Year" means the period beginning at 12:01 a.m. EPT on the Start Date and ending on December 31st of the same year, and each succeeding calendar year thereafter during the Delivery Period. If the first or last Contract Year consists of a shorter period than a full calendar year, including by reason of the termination of this Agreement prior to the expiration of the Delivery Period, then that Contract Year may consist of a shorter period than a full calendar year, in which case with respect to that Contract Year, all terms and provisions of this Agreement that refer to or are based on a Contract Year shall be adjusted ratably downward to reflect such shorter period.

"Delivery Period" has the meaning set forth in Section 2.2.

"Delivery Point" has the meaning set forth in Section 3.4.

"Depreciation Payment" has the meaning set forth in Section 5.4.

"Effective Date" means the date on which all of the conditions precedent set forth in Section 11.1 have been satisfied or waived, which date shall not be earlier than the Closing Date.

"End Date" has the meaning set forth in Section 2.2.

"Energy" means three-phase, 60-cycle alternating current electric energy, expressed in MWh.

"**EPA**" means the United States Environmental Protection Agency or any successor agency with similar jurisdiction.

"**EPT**" or "**Eastern Prevailing Time**" means the local time at the geographical location of the Delivery Point.

"**Equitable Defenses**" means any bankruptcy, insolvency, reorganization and other laws affecting creditors' rights generally, and with regard to equitable remedies, the discretion of the court before which proceedings to obtain same may be pending.

"**Facility**" means any unit identified on Schedule A entitled Ohio Generation Facilities.

"**Facility Operating Agreement**" means the applicable operating agreement(s) by and among Seller and the other co-owners thereto, as amended or supplemented from time to time, and shall include all exhibits, schedules and annexes thereto, and, for purposes of Section 10.5, such term shall be deemed to include all other agreements, documents, certificates and instruments to which Seller is a party with respect to or in connection with a Facility, as the same may be supplemented or amended from time to time. Upon execution and delivery of this Agreement, Seller will, to the extent not already in the possession of Buyer, deliver to Buyer a true and correct copy of the operating agreement(s) as of that date, including any amendments thereto.

"**Facilities**" means the generation facilities or units on Schedule A entitled Ohio Generation Facilities.

"**Facility LMP Point**" means the location at each Facility recognized by the PJM's scheduling and settlement systems.

"**FERC**" means the Federal Energy Regulatory Commission or any successor entity with similar jurisdiction.

"**Force Majeure**" means an event or circumstance which prevents one Party from performing its obligations under this Agreement, which event or circumstance was not reasonably anticipated as of the date set forth in the preamble to this Agreement, which is not within the reasonable control of, or the result of the negligence of, the Affected Party, and which, by the exercise of due diligence, the Affected Party is, by using reasonable efforts, unable to overcome or avoid or cause to be avoided. Force Majeure shall not be based on (a) Seller's ability to sell Seller's Capacity Entitlement or associated Energy or Ancillary Services at a price greater than the Contract Price; (b) the loss of Buyer's markets; or (c) a Party's inability economically to purchase, use, sell or resell fuel, equipment or services or the Capacity, Energy or Ancillary Services purchased hereunder. Force Majeure includes events of "Force Majeure" as defined in a Facility Operating Agreement, to the extent excusing the performance of the Facility operator or the other joint owners thereto from their obligations under that agreement, but only to the extent affecting the Parties' performance under this Agreement.

"**Fuel Costs**" means without limitation, all fixed or variable costs, expenses, losses, gains, liabilities, fuel hedging, claims and charges related to the acquisition, sale, storage, inventory, transloading, handling, balancing and transportation and delivery of fuel and all expenses recorded to FERC accounts 501 and 502 including, without limitation, coal, natural gas, diesel fuel, oil, consumables, chemicals, trona, urea, limestone, lime hydrated lime, ammonium carbonate, activated carbon, ash, scrubber waste, plant waste and gypsum disposal expense and sales credits, emission Allowance expenses (including all Allowance expenses recorded in Account 509, along with gains/losses in Accounts 411.8 and 411.9), for the Schedule A Generation Facilities, including related costs of credit,

"**Fuel Payment**" has the meaning set forth in Section 5.2.

"**Governmental Approval**" means any permit, authorization, registration, consent, action, waiver, exception, variance, order, judgment, decree, license, exemption, publication, filing, notice to, or declaration of or with, or required by any Governmental Authority or applicable law.

"**Governmental Authority**" means any federal, state, tribal, local, or municipal government body; and any governmental, regulatory, or administrative agency, commission, body, agency, instrumentality, or other authority exercising or entitled to exercise any executive, judicial, legislative, administrative, regulatory, or taxing authority or power, including any court or other tribunal.

"**Imbalance Charges**" means any penalties, fees or charges assessed by a Transmission Operator or Transmission Provider for failure to satisfy requirements for balancing of electric energy receipts and deliveries or loads and generation, or payable to any other Person in connection with the delivery of electrical energy in an amount(s) different from the amount(s) scheduled.

"**Income Tax**" means any Tax imposed by any Taxing Authority (i) based upon, measured by or calculated with respect to gross or net income, profits, commercial activity, or receipts (including municipal gross receipt Taxes, capital gains Taxes and minimum Taxes) or (ii) based upon, measured by or calculated with respect to multiple bases (including corporate franchise Taxes) if one or more of such bases is described in clause (i), in each case together with any interest, penalties or additions attributable to such Tax.

"**Indemnified Parties**" has the meaning set forth in Section 13.2.

"**Letter(s) of Credit**" means one or more irrevocable, unconditional, transferable standby letters of credit issued by a major U.S. commercial bank or the U.S. branch office of a foreign bank with, in either case, a Credit Rating of at least (a) "A-" by S&P and "A3" by Moody's, if such entity is rated by both S&P and Moody's or (b) "A-" by S&P or "A3" by Moody's, if such entity is rated by either S&P or Moody's but not both, in a form acceptable to the Party in whose favor the Letter of Credit is issued. Costs of a Letter of Credit shall be borne by the applicant for such Letter of Credit.

"**Mobile-Sierra Doctrine**" has the meaning set forth in Section 13.13.

"**Monthly Payment**" has the meaning set forth in Section 5.1.

"**Moody's**" means Moody's Investors Services, Inc. or its successor.

"**MW**" means megawatt.

"**MWh**" means megawatt-hour.

"**NERC**" means the North American Electric Reliability Corporation or any successor entity with similar jurisdiction.

"**O&M Payment**" has the meaning set forth in Section 5.3.

"**Operation and Maintenance Costs**" means all fixed or variable costs, expenses, losses, liabilities, claims, charges and associated credits incurred directly or indirectly in the performance of Operating Work, including a ratable portion of retirement costs, but not including Fuel Costs.

"**Operating Work**" means the operation, maintenance, use, repair or retirement of a Facility on or after the Start Date, including but not limited to labor; parts; supplies; insurance; permits; related taxes; community relations; procurement of ancillary services, fuel and other consumables; fuel acquisition or sales, transportation balancing and storage; waste handling and disposal; filing, defense and settlement of claims, suits and causes of action; procurement (or sale) of Allowances and settlement of all other environmental charges (or credits) pertaining to the operation of a Facility; but excluding any Capital Improvements Work.

"**Outage**" shall mean any unavailability, in whole or in part, of the Facility whereby it is not capable of fully operating at its rated capability due to (i) a forced derating, Forced outage maintenance derating, maintenance outage, planned derating, planned outage, (all as defined in the NERC Generating Unit Availability Data System ("**GADS**") Data Reporting Instructions); (ii) the actual or anticipated failure of component(s); (iii) external restrictions; (iv) testing; (v) work being performed; (vi) maintenance; (vii) construction, or (viii) any other condition or circumstance that reduces electrical generating output from time to time from the Facility so as to prevent Seller from performing its obligations in whole or in part.

"**Party**" has the meaning set forth on the preamble hereto.

"**Performance Assurance**" means collateral in the form of Cash, Letter(s) of Credit, or other security or assurances acceptable to the Requesting Party.

"**Person**" means any individual, corporation, partnership, limited liability company, other business organization of any kind, association, trust, or governmental entity, agency or instrumentality.

"**PJM**" means the PJM Interconnection, LLC or any successor entity with similar responsibilities.

"**Property Tax**" means any Tax resulting from and relating to the assessment of real or personal property by any Taxing Authority.

"**Seller**" has the meaning set forth in the preamble hereto.

"Seller's Debt Percentage" or **"DP"** means for purposes of this Agreement the percentage of 50%.

"Seller's Equity Percentage" or **"EP"** means for purposes of this Agreement the percentage of 50%.

"Seller's Facilities Net Book Value" or **"FNBV"** means the net book value of the Facilities as reflected on the books and records of Seller immediately prior to the Contract Year, and including all electric plant in service and capital lease assets net of accumulated depreciation and other investment (e.g. fuel and materials and supplies inventories, prepayments, plant held for future use, working capital, construction work in progress ("CWIP"), asset retirement obligations including ash pond closure costs, other deferred credits and accumulated deferred taxes).

"Seller's Long Term Debt Rate" or **"LTDR"** means from June 1, 2015 through December 31, 2016 an initial rate of 4.73%. Thereafter, starting on January 1, 2017, it will be Seller's average annual cost of long-term debt (i.e., debt having maturities of greater than twelve calendar months) as reflected on Seller's books and records as of the relevant determination date, updated as of January 1st of each calendar year thereafter, or updated at more frequent intervals as reasonably determined by Seller.

"Seller's Return on Equity" or **"ROE"** means Seller's post-tax rate of return on equity, which amount will equal, for each Contract Year, the average of the daily Moody's Long-Term Baa Corporate Bond Index for the month of December of the preceding calendar year, plus 650 basis points; provided, however, such amount not to be less than 8.90% or greater than 15.90%.

"Seller's Weighted Average Cost of Capital" or **"WACOC"** has the meaning set forth in Section 5.5.

"Start Date" has the meaning set forth in Section 2.2.

"Straddle Period" means, as appropriate, either any Tax Period beginning before the beginning of the first Contract Year and ending either during or as of the end of the first Contract Year or any Tax Period that is longer than one month. For example, pursuant to Section 8.5, the Tax Period for Property Taxes is each calendar year. Hence, the Tax Period for Property Taxes is a Straddle Period.

"Tax" or "Taxes" means any federal, state, local, or foreign income, commercial activity, gross receipts, value added, windfall or other profits, alternative or add-on minimum, estimated, franchise, profits, sales, use, real property, personal property, ad valorem, vehicle, airplane, boat, license, payroll, employment, workers' compensation, unemployment compensation, withholding, social security, disability, excise, severance, stamp, occupation, premium, environmental (including taxes under Code section 59A or any cost, charge or other financial burden on emissions), carbon dioxide, other greenhouse gases, charges on consumption, transportation or use of energy from such sources, customs duties, import fees, capital stock transfer, title, documentary, or registration, or other tax, duty, or impost of any kind whatsoever, whether disputed or not, and on either side of the Delivery Point. "Taxes" includes (i) any liability for the payment of any amounts described in the preceding sentence as a result of being a member of an affiliated, consolidated, combined, or unitary group for any taxable period, (ii) any liability for the payment of any amount described in clause (i) above as a result of being a Person required to withhold or collect Taxes imposed on another Person, (iii) any liability for the payment of any amount described in the preceding sentence or in clause (i) or (ii) of this sentence as a result of being a transferee of, or successor in interest to, any Person or as a result of an express or implied obligation to indemnify any Person, and (iv) any and all interest, penalties, additions to tax, or additional amounts imposed in connection with or with respect to any amount described above in this definition.

"Taxing Authority" shall mean, with respect to any Tax, the governmental entity (national, local, municipal or otherwise) or political subdivision thereof that imposes such Tax, the agency (if any) charged with the collection of such Taxes for such entity or subdivision, including any governmental or quasi-governmental entity, a council (if any) or agency that imposes, grants or monitors Taxes or the abatements thereof, or is charged with collecting social security or similar charges or premiums.

"Tax Period" means the time period for which or during which a Tax is imposed by any Taxing Authority.

"Tax Reimbursement Payment" has the meaning set forth in Section 5.6.

"Term" has the meaning set forth in Section 2.1.

"Transmission Operator" means PJM or any Transmission Provider, independent system operator, regional transmission operator or other transmission operator from time to time having authority to control the transmission control area to which the Facility is interconnected.

"Transmission Provider" means any Person or Persons that owns, operates or controls facilities used for the transmission of electrical energy in interstate commerce.

"Unit Contingent" or reference to **"Unit Contingency"** means, with respect to Energy or Ancillary Services associated with Buyer's Contractual Capacity, that such Energy or Ancillary Services are intended to be supplied from the Facility and Seller's failure to deliver such Energy or Ancillary Services is excused to the extent the Facility (including all facilities on Seller's side of the Delivery Point) is unavailable as a result of (i) an Outage, (ii) Force Majeure or (iii) Buyer's failure to perform.

1.2 Interpretation. Unless the context otherwise requires:

(a) Words singular and plural in number will be deemed to include the other and pronouns having masculine or feminine gender will be deemed to include the other.

(b) Any reference herein to any Person includes its successors and permitted assigns and, in the case of any Government Authority or Taxing Authority, any Person succeeding to its functions and capacities.

(c) Any reference herein to any Article, Section, clause, or schedule means and refers to the appropriate Article, Section or clause or schedule in this Agreement.

(d) Other grammatical forms of defined words or phrases have corresponding meanings.

(e) The term "including" when used in this Agreement means "including without limitation."

(f) Unless otherwise specified, a reference to a specific time for the performance of an obligation is a reference to that time in the place where that obligation is to be performed.

(g) A reference to a document or agreement, including this Agreement, includes all appendices and schedules thereto.

(h) A reference to a document or agreement, including this Agreement, includes a reference to that document or agreement as amended, supplemented, amended and restated or otherwise modified from time to time.

(i) If any payment, act, matter or thing hereunder would occur on a day that is not a Business Day, then such payment, act, matter or thing shall, unless otherwise expressly provided for herein, occur on the next succeeding Business Day.

(j) The words "hereof," "hereunder," "herein," "herewith," and "hereto," and similar words refer to this Agreement as a whole and not to any particular Article, Section or clause in this Agreement.

1.3 Technical Meanings. Words not otherwise defined herein that have well-known and generally accepted technical or trade meanings are used herein in accordance with such recognized meanings, as of the date set forth in the preamble to this Agreement.

ARTICLE II

TERM

2.1 Term. The term of this Agreement (**"Term"**) shall commence on the date set forth in the preamble to this Agreement and shall continue, unless earlier terminated in accordance with the provisions of this Agreement, until the End Date.

2.2 Delivery Period. Subject to Section 2.3 or Section 2.4, the period during which the Parties will be obligated to purchase and sell Capacity, Energy and Ancillary Services as set forth in this Agreement (**"Delivery Period"**) will commence on June 1, 2015, or such other earlier date as may be jointly specified by the Parties (**"Start Date"**), and run through the conclusion of the commercial operational life of the generation facilities listed on Schedule A, including any post-retirement period to complete all asset retirement obligations and any other removal projects (**"End Date"**), unless the Parties otherwise mutually agree in writing upon an alternative End Date.

2.3 Early Termination Right. Subject to Buyer complying with its obligations under Article V and provided Buyer is not a Defaulting Party, Buyer will have on or after the first anniversary of the Start Date, the right, but not the obligation, upon no less than three hundred and sixty five (365) days notice to Seller to terminate, in whole, this Agreement prior to the End Date if retail cost recovery for Buyer's costs hereunder is discontinued or substantially diminished, including through a one-time significant disallowance for retail rate recovery of costs.

2.4 Other Early Termination Rights. In the event the Parties are unable to reach agreement upon the retirement date of a Unit or Facility, the Parties may mutually agree to remove such Unit or Facility from this Agreement, subject to Buyer complying with its obligations under Article V.

ARTICLE III

PURCHASE AND SALE OBLIGATION

3.1 Seller's and Buyer's Obligations. Subject to, and in accordance with, the terms and conditions of this Agreement, Seller agrees to sell and deliver, and Buyer agrees to purchase, receive, and pay for, Buyer's Contractual Capacity and the Energy and Ancillary Services associated with Buyer's Contractual Capacity delivered by Seller to the Delivery Point during each hour of the Delivery Period.

3.2 Unit Contingent. All Energy and Ancillary Services associated with Buyer's Contractual Capacity and all of Seller's obligations to sell and deliver the Energy and Ancillary Services associated with the Buyer's Contractual Capacity are Unit Contingent.

3.3 Fuel. During the Delivery Period, Seller will arrange, provide, procure, supply, manage, transact, transport and deliver Fuel to Facilities where Seller performs this function, and at all remaining Facilities, Seller will provide input to the plant operator on Fuel purchases and Fuel related matters for such Facility. Buyer will have the rights to monitor the Fuel procurement and logistics process and provide reasonable direction on the activity to the Seller at Operating Committee Meetings. When Seller needs to acquire Fuel on behalf of Buyer, Seller agrees to conduct such purchases of Fuel, whenever reasonably possible, using competitive methods, including, without limitation, requests for proposals, and Buyer will have the right, but not the obligation, to observe, monitor, and approve the results of such competitive methods. Excluding emergency situations, Fuel procurements not purchased through competitive methods must first be approved by Buyer. Any fuel purchase contracts used to supply fuel to the Facilities that are in effect prior to and extend beyond the Start Date will continue to be utilized for the Facilities. Buyer acknowledges and agrees that existing contracts entered into prior to the Start Date will continue to be utilized to supply fuel to Seller's generation covered by this Agreement and if any such fuel is also utilized to supply fuel to Seller's generation that is not part of this Agreement the allocation of such fuel between the Facilities and the Seller's other units will be performed in an equitable manner approved by both the Seller and the Buyer. Any such pre-existing contracts will not be renewed or extended to serve the Facilities covered by this Agreement unless approved by the Buyer.

3.4 Delivery Point. The Delivery Point for Energy and Ancillary Services associated with Buyer's Contractual Capacity will be the location of the PJM node at each facility, typically located at the high side of the transformers located at each of the generating facilities identified in Schedule A, at which point the quantities of such Energy or Ancillary Services delivered by Seller to Buyer will be recorded and measured by the relevant revenue meters.

3.5 Scheduling and Dispatch. Buyer or its agent will dispatch the generation associated with the Facilities by reviewing and determining the parameters associated with PJM generation offers, including how such generation will be offered to PJM, for the Energy and Ancillary Services associated with Buyer's Contractual Capacity and Seller will, subject to the requirements of PJM and the operating parameters of the Facilities, as determined by the Facility operator, operate and control the Facilities and schedule with PJM pursuant to Buyer's dispatch criteria and PJM's requirements and instructions. Buyer acknowledges and agrees that it will be obligated at all times to receive Seller's allocation of minimum output of a Facility, consistent with unit operation limitations and any Facility Operating Agreement. Schedules will be adjusted to the extent necessary to allow Seller or the Facility operator to start-up, operate, curtail or shut-down any of the Facilities as required to comply with instructions from the Transmission Operator. Seller will cooperate and provide any assistance to Buyer so that Buyer can determine how such generation will be offered to PJM. Buyer will be allocated any excess (or deficit) amount of Energy or Ancillary Services made available by Seller at the Delivery Point over (or under) the amount of Energy or Ancillary Services Scheduled by the Buyer. Buyer will be responsible for all Imbalance Charges associated with the Energy made available to it by Seller at the Delivery Point, provided, however, that any such Imbalance Charges resulting from Seller's unexcused failure to dispatch, or to cause the Facility operator to dispatch, the Energy associated with the Seller's Capacity Entitlement that are designated by Buyer will be the responsibility of the Seller. The Energy and Ancillary Services associated with Buyer's Contractual Capacity will be recorded by the Parties in PJM's scheduling and settlement systems at the Facility LMP Point.

3.6 Transmission And Related Costs. Seller shall make all Energy and Ancillary Services associated with Seller's Capacity Entitlement available to Buyer at the Delivery Point. Buyer shall be responsible for transmission service at and from the Delivery Point and shall coordinate, as necessary, for scheduling services with the Transmission Operator to receive all Energy and Ancillary Services associated with the Seller's Capacity Entitlement at the Delivery Point. Buyer shall have the right to designate an agent for coordinating, as needed, with PJM related to the Capacity, Energy and Ancillary Services received under this Agreement. Buyer shall be responsible (i) for all costs or charges imposed on or associated with the Seller's Capacity Entitlement and associated Energy and Ancillary Services and the delivery of all Energy and Ancillary Services associated with the Seller's Capacity Entitlement at and after the Delivery Point, and (ii) for any and all Imbalance Charges consistent with Section 3.5. Subject to reimbursement as set forth in Article IV, Seller shall be responsible for all costs or charges imposed on or associated with the Seller's Capacity Entitlement and associated Energy and Ancillary Services and the delivery of all Energy and Ancillary Services associated with the Seller's Capacity Entitlement up to the Delivery Point.

3.7 Force Majeure. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under this Agreement (other than an obligation to pay money), and such Party (the "**Affected Party**") gives notice and details of the Force Majeure to the other Party as soon as practicable (but not later than thirty (30) days thereafter to the extent such details are then available) then the Affected Party shall be excused from the performance of its obligations under this Agreement (other than the obligation to make payments) so long as the Affected Party shall be using all reasonable efforts to overcome the Force Majeure and resume performance as soon as possible. The non-Affected Party shall not be required to perform or resume performance of its obligations (excluding payment obligations) to the Affected Party corresponding to the obligations of the Affected Party excused by Force Majeure, until such time and to the extent the Affected Party resumes its performance.

3.8 Allowances. Seller shall separate the Allowance inventories associated with the Facilities and maintain them in a separate subaccount for Buyer's benefit. To the extent Seller has any Allowances prior to the Start Date that are not associated with the Facilities or any of the Seller's other generation units, such Allowances will be allocated to Buyer's separate subaccount and the Seller's other Allowance subaccounts based on the emissions of the applicable units over the 5 prior calendar years. The applicable units will be all the units required to provide Allowances for its emissions, excluding any units retired prior to the Start Date. Following the Start Date, the subaccount established for Buyer shall be used to record all Allowances arising from or associated with a Facility that Seller is granted or to which it is entitled for the Delivery Period, within thirty (30) days of such grant or other effective date, whether such grant or entitlement is made on a one-time, annual or other periodic basis. Allowances will be removed from the subaccount established for Buyer as needed to comply with surrender requirements associated with any applicable emissions from the Facilities by the Allowance Transfer Deadline, and the associated Allowance expense will be borne by the Buyer. Buyer shall manage all Allowances in the subaccount established for Buyer, including the purchasing, selling or other disposition of the Allowances and will receive any gains or any losses associated with such management.

3.9 Failure to Deliver Energy/Ancillary Services. If Seller fails to or Seller fails to cause the Facility operator under the Facility Operating Agreement to Schedule, Dispatch and/or deliver all or any part of the Energy and/or Ancillary Services that are Scheduled and Dispatched by Buyer pursuant to this Agreement and it is not the result of an Outage or a Force Majeure, Seller shall pay Buyer an amount equal to the sum of (a) the positive difference, if any between the Contract Price of the Energy and/or Ancillary Services to be supplied by Seller and (b) the price for a corresponding amount of replacement Energy and/or Ancillary Services.

3.10 Consent Decree. Due to certain of the Facilities being subject to the Consent Decree between U.S. EPA and Ohio Power Company entered on December 10, 2007 and as issued in Civil Action No. C2-99-1182 and consolidated cases by the United States District Court for the Southern District of Ohio, Eastern Division, as modified from time to time ("Consent Decree"), Seller will constrain the dispatch of impacted Facilities if or when needed to ensure compliance with any emission limitations required by the Consent Decree. Such limitations will be reasonably economically imposed and applied on a consistent basis between the Agreement Facilities and other generating units of the Seller that are not part of this Agreement. Buyer shall bear the full cost of any fines or penalties resulting from non-compliance with any resulting emission limitations of the Agreement Facilities associated with Buyer's rights to dispatch the Facilities hereunder. Seller shall bear the full cost of any fines or penalties resulting from Seller's failure to constrain the use of impacted Facilities needed to ensure compliance with any emission limitations required by the Consent Decree.

3.11 Cardinal Station Agreement. Buyer acknowledges and agrees that Buyer's entitlements and obligations under this Agreement shall be subject to, conditioned upon, and net of all the entitlements and obligations of Buckeye under the Cardinal Station Agreement related to capacity, energy and ancillary service entitlements and back-up obligations. Accordingly, Buyer shall provide for Buckeye's use and bear all of the net cost of providing all such entitlements directly to Buckeye or to Seller for Buckeye's benefit. Consistent with Section 3.5, the Buckeye's Units shall be dispatched and the Buyer shall receive the corresponding capacity, energy and ancillary service revenues, net of any applicable costs, as described under and subject to the Cardinal Station Agreement. During the Delivery Period, Seller shall not agree to any amendment, waiver or other modification of the Cardinal Station Agreement without obtaining the prior written consent of Buyer. During the 2015/2016 Planning Year, Seller will credit to Buyer Capacity revenues associated with Buckeye's Units in an amount equal to the Capacity revenues of the Facilities that have been provided to Buckeye for that Planning Year.

ARTICLE IV

FACILITY OPERATIONS

4.1 Operation and Maintenance. At all times during the Delivery Period, Seller shall perform the Operating Work, or cause the Operating Work to be performed, in accordance with good commercial and prudent utility practice consistent with the procedures employed by Seller at similar generating stations or the procedures followed by the operator of units that are not wholly owned by Seller. Subject to reimbursement as set forth in Article V, Seller shall be responsible for all costs, expenses, losses, liabilities and charges incurred by it, or on its behalf, in the performance of Operating Work, including the procurement of Ancillary Services sufficient to satisfy Ancillary Service obligations to the Transmission Operator related to the Facility.

4.2 Capital Improvements. From time to time during the Term, Seller shall perform, or cause to be performed, Capital Improvements Work related to a Facility. For major or material projects at a wholly owned Seller Facility, Buyer's prior written approval and agreement must first be obtained before proceeding with such Capital Improvements Work. For a unit at a Facility that is jointly owned, Seller will obtain and communicate to the third party operator Buyer's input on any Capital Improvements Work proposed. Subject to reimbursement as set forth in Article V, Seller shall be responsible for all costs, expenses, losses, liabilities and charges incurred by it, or on its behalf, in the performance of Capital Improvements Work. Annually, Seller will provide Buyer with a confidential three year forecast of projected Capital Improvements Work.

4.3 Planned Outage Schedule. Seller will develop and implement, or cause to be developed and implemented, a planned outage and maintenance schedule for Facilities that Seller operates that is coordinated with American Electric Power Service Corporation. For Facilities that are not operated by Seller, Seller will communicate Buyer's input on planned outages and maintenance schedules for such Facilities to the Facility operator.

4.4 Auxiliary Power. During any hour that the Facility is out of service, Seller or the applicable Facility operator will procure the energy used by Facility auxiliaries during that hour, the cost of which will be borne by the Buyer.

ARTICLE V

PRICING

5.1 Monthly Payments. For each calendar month during the Delivery Period, Buyer shall pay Seller an amount (the **"Monthly Payment"**) equal to the sum of (i) a Fuel Payment, (ii) an O&M Payment, (iii) a Depreciation Payment, (iv) a Capacity Payment, (v) a Tax Reimbursement Payment, and (vi) Other Miscellaneous Payment. The Monthly Payment will be Seller's sole compensation for Seller's sale and delivery to Buyer of Buyer's Contractual Capacity and the Energy and Ancillary Services associated with Buyer's Contractual Capacity.

5.2 Fuel Payment. For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the **"Fuel Payment"**) equal to the Fuel Costs incurred by or invoiced to Seller at the Facilities for that month.

5.3 O&M Payment. For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the **"O&M Payment"**) equal to the Operation and Maintenance Costs at the Facilities for that month.

5.4 Depreciation Payment. For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the **"Depreciation Payment"**) equal to the sum of the depreciation expenses incurred by Seller for each Facility in Schedule A at the actual rate of depreciation during the relevant month and, in the case of jointly owned units, those expenses directly related to its ownership interest in the applicable Facility. The depreciation rates will be updated periodically at intervals that will not exceed five (5) years and the new rates will become effective on the subsequent January 1st during the Term of this Agreement. Any positive net book value at the end of the commercial life of a given Facility will be included in the net book value of the other units at the same Facility and depreciated at an adjusted rate of those other units. If the final Facility or Facilities at a plant are retired, any remaining net book value will be payable by Buyer at that time, unless the Parties mutually agree upon an alternative payment arrangement.

5.5 Capacity Payment. For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the **"Capacity Payment"**) equal to the following:

$$CapacityPayment = \frac{FNBV \times WACOC}{12}$$

where,

FNBV	=	Seller's Net Book Value of the Facilities.
WACOC	=	(DP% x LTDR) + (EP% x ROE)

LTDR	=	Seller's Long Term Debt Rate
ROE	=	Seller's Return on Equity
DP%	=	Seller's Debt Percentage
EP%	=	Seller's Equity Percentage

Each component of the Capacity Payment that is subject to change under the terms of this Agreement will ~~be updated as of January 1st of~~ each calendar year during the Term of this Agreement, or at more frequent intervals as ~~elected~~ by Seller.

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5.6 Tax Reimbursement Payment. For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the "**Tax Reimbursement Payment**") equal to all Taxes (other than taxes included in Sections 5.2 through 5.5, above, such that there will be no duplication of Tax reimbursement to Seller) for that month applicable to Buyer's Contractual Capacity and the Energy and Ancillary Services associated with Buyer's Contractual Capacity, as more fully set forth in Article IX. Any Tax based upon income, gross receipts, commercial activity, or any similar Tax for which the inclusion of such Tax in the Monthly Payment would increase Seller's liability for any Tax including WACOC shall be grossed-up so as to make the receipt of any such Tax neutral to the Seller. Any Tax for any Straddle Period shall be included in the Monthly Payment based upon the ratio of the days in the month for the Monthly Payment over the total number of days in the Tax Period. Taxes included in the Monthly Payment may be estimated by Seller. The difference between estimated Taxes and the actual Taxes for which Buyer is responsible will be billed or credited to Buyer, as appropriate, in one or more installments following the end of the relevant Tax Period. For purposes of Taxes subject to the provisions of this Section 5.6, all Taxes shall be based upon the amount accrued for the relevant calendar month billing period, including any deferred tax amount.

5.7 Other Miscellaneous Payment.

For each calendar month during each Contract Year, Buyer shall pay Seller an amount (the "Other Miscellaneous Payment") which shall include:

(A) Any other costs and credits as described within this Agreement not already included in the other payment components or any other costs or credits reasonably associated with the Facilities which may be billed monthly or if incurred less frequently, on either a quarterly or as incurred basis. For example, the Parties understand and agree that the cost of Ancillary Services associated with the Facility Capacity that are requested and delivered in accordance with regular dispatch of a Facility in accordance with this Agreement is included in and compensated for by the Monthly Payment. The Other Miscellaneous Payment shall also include, but not necessarily be limited to, any PJM charges and credits associated with the Facilities.

(B) Where Buyer exercises its right under Section 2.3 to terminate this Agreement or an Early Termination Date is declared due to a Buyer Event of Default, Seller will invoice Buyer, and Buyer shall pay Seller, an amount equal to the sum of the then undepreciated net book value of the Generating Facilities and the expected retirement-related costs associated with such

Generating Facilities at the time this Agreement is terminated as determined by the Seller in a commercially reasonable manner.

(C) Where the Parties exercise their right under Section 2.4 to remove Unit(s) or Facilities terminate this Agreement, Seller will invoice Buyer, and Buyer shall pay Seller, an amount, determined by Seller in a commercially reasonable manner, equal to the sum of the then undepreciated net book value of the Unit(s) or Generating Facilities that are to be removed from this Agreement and the expected retirement-related costs associated with such Unit(s) or Generating Facilities at the time the Unit(s) or Facilities are removed from this Agreement. At Buyer's request and at Buyer's sole expense, the fair market value of the Unit(s) or Facilities, including all of the associated liabilities thereto will be determined by Seller, such values may be developed by Seller through the use of an independent appraisal or other competitive solicitation conducted by Seller to obtain bids to purchase the Unit(s) or Generating Facilities. To the extent any appraisal or competitive solicitation would result in positive revenues to Seller as a result of such sale, Seller will apply a credit on Buyer's invoice for such positive revenues, up to, but not exceeding, the amount invoiced by Seller hereunder. Seller retains the right of first refusal to match any bona fide offer that complies with all of the terms of any competitive solicitation. Where there is a disagreement over a retirement date for Unit(s) or Facilities and this Agreement is terminated under Section 2.4, in the event Seller intends to continue operating such Unit or Facility after it is removed from this Agreement in accordance with Section 2.4, Seller will also apply a credit to Buyer's invoice referenced above with respect to allocating the retirement related costs of such Unit(s) or Facilities to account for the additional time Seller intends to operate the Unit(s) or Facilities after it is removed from this Agreement, in relation to the period of time Buyer purchased Energy and Capacity from such Unit(s) or Facilities hereunder.

ARTICLE VI

BILLING AND PAYMENT

6.1 Billing and Payment. The calendar month shall be the standard period for all payments under this Agreement. As soon as practicable after the end of each month, Seller will render to Buyer an invoice for the payment obligations incurred during the preceding month. Each component of the invoice will be described in reasonable detail. All invoices under this Agreement shall be due and payable on or before the twentieth (20th) day of each month, or tenth (10th) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day. Buyer will make payments by electronic funds transfer to the account designated by Seller, or by other mutually agreeable method(s). Any amounts not paid by the due date will be deemed delinquent and will accrue interest at the then current short term borrowing rate of the Seller ("Interest Rate"), such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full.

6.2 Books and Records; Audit. Seller shall keep, or shall cause to be kept, all necessary books of record, books of account, and memoranda of all transactions involving the Facility, in conformance, where required, with the FERC's Uniform System of Accounts. Seller shall make, or shall cause to be made, all computations relating to the Facilities and all allocations of the costs and expenses of the Facilities. Buyer has the right to examine the records of Seller to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement (including any statements evidencing the quantities delivered to Buyer at the Delivery Point) within twelve (12) months of receipt of the statement, charge or computation. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made promptly, along with interest accrued at the Interest Rate, provided, however, that any claim by a Party for overpayment or underpayment with respect to an invoice is waived unless the other Party is notified of the claim within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made. If an invoice is not rendered within twelve (12) months after the close of the month during which performance occurred, the right to payment for such performance is waived.

6.3 Netting of Payments. The Parties hereby agree that they shall discharge mutual debts and payment obligations due and owing to each other under this Agreement through netting, in which case all amounts owed by each Party to the other Party under this Agreement, including any related damages, interest, and payments or credits, shall be netted so that only the excess amount remaining due shall be paid by the Party who owes it.

ARTICLE VII

CREDIT REQUIREMENTS

7.1 Credit Assurances. If a Party (the "**Requesting Party**") has reasonable grounds to believe that the other Party's (the "**Posting Party**") creditworthiness or performance under this Agreement has become unsatisfactory, the Requesting Party will provide the Posting Party with written notice requesting Performance Assurance in an amount determined by the Requesting Party in a commercially reasonable manner. Upon receipt of such notice, the Posting Party shall remedy the situation within a reasonable period (not exceeding thirty (30) days) by providing such Performance Assurance to the Requesting Party.

7.2 Grant of Security Interest/Remedies. To secure its obligations under this Agreement and to the extent either or both Parties deliver Performance Assurance hereunder, each Party (a "**Pledgor**") hereby grants to the other Party (the "**Secured Party**") a present and continuing security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, such Secured Party, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Secured Party's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, the Non-Defaulting Party may do any one or more of the following: (i) exercise any of the rights and remedies of a Secured Party with respect to all Performance Assurance, including any such rights and remedies under law then in effect; (ii) exercise its rights of setoff against any and all property of the Defaulting Party in the possession of the Non-Defaulting Party or its agent; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all Performance Assurance then held by or for the benefit of the Secured Party free from any claim or right of any nature whatsoever of the Defaulting Party, including any equity or right of purchase or redemption by the Defaulting

Party. The Secured Party shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Pledgor's obligations under the Agreement (the Pledgor remaining liable for any amounts owing to the Secured Party after such application), subject to the Secured Party's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

ARTICLE VIII

EVENTS OF DEFAULT, REMEDIES & LIMITATIONS

8.1 Events of Default. An "**Event of Default**" shall mean, with respect to a Party (a "**Defaulting Party**"), the occurrence of any of the following:

(i) the failure to make, when due, any payment required pursuant to this Agreement if such failure is not remedied within ten (10) Business Days after written notice;

(ii) any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and if not remedied within thirty (30) Business Days after written notice;

(iii) the failure to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default), if such failure is not remedied within thirty (30) Business Days after written notice;

(iv) such Party becomes Bankrupt;

(v) the failure of such Party to satisfy the creditworthiness/collateral requirements agreed to pursuant to Article VII; or

(vi) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another Person and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee Person fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a Party by operation of law or pursuant to an agreement reasonably satisfactory to the other Party.

8.2 Remedies. If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party (the "**Non-Defaulting Party**") shall have the right, at its sole discretion, to take any one or more of the following actions: (i) to exercise any rights and remedies under this Agreement or law with respect to any Performance Assurance or other financial assurance; (ii) to withhold any payment due to the Defaulting Party under this Agreement; (iii) to suspend its performance; (iv) to cancel this Agreement by declaring a date for its early termination (an "**Early Termination Date**"); or (v) exercise such other rights or remedies it may have in contract, in equity, or at law. An Early Termination Date shall not relieve a Party of its obligation to payments hereunder. None of the remedies conferred upon the Parties above is intended to be exclusive of any other remedy or remedies now or hereafter existing and every such remedy will be cumulative and shall be in addition to the remedies set forth above and every other remedy. Each party may commence such suits, actions or proceedings, at law or in equity, including suits for specific performance, as may be necessary or appropriate to enforce this Agreement.

8.3 Limitation of Remedies, Liability and Damages. EXCEPT AS SET FORTH HEREIN, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. FOR BREACH OF ANY PROVISION OF THIS AGREEMENT, THE OBLIGOR'S LIABILITY SHALL BE LIMITED TO DIRECT DAMAGES ONLY, SUCH DIRECT DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE.

ARTICLE IX

TAXES

9.1 Cooperation. Each Party shall use reasonable efforts to implement the provisions of and to administer this Agreement in accordance with the intent of the parties to minimize all Taxes, so long as neither Party is materially adversely affected by such efforts.

9.2 Taxes. Subject to reimbursement by Buyer as set forth in Article V, Seller shall pay or cause to be paid all Taxes imposed on or with respect to the Buyer's Contractual Capacity and associated Energy and Ancillary Services arising prior to the Delivery Point. Buyer shall pay the Tax Reimbursement Payment and pay or cause to be paid all Taxes on or with respect to the Buyer's Contractual Capacity and associated Energy and Ancillary Services at and from the Delivery Point. In the event Seller is required by law or regulation to remit or pay Taxes which are Buyer's responsibility hereunder, Buyer shall promptly reimburse Seller for such Taxes as set forth in Article V. If Buyer is required by law or regulation to remit or pay Taxes which are Seller's responsibility hereunder, Buyer may deduct the amount of any such Taxes from the sums due to Seller under Article V of this Agreement. Nothing shall obligate or cause a Party to pay or be liable to pay any Taxes for which it is exempt under the law.

9.3 Change-in-Law Taxes. Buyer shall be responsible for (or receive the benefit of) all Change-in-Law Taxes.

9.4 Exemptions. Either Party, upon written request of the other, shall provide a certificate of exemption or other reasonably satisfactory evidence of exemption if either Party is exempt from any Taxes and shall use all reasonable efforts to obtain or maintain, or to enable the other Party to obtain or maintain, any exemption from or reduction of any Taxes, whether currently available or becoming available in the future. Without limiting the generality of the foregoing, the Parties agree that, if beneficial to the efforts of either Party to obtain or maintain any exemption from or reduction of any Taxes, whether currently available or becoming available in the future, the Parties will cooperate to restructure the transactions contemplated by this Agreement so as to enable either Party to obtain or maintain such exemption or reduction, as the case may be; provided, however, that any such restructuring shall not affect adversely the economic consequences of this Agreement to either Party or subject either Party to any regulatory jurisdiction other than that to which it is subject on the date set forth in the preamble to this Agreement.

ARTICLE X

COMPLIANCE WITH LAWS; ADMINISTRATION

10.1 Seller's Compliance. Seller shall, at its expense, comply with all applicable laws and obtain and maintain all Governmental Approvals applicable to Seller and/or the Facilities or necessary for Seller's performance of its obligations hereunder. Notwithstanding the foregoing, Seller shall not be deemed in default of this obligation if it is contesting the application, interpretation, order, or other legal direction or Governmental Approval of any Governmental Authority in good faith and with due diligence through appropriate proceedings and if such non-compliance does not have a material adverse effect on Seller's performance of this Agreement. Seller agrees to adhere to the applicable operating policies, criteria and guidelines of NERC.

10.2 Buyer's Compliance. Buyer shall at its expense, at all times, comply with all applicable laws and obtain and maintain all Governmental Approvals applicable to Buyer or necessary for Buyer's performance of its obligations hereunder. Notwithstanding the foregoing, Buyer shall not be deemed in default of this obligation if Buyer is contesting the application, interpretation, order, or other legal direction or Governmental Approval of any Governmental Authority in good faith and with due diligence through appropriate proceedings and if such non-compliance does not have a material adverse effect on Buyer's performance of this Agreement. Buyer agrees to adhere to the applicable operating policies, criteria and guidelines of the NERC.

10.3 Administration. Seller will promptly provide Buyer with copies of all written notices from the operator or other co-owners pertaining to the Facilities that materially affect, or potentially materially affect, Buyer's rights and obligations under this Agreement, including all invoices, budgets, maintenance schedules, outage/derating notices, availability forecasts, and material contracts, to the extent not restricted by an obligation of confidentiality for which Seller cannot obtain a waiver or other appropriate relief. At all times during the Term, Seller shall cause the Facility operator to perform its responsibilities and otherwise discharge its obligations in respect of the applicable Facility, and maintain accurate records regarding the foregoing, in accordance with all relevant Governmental Approvals and all applicable statutes, codes, regulations, standards, and guidelines adopted by Governmental Authorities, NERC and the Transmission Operator from time to time.

10.4 Operating Committee. By written notice to each other, the Parties and American Electric Power Service Corporation each shall name one representative ("Representative") to act for it in matters pertaining to the Parties' obligations under this Agreement and to develop, if necessary, operating procedures for the generation, delivery and receipt of Energy hereunder, and such other mutually agreed upon contract administration procedures. Any Party may change its Representative at any time by written notice to the other Parties. The Representatives for the respective Parties shall comprise the Operating Committee. The Representative for American Electric Power Service Corporation shall be free to express the views of such Party, but shall not have a vote on the Committee except in the case of a tie between the other Parties. The Operating Committee shall meet at least annually, and at such other times as any Party may reasonably request. The Parties shall cooperate in providing to the Operating Committee the information it reasonably needs to carry out its duties. The Operating Committee will review and approve decisions regarding the retirement or early retirement of any of the Facilities, annual budgets, capital expenditures, procedures and systems for dispatch and notification of dispatch, procedures for communication and coordination with respect to Facility capacity availability, discuss scheduling of outages for maintenance, as well as the return to availability following an unplanned outage, approval of material contracts for Fuel, establishment of specifications for Fuels, and other duties as assigned by agreement of the Representatives.

10.5 Seller's Negative Covenants. Seller will not take any action or fail to take any action that would cause a default by Seller under the Facility Operating Agreement(s). Seller shall not, without the prior written consent of Buyer, (i) terminate or suspend any Facility Operating Agreement(s) or its interest in such Facility, (ii) amend or modify a Facility Operating Agreement(s), or (iii) grant any waiver or consent with respect to Facility Operating Agreement(s) or its interest in such Facility that would, in the case of (ii) and (iii) above, materially affect, or potentially materially affect, Buyer's rights and obligations under this Agreement, unless Seller shall first have obtained Buyer's written consent, which consent shall not be unreasonably withheld, conditioned or delayed.

ARTICLE XI

CONDITIONS

11.1 Conditions. Subject to Section 11.2 and except to the extent waived in writing by the Parties in their sole and absolute discretion, the obligation of the Parties to consummate the transactions contemplated hereunder shall be subject to fulfillment of the following conditions:

(i) ~~The occurrence of the Closing.~~

(ii) If required, Seller shall have filed with the FERC and received acceptance of this Agreement that is satisfactory to Seller and Buyer in their sole judgment and discretion, without any limitation thereto whatsoever.

(iii) The Parties shall each have obtained any and all other Approvals required with respect to the performance of their respective obligations hereunder and such Approvals shall be in form and substance satisfactory to Seller and Buyer in their sole and absolute discretion.

11.2 Obligations of Buyer and Seller. Commencing on the date set forth in the preamble to this Agreement, on the terms and subject to the conditions of this Agreement, each Party shall use its commercially reasonable efforts to take, or cause to be taken, all appropriate action, and do, or cause to be done, and assist and cooperate with the other Party in taking or doing, all things necessary, proper or advisable to consummate the transactions contemplated hereby, including, without limitation the satisfaction of the conditions set forth in Section 11.1.

11.3 Failure of Conditions Generally. This Agreement may be terminated by either Party in the event that the conditions set forth in Section 11.1 are not satisfied or waived by the Parties in accordance with such Section.

ARTICLE XII

REPRESENTATIONS AND WARRANTIES

12.1 Representations and Warranties of Both Parties. On the date set forth in the preamble to this Agreement each Party represents and warrants to the other Party that:

(i) it is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation;

(ii) subject to the fulfillment of the conditions set forth in Section 11.1, it has all Governmental Approvals necessary for it legally to perform its obligations under this Agreement;

(iii) the execution, delivery and performance of this Agreement are within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it;

(iv) this Agreement constitutes a legally valid and binding obligation enforceable against it in accordance with its terms; subject to any Equitable Defenses;

(v) it is not bankrupt, however evidenced, and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt;

(vi) there is not pending or, to its knowledge, threatened against it any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;

(vii) no material breach of this Agreement with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement; and

(viii) it has entered into this Agreement in connection with the conduct of its business and it has the capacity or ability to make or take delivery of the Buyer's Contractual Capacity and associated Energy and Ancillary Services.

ARTICLE XIII

MISCELLANEOUS

13.1 Title and Risk of Loss. Title to and risk of loss related to the Capacity and associated Energy and Ancillary Services shall transfer from Seller to Buyer at the Delivery Point. Seller warrants that it will deliver to Buyer the Capacity and associated Energy and Ancillary Services free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any Person arising prior to the Delivery Point.

13.2 Indemnity. Each Party shall indemnify, defend and hold harmless the other Party and such Party's partners, directors, officers, employees, agents and representatives (the "**Indemnified Parties**") from and against any Claims arising from or out of any event, circumstance, act or incident first occurring or existing during the period when control of, risk of loss related to, and title to the Capacity and associated Energy and Ancillary Services is vested in such Party as provided in Section 13.1, except to the extent, as to any Indemnified Party, such Claims are attributable to the gross negligence or willful misconduct of such Indemnified Party. Each Party shall indemnify, defend and hold harmless the other Party against any Taxes for which such Party is responsible under Article IX. The foregoing indemnities shall forever survive the termination of the Agreement.

13.3 Amendments and Waivers. Neither this Agreement nor any provisions hereof may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into by both Parties.

13.4 Notices. All notices, requests, statements or payments shall be made as specified in Schedule 13.4. Notices, other than notices regarding availability, Scheduling and Dispatch of a Facility shall, unless otherwise specified herein, be in writing and shall be deemed to be given or made if delivered by (a) hand delivery, electronic mail or other electronic transmission device capable of written record or facsimile, in each case, effective at the close of business on the day actually received, if received during business hours on a Business Day, otherwise shall be effective at the close of business on the next Business Day, or (b) United States mail or overnight courier service, in each case, effective on the next Business Day after it was sent. Notices regarding the availability, Scheduling and Dispatch of a Facility may be made (x) telephonically, effective when made, or (y) by electronic mail or other electronic device capable of written record, effective when received. A Party may change its notice details by providing a notice of same to the other Party in accordance herewith.

13.5 Successors and Assigns; Assignment. The provisions of this Agreement shall be binding upon and inure to the benefit of the Parties and the Parties' successors and assigns permitted hereby and no other Person shall acquire or have any rights under or by virtue of this Agreement. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent may be withheld in the exercise of its sole discretion; provided, however, that either Party may, without the consent of the other Party (and without relieving itself from liability hereunder) (i) transfer, sell, pledge, encumber or assign this Agreement or the accounts, revenues or proceeds hereof in connection with any financing or other financial arrangements, (ii) transfer or assign this Agreement to an Affiliate, or (iii) transfer or assign this Agreement to a successor to all or substantially all of Seller's Schedule A Units and Facilities provided such assignee shall agree in writing to be bound by the terms and conditions of this Agreement, and, as applicable, be a qualified operator of the Schedule A Units and Facilities. In addition to the foregoing, Seller shall require as a condition of said sale, assignment or other transfer that such other Person agree in writing to be bound by the terms and conditions of this Agreement to the same extent, such that Buyer's right to purchase such products shall continue uninterrupted and in the same manner as set forth in this Agreement without material alteration.

13.6 Integration. This Agreement constitutes the entire agreement between the Parties relating to the subject matter hereof and supersedes any and all previous and understandings, oral or written, between the Parties relating to the subject matter hereof.

13.7 Acknowledgments. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof.

13.8 Waiver. No failure to exercise and no delay in exercising by a Party any right, remedy, power or privilege hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any right, remedy power or privilege.

13.9 Counterparts. This Agreement may be executed by the Parties in any number of counterparts, which, taken together, shall constitute one and the same legal binding instrument. Delivery of an executed counterpart of a signature page of this Agreement by facsimile transmission shall be effective as delivery of a manually executed counterpart of this Agreement.

13.10 Headings. The headings used herein are for convenience and reference purposes only.

13.11 Confidentiality. Neither Party shall disclose the terms or conditions of this Agreement to a third party (other than the Parties' employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential) except in order to comply with any applicable law, regulation, or any exchange, control area or independent system operator rule or in connection with any court or regulatory proceeding; provided, however, that each Party shall, to the extent practicable, use reasonable efforts to prevent or limit the disclosure. Subject to the provisions of Section 8.3, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with this confidentiality obligation.

13.12 Governing Law. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF OHIO, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.

13.13 Mobile/Sierra Doctrine. Absent the agreement of all Parties to the proposed change, the standard of review for changes to any rate, charge, classification, term or condition of this Agreement, whether proposed by a Party, a non-party or FERC acting sua sponte, shall be the "public interest" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956) and clarified by Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish, 554 U.S. 527 (2008), and NRG Power Marketing LLC v. Maine Public Utilities Commission, 558 U.S. 165 (2010) (the "**Mobile-Sierra Doctrine**").

13.14 Severability. Should any provision of this Agreement be held to be invalid or unenforceable, such provision shall be invalid or unenforceable only to the extent of such invalidity or unenforceability without invalidating or rendering unenforceable any other provision hereof.

[signatures appear on next page]

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed and delivered by their duly authorized representatives as of the date set forth in the preamble to this Agreement.

[GENCO]

By: ______________________________
Name:
Title:

OHIO POWER COMPANY

By: ______________________________
Name:
Title:

Schedule A

Ohio Generation Facilities

Facility	Unit(s)	Location	Unit Capacity (MW)	Seller Ownership (%)	Seller Ownership (MW)
Cardinal	1	OH	592	100.0%	592
Conesville	4	OH	779	43.5%	339
Conesville	5	OH	405	100.0%	405
Conesville	6	OH	405	100.0%	405
Stuart	1	OH	577	26.0%	150
Stuart	2	OH	577	26.0%	150
Stuart	3	OH	577	26.0%	150
Stuart	4	OH	577	26.0%	150
Zimmer	1	OH	1,300	25.4%	330
Total			5,789		2,671

SCHEDULE 13.4

Notice Information

If to Seller:

[GENCO]
155 W. Nationwide Blvd. Suite 400
Columbus, Ohio 433215
Attention: President

with a copy to:

[GENCO]
One Riverside Plaza
Columbus, Ohio 433215
Attention: Secretary

If to Buyer:

Ohio Power Company
One Riverside Plaza
Columbus, Ohio 433215
Attention: President

with a copy to:

Ohio Power Company
One Riverside Plaza
Columbus, Ohio 433215
Attention: Secretary

OHIO POWER COMPANY'S RESPONSES TO
INDUSTRIAL ENERGY USERS-OHIO DISCOVERY REQUESTS
PUCO CASE NO. 14-1693-EL-RDR
FIRST SET

REQUEST FOR PRODUCTION OF DOCUMENTS

RPD-1-003 Provide an interactive Excel spreadsheet containing the detailed calculations, including all individual cost items supporting the projected "Agreement costs" shown on Exhibit KDP-2 for the period 2015 through 2024.

RESPONSE

The IEU_RPD-1-003 **COMPETITIVELY-SENSITIVE Confidential** Attachments 1 and 2 for Excel spreadsheets containing the requested information for the period June 1, 2015 to December 31, 2024.

Attachment 1 contains the supporting information for the High Load, Weather Normalized Load and Low Load scenarios presented in Exhibit KPD-2. The Average of the High and Low Forecast was a simple average of the summarized results of the High and Low scenarios in Exhibit KDP-2, and therefore supporting data was not averaged at the detailed level for each of the individual PPA cost components.

Attachment 2 represents a forecast of electric plant in service, accumulated depreciation and depreciation expense. These forecasted values are common to all three scenarios.

Confidential attachments will be provided to parties who have executed a Protected Agreement.

Prepared by: Kelly D. Pearce

OHIO POWER COMPANY'S RESPONSES TO
INDUSTRIAL ENERGY USERS-OHIO DISCOVERY REQUESTS
PUCO CASE NO. 14-1693-EL-RDR
FIRST SET

REQUEST FOR PRODUCTION OF DOCUMENTS

RPD-004 Provide an interactive Excel spreadsheet containing the detailed calculations, supporting the projected "PJM Revenues" shown on Exhibit KDP-2 for the period 2015 through 2024

RESPONSE

See the workpapers submitted in the Company's response to IEU-RPD-1-003 for the requested Excel spreadsheet.

Prepared by: Kelly D. Pearce

EXHIBIT ____ (LK-3)

OHIO POWER COMPANY'S RESPONSES TO
OHIO ENERGY GROUP'S DISCOVERY REQUESTS
PUCO CASE NO. 14-1693-EL-RDR
THIRD SET

INTERROGATORY

INT-3-002 Refer to the Company's response to OEG-INT-1-012.

a. Please confirm that under the proposed PPA, AEPGR and OPC could agree to change the terms of the contract without seeking FERC approval through a Section 205 or other filing. Please explain your response.

b. Please confirm that under the proposed PPA, AEPGR and OPC could agree to change the terms of the contract without seeking PUCO approval. Please explain your response.

RESPONSE

The Company objects to these questions because they seek legal advice and do not seek information likely to lead to the discovery of admissible evidence. Without waiving any of its objections, Company states as follows:

a. The Company does not plan to seek stand-alone approval from FERC for the proposed PPA contract as explained in the response to OEG INT-1-011. If a proposed change was agreed to by the contracting parties prior to executing the contract and was within the parameters of the response to OEG INT-1-011, that change could be made.

b. For the parameters of the approval being requested of the Commission by the Company, please see the response to OEG INT 1-003. If a proposed change was agreed to by the contracting parties prior to executing the contract and was within the parameters of the response to OEG INT-1-003, that change could be made.

Prepared by: Counsel

EXHIBIT ____ (LK-4)

THIS FILING IS (CHECK ONE BOX FOR EACH ITEM)	
Item 1: [X] An Initial (Original) Submission	OR [ ] Resubmission No. ____
Item 2: [ ] An Original Signed Form	OR [ ] Conformed Copy

Form Approved
OMB No. 1902-0021
(Expires 3/31/2005)

FERC Form No. 1: ANNUAL REPORT OF MAJOR ELECTRIC UTILITIES, LICENSEES AND OTHERS

This report is mandatory under the Federal Power Act, Sections 3, 4(a), 304 and 309, and 18 CFR 141.1. Failure to report may result in criminal fines, civil penalties and other sanctions as provided by law. The Federal Energy Regulatory Commission does not consider this report to be of a confidential nature.

Exact Legal Name of Respondent (Company)	Year of Report
Ohio Power Company	Dec. 31, 2003

Name of Respondent	This Report Is:	Date of Report (Mo, Da, Yr)	Year of Report
Ohio Power Company	(1) [X] An Original (2) [ ] A Resubmission	/ /	Dec. 31, 2003

STATEMENT OF CASH FLOWS

4. Investing Activities include at Other (line 31) net cash outflow to acquire other companies. Provide a reconciliation of assets acquired with liabilities assumed on pages 122-123. Do not include on this statement the dollar amount of Leases capitalized per US of A General Instruction 20; instead provide a reconciliation of the dollar amount of Leases capitalized with the plant cost on pages 122-123.
5. Codes used:
(a) Net proceeds or payments.
(b) Bonds, debentures and other long-term debt.
(c) Include commercial paper.
(d) Identify separately such items as investments, fixed assets, intangibles, etc.
6. Enter on pages 122-123 clarifications and explanations.

Line No.	Description (See Instruction No. 5 for Explanation of Codes) (a)	Amounts (b)
46	Loans Made or Purchased	
47	Collections on Loans	
48		
49	Net (Increase) Decrease in Receivables	
50	Net (Increase) Decrease in Inventory	
51	Net (Increase) Decrease in Allowances Held for Speculation	
52	Net Increase (Decrease) in Payables and Accrued Expenses	
53	Other (provide details in footnote):	
54		
55		
56	Net Cash Provided by (Used in) Investing Activities	
57	Total of lines 34 thru 55)	-235,797,014
58		
59	Cash Flows from Financing Activities:	
60	Proceeds from Issuance of:	
61	Long-Term Debt (b)	1,000,000,000
62	Preferred Stock	
63	Common Stock	
64	Other (provide details in footnote):	
65	(Less) Long-Term Debt Issuance Cost	-11,085,750
66	Net Increase in Short-Term Debt (c)	
67	Other (provide details in footnote):	
68		
69		
70	Cash Provided by Outside Sources (Total 61 thru 69)	988,914,250
71		
72	Payments for Retirement of:	
73	Long-term Debt (b)	-426,915,000
74	Preferred Stock	-1,602,300
75	Common Stock	
76	Other (provide details in footnote):	
77		
78	Net Decrease in Short-Term Debt (c)	-275,000,000
79	Notes Receivable/Payable - Associated Companies	-197,896,871
80	Dividends on Preferred Stock	-1,098,050
81	Dividends on Common Stock	-167,733,846
82	Net Cash Provided by (Used in) Financing Activities	
83	(Total of lines 70 thru 81)	-81,331,817
84		
85	Net Increase (Decrease) in Cash and Cash Equivalents	
86	(Total of lines 22,57 and 83)	50,782,789
87		
88	Cash and Cash Equivalents at Beginning of Year	5,284,752
89		
90	Cash and Cash Equivalents at End of Year	56,067,541

Schedule Page: 120 Line No.: 19 Column: b

Change in Other Assets		Cash Flow Incr/(Decr)
Net Electric Utility Plant and Nonutility Property		2,885,728
Other Investments - COLI (124)		8,097,328
Other Investments - Misc (123,124)		(3,787,945)
Clearing Accounts (184)		1,628,074
Unamortized Debt Expense (181)		(7,193,165)
Gavin JMG Prepaid Expense (165,186)		(55,923,164)
Other Prepayments (165)		(5,840,471)
Other Deferred Debits (186)		(2,189,067)
Loss on Reacquired Debt (189)		(5,272,895)
Other Current Assets (134,174)		(7,896,666)
Non-cash Portion of LTD New Issuances		6,931,250
(Gain)/Loss on Sale of Assets		(1,599,817)
Other		(5,124,671)
	Total	(75,285,481)

Schedule Page: 120 Line No.: 20 Column: b

Change in Other Liabilities		Cash Flow Incr/(Decr)
Unamortized Discount on Reacquired Debt (226)		(3,299,499)
Other Deferred Credits (252,253)		(4,497,215)
Obligations Under Capital Lease (227)		(7,939,813)
Accumulated Provisions - Misc (228)		(33,733,614)
FAS 143 Asset Retirement Obligation		2,404,195
Paid-in-Capital - Other Comprehensive Income (219)		24,079,657
Customer Deposits (235)		4,340,101
Obligations Under Capital Leases - Current (243)		(4,736,589)
JMG Funding (242)		(15,125,674)
Other Current Liabilities (238,241,242)		(8,545,059)
Non-Cash Portion of LTD New Issuances		4,154,500
Other		992
	Total	(66,977,675)

Schedule Page: 120 Line No.: 21 Column: b

Extraordinary Items After Taxes		Cash Flow Incr/(Decr)
Extraordinary Income - SFAS 143 (434)		(213,641,327)
Extraordinary Deductions - EITF 98-10(435)		4,159,224
Income Taxes - Federal and State (409.3)		84,850,385
	Total	(124,631,718)

Schedule Page: 120 Line No.: 32 Column: b

Other Investing Activities	Cash Flow Incr/(Decr)
Amortization of Fiber Optics Leases to AEP Communications LLC	99,949

Schedule Page: 120 Line No.: 79 Column: b

AEP has established a utility money pool to coordinate short-term borrowings for certain subsidiaries, including Ohio Power Company.

Reclassification

Certain additional prior period footnote disclosure amounts have been reclassified to conform to current period presentation. Such reclassifications had no impact on previously reported Net Income.

2. NEW ACCOUNTING PRONOUNCEMENTS AND EXTRAORDINARY ITEMS

NEW ACCOUNTING PRONOUNCEMENTS

SFAS 132 (revised 2003) "Employers' Disclosure about Pensions and Other Postretirement Benefits"

In December 2003 the FASB issued SFAS 132 (revised 2003), which requires additional footnote disclosures about pensions and postretirement benefits, some of which are effective beginning with the year-end 2003 financial statements. Other additional disclosures will begin with our 2004 quarterly financial statements.

We will implement new quarterly disclosures when they become effective in the first quarter of 2004, including (a) the amount of net periodic benefit cost for each period for which an income statement is presented, showing separately each component thereof, and (b) the amount of employer contributions paid and expected to be paid during the current year, if significantly different from amounts disclosed at the most recent year-end. See Note 10 for these additional 2003 disclosures.

SFAS 143 "Accounting for Asset Retirement Obligations"

We implemented SFAS 143, "Accounting for Asset Retirement Obligations," effective January 1, 2003, which requires entities to record a liability at fair value for any legal obligations for asset retirements in the period incurred. Upon establishment of a legal liability, SFAS 143 requires a corresponding asset to be established which will be depreciated over its useful life. SFAS 143 requires that a cumulative effect of change in accounting principle be recognized for the cumulative accretion and accumulated depreciation that would have been recognized had SFAS 143 been applied to existing legal obligations for asset retirements. In addition, the cumulative effect of change in accounting principle is favorably affected by the reversal of accumulated removal cost. These costs had previously been recorded for generation and did not qualify as a legal obligation although these costs were collected in depreciation rates. The cumulative effect of change in accounting principle is recorded in Extraordinary Items on our Statement of Income.

We completed a review of our asset retirement obligations and concluded that we have related legal liabilities for the retirement of certain ash ponds. A regulatory asset was recorded for the cumulative effect of certain retirement costs for ash ponds for our regulated operations.

We have collected removal costs from ratepayers for certain assets that do not have associated legal asset retirement obligations. To the extent that we have now been deregulated, we reversed the balance of such removal costs which resulted in a net favorable cumulative effect in 2003 reported in Extraordinary Items. We had $101.2 million and $97.0 million of regulatory liabilities for removal costs included in Accumulated Depreciation and Amortization as of December 31, 2003 and 2002, respectively.

The following is a summary of our cumulative effect of change in accounting principle, as a result of SFAS 143, for the year ended December 31, 2003 recorded in Extraordinary Items:

Pre-tax Income (Loss)		After-tax Income (Loss)	
(in millions)			
Ash Ponds	**Reversal of Cost of Removal**	**Ash Ponds**	**Reversal of Cost of Removal**
$(36.8)	$250.4	$(21.9)	$149.3

We have identified, but not recognized, asset retirement obligation liabilities related to electric transmission and distribution as a result of certain easements on property on which we have assets. Generally, such easements are perpetual and require only the retirement and removal of our assets upon the cessation of the property's use. The retirement obligation is not estimable for such easements since we plan to use our facilities indefinitely. The retirement obligation would only be recognized if and when we abandon or cease the use of specific easements.

The following is a reconciliation of beginning and ending aggregate carrying amounts of asset retirement obligations following our adoption of SFAS 143:

Balance at January 1, 2003	Accretion	Balance at December 31, 2003
	(in millions)	
$39.5	$3.2	$42.7(a)

(a) Consists of asset retirement obligations related to ash ponds.

Accretion expense is included in Operating expense.

Pro forma net income has not been presented for the year ended December 31, 2002 because the pro forma application of SFAS 143 would result in pro forma net income not materially different from the actual amounts reported for those periods.

The pro forma liability for asset retirement obligations which has been calculated as if SFAS 143 had been adopted as of the beginning of the period was $39.5 million as of December 31, 2002.

SFAS 144 "Accounting for the Impairment or Disposal of Long-lived Assets"

In August 2001, the FASB issued SFAS 144, "Accounting for the Impairment or Disposal of Long-lived Assets" which sets forth the accounting to recognize and measure an impairment loss. This standard replaced, SFAS 121, "Accounting for Long-lived Assets and for Long-lived Assets to be Disposed Of." We adopted SFAS 144 effective January 1, 2002 with no material effect to our results of operations, cash flows or financial condition. See Note 9 for discussion of impairments recognized in 2003 and 2002.

Name of Respondent	This Report Is:	Date of Report (Mo, Da, Yr)	Year of Report
Ohio Power Company	(1) [X] An Original (2) [ ] A Resubmission	/ /	Dec. 31, 2003

STATEMENT OF INCOME FOR THE YEAR

1. Report amounts for accounts 412 and 413, Revenue and Expenses from Utility Plant Leased to Others, in another Utility column (i, k, m, o) in a similar manner to a utility department. Spread the amount(s) over Lines 02 thru 24 as appropriate. Include these amounts in columns (c) and (d) totals.
2. Report amounts in account 414, Other Utility Operating income, in the same manner as accounts 412 and 413 above.
3. Report data for lines 8, 10, and 11 for Natural Gas companies using accounts 404.1, 404.2, 404.3, 407.1 and 407.2.
4. Use pages 122-123 for important notes regarding the statement of income or any account thereof.
5. Give concise explanations concerning unsettled rate proceedings where a contingency exists such that refunds of a material amount may need to be made to the utility's customers or which may result in a material refund to the utility with respect to power or gas purchases. State for each year affected the gross revenues or costs to which the contingency relates and the tax effects together with an explanation of the major factors which affect the rights of the utility to retain such revenues or recover amounts paid with respect to power and gas purchases.
6. Give concise explanations concerning significant amounts of any refunds made or received during the year

Line No.	Account (a)	(Ref.) Page No. (b)	TOTAL Current Year (c)	TOTAL Previous Year (d)
1	UTILITY OPERATING INCOME			
2	Operating Revenues (400)	300-301	2,244,653,032	2,113,124,711
3	Operating Expenses			
4	Operation Expenses (401)	320-323	1,138,121,608	1,121,463,061
5	Maintenance Expenses (402)	320-323	166,435,717	136,609,324
6	Depreciation Expense (403)	336-337	157,090,928	168,059,125
7	Depreciation Expense for Asset Retirement Costs (403.1)	336-337	337,869	
8	Amort. & Depl. of Utility Plant (404-405)	336-337	12,246,385	6,041,917
9	Amort. of Utility Plant Acq. Adj. (406)	336-337	12,696	12,696
10	Amort. Property Losses, Unrecov Plant and Regulatory Study Costs (407)			
11	Amort. of Conversion Expenses (407)			
12	Regulatory Debits (407.3)		77,773,985	74,443,451
13	(Less) Regulatory Credits (407.4)			
14	Taxes Other Than Income Taxes (408.1)	262-263	175,043,401	176,246,878
15	Income Taxes - Federal (409.1)	262-263	128,858,579	78,700,927
16	- Other (409.1)	262-263	-9,479,843	11,302,109
17	Provision for Deferred Income Taxes (410.1)	234, 272-277	353,023,139	324,065,880
18	(Less) Provision for Deferred Income Taxes-Cr. (411.1)	234, 272-277	320,833,003	294,017,073
19	Investment Tax Credit Adj. - Net (411.4)	266	-2,492,949	-2,493,536
20	(Less) Gains from Disp. of Utility Plant (411.6)		-17,571	-18,561
21	Losses from Disp. of Utility Plant (411.7)			
22	(Less) Gains from Disposition of Allowances (411.8)		875,818	817,751
23	Losses from Disposition of Allowances (411.9)		12,438,014	7,774,151
24	Accretion Expense (411.10)		3,175,095	
25	TOTAL Utility Operating Expenses (Enter Total of lines 4 thru 24)		1,890,893,374	1,807,409,720
26	Net Util Oper Inc (Enter Tot line 2 less 25) Carry to Pg117,line 25		353,759,658	305,714,991

STATEMENT OF INCOME FOR THE YEAR (Continued)

resulting from settlement of any rate proceeding affecting revenues received or costs incurred for power or gas purchases, and a summary of the adjustments made to balance sheet, income, and expense accounts.
7. If any notes appearing in the report to stockholders are applicable to this Statement of Income, such notes may be included on pages 122-123.
8. Enter on page 123 a concise explanation of only those changes in accounting methods made during the year which had an effect on net income, including the basis of allocations and apportionments from those used in the preceding year. Also give the approximate dollar effect of such changes.
9. Explain in a footnote if the previous year's figures are different from that reported in prior reports.
10. If the columns are insufficient for reporting additional utility departments, supply the appropriate account titles, lines 2 to 26, and report the information in the blank space on page 123 or in a footnote.

ELECTRIC UTILITY		GAS UTILITY		OTHER UTILITY		Line No.
Current Year (e)	Previous Year (f)	Current Year (g)	Previous Year (h)	Current Year (i)	Previous Year (j)	
						1
2,244,653,032	2,113,124,711					2
						3
1,138,121,608	1,121,463,061					4
166,435,717	136,609,324					5
157,090,928	168,059,125					6
337,869						7
12,246,385	6,041,917					8
12,696	12,696					9
						10
						11
77,773,985	74,443,451					12
						13
175,043,401	176,246,878					14
128,858,579	78,700,927					15
-9,479,843	11,302,109					16
353,023,139	324,065,880					17
320,833,003	294,017,073					18
-2,492,949	-2,493,536					19
-17,571	-18,561					20
						21
875,818	817,751					22
12,438,014	7,774,151					23
3,175,095						24
1,890,893,374	1,807,409,720					25
353,759,658	305,714,991					26

Name of Respondent Ohio Power Company	This Report Is: (1) [X] An Original (2) [ ] A Resubmission	Date of Report (Mo, Da, Yr) / /	Year of Report Dec. 31, 2003

STATEMENT OF INCOME FOR THE YEAR (Continued)

Line No.	OTHER UTILITY		OTHER UTILITY		OTHER UTILITY	
	Current Year (k)	Previous Year (l)	Current Year (m)	Previous Year (n)	Current Year (o)	Previous Year (p)
1						
2						
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Name of Respondent	This Report Is:	Date of Report (Mo, Da, Yr)	Year of Report
Ohio Power Company	(1) [X] An Original (2) [ ] A Resubmission	/ /	Dec. 31, 2003

STATEMENT OF INCOME FOR THE YEAR (Continued)

Line No.	Account (a)	(Ref.) Page No. (b)	TOTAL Current Year (c)	TOTAL Previous Year (d)
27	Net Utility Operating Income (Carried forward from page 114)		353,759,658	305,714,991
28	Other Income and Deductions			
29	Other Income			
30	Nonutilty Operating Income			
31	Revenues From Merchandising, Jobbing and Contract Work (415)		1,293,836	6,894,372
32	(Less) Costs and Exp. of Merchandising, Job. & Contract Work (416)		1,665,056	6,023,270
33	Revenues From Nonutility Operations (417)		21,783,861	21,097,612
34	(Less) Expenses of Nonutility Operations (417.1)		26,413,013	21,110,715
35	Nonoperating Rental Income (418)		236,125	330,701
36	Equity in Earnings of Subsidiary Companies (418.1)	119		
37	Interest and Dividend Income (419)		2,364,734	1,004,948
38	Allowance for Other Funds Used During Construction (419.1)		1,092,703	-29,213
39	Miscellaneous Nonoperating Income (421)		-6,269,318	28,615,758
40	Gain on Disposition of Property (421.1)		3,404,282	63,487
41	TOTAL Other Income (Enter Total of lines 31 thru 40)		-4,171,846	30,843,680
42	Other Income Deductions			
43	Loss on Disposition of Property (421.2)		1,804,465	3,962,979
44	Miscellaneous Amortization (425)	340	20,367	20,370
45	Miscellaneous Income Deductions (426.1-426.5)	340	11,787,521	14,213,851
46	TOTAL Other Income Deductions (Total of lines 43 thru 45)		13,612,353	18,197,200
47	Taxes Applic. to Other Income and Deductions			
48	Taxes Other Than Income Taxes (408.2)	262-263	750,775	624,000
49	Income Taxes-Federal (409.2)	262-263	-2,353,284	-1,245,491
50	Income Taxes-Other (409.2)	262-263		
51	Provision for Deferred Inc. Taxes (410.2)	234, 272-277	130,652,575	-30,373,723
52	(Less) Provision for Deferred Income Taxes-Cr. (411.2)	234, 272-277	138,361,211	-46,335,513
53	Investment Tax Credit Adj.-Net (411.5)		-614,651	-683,701
54	(Less) Investment Tax Credits (420)			
55	TOTAL Taxes on Other Income and Deduct. (Total of 48 thru 54)		-9,925,796	14,656,598
56	Net Other Income and Deductions (Enter Total lines 41, 46, 55)		-7,858,403	-2,010,118
57	Interest Charges			
58	Interest on Long-Term Debt (427)		90,689,751	75,192,140
59	Amort. of Debt Disc. and Expense (428)		1,302,270	906,574
60	Amortization of Loss on Reaquired Debt (428.1)		1,122,502	603,695
61	(Less) Amort. of Premium on Debt-Credit (429)			
62	(Less) Amortization of Gain on Reaquired Debt-Credit (429.1)			
63	Interest on Debt to Assoc. Companies (430)	340	3,158,543	10,065,902
64	Other Interest Expense (431)	340	2,501,813	3,604,505
65	(Less) Allowance for Borrowed Funds Used During Construction-Cr. (432)		3,904,359	6,691,368
66	Net Interest Charges (Enter Total of lines 58 thru 65)		94,870,520	83,681,448
67	Income Before Extraordinary Items (Total of lines 27, 56 and 66)		251,030,735	220,023,425
68	Extraordinary Items			
69	Extraordinary Income (434)		213,641,327	
70	(Less) Extraordinary Deductions (435)		4,159,267	
71	Net Extraordinary Items (Enter Total of line 69 less line 70)		209,482,060	
72	Income Taxes-Federal and Other (409.3)	262-263	84,850,385	
73	Extraordinary Items After Taxes (Enter Total of line 71 less line 72)		124,631,675	
74	Net Income (Enter Total of lines 67 and 73)		375,662,410	220,023,425

EXTRAORDINARY ITEMS

Accounting for Risk Management Contracts

EITF 02-3 rescinds EITF 98-10 and related interpretive guidance. We have recorded after tax charges against net income in Extraordinary Items. This amount will be realized when the positions settle.

Asset Retirement Obligations (SFAS 143)

In the first quarter of 2003, we recorded the cumulative effect of accounting change for asset retirement obligations in Extraordinary Items.

The following is a summary of the cumulative effect of changes in accounting principles recorded in Extraordinary Items for the adoption of EITF 02-3 and SFAS 143:

EITF 02-3 Cumulative Effect		SFAS 143 Cumulative Effect	
Pre-tax Income (Loss)	After-tax Income (Loss)	Pre-tax Income (Loss)	After-tax Income (Loss)
(in millions)		(in millions)	
$(4.2)	$(2.7)	$ 213.6	$127.3

3. RATE MATTERS

FERC Long-term Contracts

In 2002, the FERC set for hearing complaints filed by certain wholesale customers located in Nevada and Washington that sought to break long-term contracts which the customers alleged were "high-priced." At issue were long-term contracts entered into during the California energy price spike in 2000 and 2001. The complaints alleged that AEP sold power at unjust and unreasonable prices.

In February 2003, AEP and one of the customers agreed to terminate their contract. The customer withdrew its FERC complaint and paid $59 million to AEP. As a result of the contract termination, AEP reversed $69 million of unrealized mark-to-market gains previously recorded, resulting in a $10 million pre-tax loss.

Name of Respondent	This Report Is:	Date of Report (Mo, Da, Yr)	Year of Report
Ohio Power Company	(1) [X] An Original (2) [ ] A Resubmission	/ /	Dec. 31, 2003

ACCUMULATED PROVISION FOR DEPRECIATION OF ELECTRIC UTILITY PLANT (Account 108)

1. Explain in a footnote any important adjustments during year.
2. Explain in a footnote any difference between the amount for book cost of plant retired, Line 11, column (c), and that reported for electric plant in service, pages 204-207, column 9d), excluding retirements of non-depreciable property.
3. The provisions of Account 108 in the Uniform System of accounts require that retirements of depreciable plant be recorded when such plant is removed from service. If the respondent has a significant amount of plant retired at year end which has not been recorded and/or classified to the various reserve functional classifications, make preliminary closing entries to tentatively functionalize the book cost of the plant retired. In addition, include all costs included in retirement work in progress at year end in the appropriate functional classifications.
4. Show separately interest credits under a sinking fund or similar method of depreciation accounting.

Section A. Balances and Changes During Year

Line No.	Item (a)	Total (c+d+e) (b)	Electric Plant in Service (c)	Electric Plant Held for Future Use (d)	Electric Plant Leased to Others (e)
1	Balance Beginning of Year	2,486,972,385	2,486,972,385		
2	Depreciation Provisions for Year, Charged to				
3	(403) Depreciation Expense	156,511,579	156,511,579		
4	(403.1) Depreciation Expense for Asset Retirement Costs	337,869	337,869		
5	(413) Exp. of Elec. Plt. Leas. to Others				
6	Transportation Expenses-Clearing				
7	Other Clearing Accounts				
8	Other Accounts (Specify, details in footnote):				
9					
10	TOTAL Deprec. Prov for Year (Enter Total of lines 3 thru 9)	156,849,448	156,849,448		
11	Net Charges for Plant Retired:				
12	Book Cost of Plant Retired	50,294,667	50,294,667		
13	Cost of Removal	-16,201,040	-16,201,040		
14	Salvage (Credit)	9,859,576	9,859,576		
15	TOTAL Net Chrgs. for Plant Ret. (Enter Total of lines 12 thru 14)	24,234,051	24,234,051		
16	Other Debit or Cr. Items (Describe, details in footnote):	-271,867,769	-271,867,769		
17					
18	Book Cost or Asset Retirement Costs Retired				
19	Balance End of Year (Enter Totals of lines 1, 10, 15, 16, and 18)	2,347,720,013	2,347,720,013		
	Section B. Balances at End of Year According to Functional Classification				
20	Steam Production	1,463,984,729	1,463,984,729		
21	Nuclear Production				
22	Hydraulic Production-Conventional	53,012,853	53,012,853		
23	Hydraulic Production-Pumped Storage				
24	Other Production				
25	Transmission	404,665,543	404,665,543		
26	Distribution	377,726,817	377,726,817		
27	General	48,330,071	48,330,071		
28	TOTAL (Enter Total of lines 20 thru 27)	2,347,720,013	2,347,720,013		

Schedule Page: 219 Line No.: 16 Column: c

Other Debits or Credits:

Record the cumulative effect adjustment related to accrued depreciation on Asset Retirement Obligations in accordance with the Company's 2003 adoption of FASB 143	3,586,729
Transfer removal costs from accumulated depreciation in accordance with the adoption of FASB 143	(276,112,694)
Adjust depreciation reserve between Accounts 1080001 and 1110001	533,297
Other	124,899
Total Other Debits or Credits	(271,867,769)

EXHIBIT ____ (LK-5)

THIS FILING IS (CHECK ONE BOX FOR EACH ITEM)	
Item 1: [X] An Initial (Original) Submission	OR [ ] Resubmission No. ____
Item 2: [ ] An Original Signed Form	OR [ ] Conformed Copy

Form Approved
OMB No. 1902-0021
(Expires 3/31/2005)

FERC Form No. 1:
ANNUAL REPORT OF MAJOR ELECTRIC UTILITIES, LICENSEES AND OTHERS

This report is mandatory under the Federal Power Act, Sections 3, 4(a), 304 and 309, and 18 CFR 141.1. Failure to report may result in criminal fines, civil penalties and other sanctions as provided by law. The Federal Energy Regulatory Commission does not consider this report to be of a confidential nature.

Exact Legal Name of Respondent (Company)	**Year of Report**
Columbus Southern Power Company	**Dec. 31,** 2003

Name of Respondent	This Report Is:	Date of Report (Mo, Da, Yr)	Year of Report
Columbus Southern Power Company	(1) [X] An Original (2) [ ] A Resubmission	/ /	Dec. 31, 2003

STATEMENT OF INCOME FOR THE YEAR (Continued)

Line No.	Account (a)	(Ref.) Page No. (b)	TOTAL Current Year (c)	TOTAL Previous Year (d)
27	Net Utility Operating Income (Carried forward from page 114)		230,202,687	230,033,026
28	Other Income and Deductions			
29	Other Income			
30	Nonutility Operating Income			
31	Revenues From Merchandising, Jobbing and Contract Work (415)		451,192	1,965,746
32	(Less) Costs and Exp. of Merchandising, Job. & Contract Work (416)		529,439	1,905,584
33	Revenues From Nonutility Operations (417)			
34	(Less) Expenses of Nonutility Operations (417.1)		239	983
35	Nonoperating Rental Income (418)		183,935	168,212
36	Equity in Earnings of Subsidiary Companies (418.1)	119	1,073,013	1,467,647
37	Interest and Dividend Income (419)		1,015,453	1,526,187
38	Allowance for Other Funds Used During Construction (419.1)		1,186,353	-134,022
39	Miscellaneous Nonoperating Income (421)		-11,956,014	22,451,754
40	Gain on Disposition of Property (421.1)		1,665,083	
41	TOTAL Other Income (Enter Total of lines 31 thru 40)		-6,910,663	25,538,957
42	Other Income Deductions			
43	Loss on Disposition of Property (421.2)		930,552	1,373,509
44	Miscellaneous Amortization (425)	340		
45	Miscellaneous Income Deductions (426.1-426.5)	340	12,801,606	18,270,094
46	TOTAL Other Income Deductions (Total of lines 43 thru 45)		13,732,158	19,643,603
47	Taxes Applic. to Other Income and Deductions			
48	Taxes Other Than Income Taxes (408.2)	262-263	315,000	315,000
49	Income Taxes-Federal (409.2)	262-263	-5,241,114	3,238,190
50	Income Taxes-Other (409.2)	262-263	-10,330	729
51	Provision for Deferred Inc. Taxes (410.2)	234, 272-277	90,829,752	-31,192,812
52	(Less) Provision for Deferred Income Taxes-Cr. (411.2)	234, 272-277	100,317,376	-28,713,564
53	Investment Tax Credit Adj.-Net (411.5)		-68,938	-173,836
54	(Less) Investment Tax Credits (420)			
55	TOTAL Taxes on Other Income and Deduct. (Total of 48 thru 54)		-14,493,006	900,835
56	Net Other Income and Deductions (Enter Total lines 41, 46, 55)		-6,149,815	4,994,519
57	Interest Charges			
58	Interest on Long-Term Debt (427)		52,002,647	42,869,676
59	Amort. of Debt Disc. and Expense (428)		625,790	430,486
60	Amortization of Loss on Reaquired Debt (428.1)		991,568	1,032,697
61	(Less) Amort. of Premium on Debt-Credit (429)			
62	(Less) Amortization of Gain on Reaquired Debt-Credit (429.1)			
63	Interest on Debt to Assoc. Companies (430)	340	1,097,160	10,890,875
64	Other Interest Expense (431)	340	1,310,477	1,108,021
65	(Less) Allowance for Borrowed Funds Used During Construction-Cr. (432)		5,121,589	2,477,765
66	Net Interest Charges (Enter Total of lines 58 thru 65)		50,906,053	53,853,990
67	Income Before Extraordinary Items (Total of lines 27, 56 and 66)		173,146,819	181,173,555
68	Extraordinary Items			
69	Extraordinary Income (434)		49,036,165	
70	(Less) Extraordinary Deductions (435)		3,135,067	
71	Net Extraordinary Items (Enter Total of line 69 less line 70)		45,901,098	
72	Income Taxes-Federal and Other (409.3)	262-263	18,617,934	
73	Extraordinary Items After Taxes (Enter Total of line 71 less line 72)		27,283,164	
74	Net Income (Enter Total of lines 67 and 73)		200,429,983	181,173,555

We will implement new quarterly disclosures when they become effective in the first quarter of 2004, including (a) the amount of net periodic benefit cost for each period for which an income statement is presented, showing separately each component thereof, and (b) the amount of employer contributions paid and expected to be paid during the current year, if significantly different from amounts disclosed at the most recent year-end. See Note 10 for these additional 2003 disclosures.

SFAS 143 "Accounting for Asset Retirement Obligations"

We implemented SFAS 143, "Accounting for Asset Retirement Obligations," effective January 1, 2003, which requires entities to record a liability at fair value for any legal obligations for asset retirements in the period incurred. Upon establishment of a legal liability, SFAS 143 requires a corresponding asset to be established which will be depreciated over its useful life. SFAS 143 requires that a cumulative effect of change in accounting principle be recognized for the cumulative accretion and accumulated depreciation that would have been recognized had SFAS 143 been applied to existing legal obligations for asset retirements. In addition, the cumulative effect of change in accounting principle is favorably affected by the reversal of accumulated removal cost. These costs had previously been recorded for generation and did not qualify as a legal obligation although these costs were collected in depreciation rates when our company was a regulated entity. The cumulative effect of change in accounting principle is recorded in Extraordinary Items on our Statement of Income.

We completed a review of our asset retirement obligations and concluded that we have related legal liabilities for the retirement of certain ash ponds. Similarly, a regulatory asset was recorded for the cumulative effect of certain retirement costs for ash ponds for our regulated operations.

We have collected removal costs from ratepayers for certain assets that do not have associated legal asset retirement obligations. To the extent that we have now been deregulated, we reversed the balance of such removal costs which resulted in a net favorable cumulative effect in 2003. We had $99.1 million and $96.0 million of regulatory liabilities for removal costs included in Accumulated Depreciation and Amortization as of December 31, 2003 and 2002, respectively.

The following is a summary of the cumulative effect of change in accounting principle, as a result of SFAS 143, for the year ended December 31, 2003, recorded as Extraordinary Items:

Pre-tax Income (Loss)		After-tax Income (Loss)	
Ash Ponds	Reversal of Cost of Removal	Ash Ponds	Reversal of Cost of Removal
$(7.8)	$56.8	$(4.7)	$33.9

We have identified, but not recognized, asset retirement obligation liabilities related to electric transmission and distribution as a result of certain easements on property on which we have assets. Generally, such easements are perpetual and require only the retirement and removal of our assets upon the cessation of the property's use. The retirement obligation is not estimable for such easements since we plan to use our facilities indefinitely. The retirement obligation would only be recognized if and when we abandon or cease the use of specific easements.

The following is a reconciliation of our beginning and ending aggregate carrying amounts of asset retirement obligations following the adoption of SFAS 143:

	Balance At January 1, 2003	Accretion	Balance at December 31, 2003
		(in millions)	
(a)	$8.1	$0.6	$8.7

(a) Consists of asset retirement obligations related to ash ponds.

Accretion expense is included in Operating expense in our Statement of Income.

Pro forma net income has not been presented for the years ended December 31, 2002 and 2001 because the pro forma application of SFAS 143 would result in pro forma net income not materially different from the actual amounts reported for those periods.

Our pro forma liability for asset retirement obligations was $8.1 million as of December 31, 2002. These obligations have been calculated as if SFAS 143 had been adopted at the beginning of each period.

SFAS 144 "Accounting for the Impairment or Disposal of Long-lived Assets"

In August 2001, the FASB issued SFAS 144, "Accounting for the Impairment or Disposal of Long-lived Assets" which sets forth the accounting to recognize and measure an impairment loss. This standard replaced, SFAS 121, "Accounting for Long-lived Assets and for Long-lived Assets to be Disposed Of." We adopted SFAS 144 effective January 1, 2002, with no material effect to our results of operations, cash flows or financial condition. See Note 9 for discussion of impairments recognized in 2003 and 2002.

SFAS 145 "Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13, and Technical Corrections"

In April 2002, the FASB issued SFAS 145, "Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13, and Technical Corrections" (SFAS 145). SFAS 145 rescinds SFAS 4, "Reporting Gains and Losses from Extinguishment of Debt," effective for fiscal years beginning after May 15, 2002. SFAS 4 required gains and losses from extinguishment of debt to be aggregated and classified as an extraordinary item if material. We adopted SFAS 145 with no material impact to our results of operations, cash flows or financial condition.

FASB Staff Position No. 106-1, Accounting and Disclosure Requirements Related to the Medicare Prescription Drug Improvement and Modernization Act of 2003

On January 12, 2004, the FASB Staff issued FSP 106-1, which allows a one-time election to defer accounting for any effects of the prescription drug subsidy under the Medicare Prescription Drug Improvement and Modernization Act of 2003 (the Act), enacted on December 8, 2003. There are significant uncertainties as to whether AEP's plan will be eligible for a subsidy under future federal regulations that have not yet been drafted. The method of accounting for any such subsidy and, therefore, the subsidy's possible reduction to the accumulated postretirement benefit obligation and periodic postretirement benefit costs has not been resolved by the FASB or other professional accounting standard setting authority. Accordingly, any potential effects of the Act were deferred until authoritative guidance on the accounting for the federal subsidy is issued. Measurements of the accumulated postretirement benefit obligation and periodic postretirement benefit cost included in these financial statements do not reflect any potential effects of the Act. We cannot determine what impact, if any, new authoritative guidance on the accounting for the federal subsidy may have on our results of operations or financial condition.

Future Accounting Changes

The FASB's standard-setting process is ongoing. Until new standards have been finalized and issued by FASB, we cannot determine the impact on the reporting of our operations that may result from any such future changes.

EXTRAORDINARY ITEMS

Accounting for Risk Management Contracts

EITF 02-3 rescinds EITF 98-10 and related interpretive guidance. We have recorded after tax charges against net income in Extraordinary Items. This amount will be realized when the positions settle.

Asset Retirement Obligations (SFAS 143)

In the first quarter of 2003, we recorded in after-tax income a cumulative effect of accounting change for Asset Retirement Obligations in Extraordinary Items.

The following is a summary of the cumulative effect of changes in accounting principles that we recorded in Extraordinary Items for the adoptions of SFAS 143 and EITF 02-3:

SFAS 143 Cumulative Effect		EITF 02-3 Cumulative Effect	
Pre-tax Income (Loss)	After-tax Income (Loss)	Pre-tax Income (Loss)	After-tax Income (Loss)
(in millions)		(in millions)	
$49.0	$29.3	$(3.1)	$(2.0)

EXHIBIT ____ (LK-6)

OHIO POWER COMPANY'S RESPONSES TO
OHIO ENERGY GROUP'S DISCOVERY REQUESTS
PUCO CASE NO. 14-1693-EL-RDR
THIRD SET

INTERROGATORY

INT-3-008 Refer to the Company's response to OEG-INT-1-016.

a. Please provide the date at which the Company or AEPGR modified its depreciation rates on generation assets to exclude all cost of removal for interim and terminal retirements.

b. Please provide a copy of all accounting authorities that direct or permit the Company or AEPGR to not accrue expense for these costs over the life of the assets.

c. Please provide a copy of each depreciation study, including any narrative discussion in addition to the schedules, used to determine depreciation rates since 2001. Provide the date at which the plant was valued for the study and the date that the depreciation rates resulting from the study were implemented.

RESPONSE

a. Effective January 1, 2003, depreciation rates on generation property currently owned by AEPGR (previously owned by OPCo in 2003) were modified to exclude all cost of removal for interim and terminal retirements.

b. Based on the proposed PPA, cost of removal will be recorded to account 506 - Steam Expense (and is included in the O&M payment) and is not recorded to Depreciation Expense.

Statement of Financial Accounting Standards (SFAS) 143, "Accounting for Asset Retirement Obligations", which was implemented effective January 1, 2003, requires the recording of a liability at fair value for any legal obligations for asset retirements in the period incurred and the establishment of a corresponding asset which is depreciated over its useful life. Effective with the implementation of SFAS 143, cost of removal for interim and terminal retirements was excluded from depreciation rates on AEPGR generation assets in accordance with the Securities and Exchange Commission Staff's conclusion that SFAS 143 paragraph B22 specifically precludes an entity from recording depreciation expense for estimated costs associated with the removal or retirement of assets, which result from other than legal obligations.

SFAS 143, B22 states - Paragraph 37 of Statement 19 states that - "estimated dismantlement, restoration, and abandonment costs . . . shall be taken into account in determining amortization and depreciation rates." Application of that paragraph has the effect of accruing an expense irrespective of the requirements for liability recognition in the FASB Concepts Statements. In doing so, it results in recognition of accumulated depreciation that can exceed the historical cost of a long-lived asset. The Board concluded that an entity should be precluded from including an amount for an asset retirement obligation in the depreciable base of a long-lived asset unless that amount also meets the recognition criteria in this Statement. When an entity recognizes a liability for an asset retirement obligation, it also will recognize an increase in the

INT-3-008 Continued

carrying amount of the related long-lived asset. Consequently, depreciation of that asset will not result in the recognition of accumulated depreciation in excess of the historical cost of a long-lived asset."

In summary, as a non-regulated entity, AEPGR does not meet the recognition criteria to record a regulatory liability under SFAS 143 for asset retirement costs which are not legal obligations. AEPGR follows asset retirement obligation accounting for legal obligations for asset retirements and expenses as incurred asset retirement costs that are not legal obligations.

c. Since 2001, two depreciation studies have been prepared to calculate updated depreciation rates for AEPGR's generation assets. The first study was prepared for Ohio Power Company and Columbus Southern Power Company prior to the transfer of generation assets to AEPGR using December 31, 2007 plant in service balances. The depreciation rates resulting from that study were implemented in January 2009 and Schedule I from the study is provided as an attachment with this response labeled "OEG-INT-3-008 Depreciation Rates Attachment 1".

The second study was prepared for AEPGR using December 31, 2012 plant in service balances. The depreciation rates resulting from that study were implemented in January 2014 and Schedule I from the study is provided as an attachment with the response labeled "OEG-INT-3-008 Depreciation Rates Attachment 2".

Prepared by: Thomas E. Mitchell

BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In The Matter Of The Application Seeking Approval Of Ohio Power Company's Proposal To Enter Into An Affiliate Power Purchase Agreement For Inclusion In The Power Purchase Agreement Rider	:	**Case No. 14-1693-EL-RDR**
In The Matter Of The Application Of Ohio Power Company For Approval Of Certain Accounting Authority	:	**Case No. 14-1694-EL-AAM**

DIRECT TESTIMONY

OF

STEPHEN J. BARON

ON BEHALF OF

THE OHIO ENERGY GROUP

J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA

September 11, 2015

BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In The Matter Of The Application Seeking Approval Of Ohio Power Company's Proposal To Enter Into An Affiliate Power Purchase Agreement For Inclusion In The Power Purchase Agreement Rider	:	**Case No. 14-1693-EL-RDR**
In The Matter Of The Application Of Ohio Power Company For Approval Of Certain Accounting Authority	:	**Case No. 14-1694-EL-AAM**

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I. QUALIFICATIONS AND SUMMARY

Q. Please state your name and business address.

A. My name is Stephen J. Baron. My business address is J. Kennedy and Associates, Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell, Georgia 30075.

Q. What is your occupation and by who are you employed?

A. I am the President and a Principal of Kennedy and Associates, a firm of utility rate, planning, and economic consultants in Atlanta, Georgia.

Q. Please describe briefly the nature of the consulting services provided by Kennedy and Associates.

A. Kennedy and Associates provides consulting services in the electric and gas utility industries. Our clients include state agencies and industrial electricity consumers. The firm provides expertise in system planning, load forecasting, financial analysis, cost-of-service, and rate design. Current clients include the Georgia and Louisiana Public Service Commissions, and industrial and commercial customer consumers throughout the United States. My educational background and professional experience are summarized on Baron Exhibit __ (SJB-1).

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of The Ohio Energy Group ("OEG"), a group of large industrial customers of Ohio Power Company ("AEP Ohio" or "the Company"). The members of OEG who take service from the Company are: AK Steel Corporation, ArcelorMittal USA, E.I. duPont de Nemours and Company, Ford Motor Company, Linde, Inc., POET Biorefining, Praxair Inc., TimkenSteel Corporation and Worthington Industries.

Q. Please summarize your testimony?

A. The Commission has ruled that a properly structured PPA is permitted under Ohio law as a financial limitation on shopping that will stabilize rates. In this case, the Commission has been requested to approve a PPA Rider to recover the costs or provide credits associated with a long term bilateral cost-of-service based contract between AEP Ohio and AEP Generation Resources (AEPGR) that will provide a physical hedge to what otherwise would be a 100% market-based electric rates paid by all ratepayers served by AEP Ohio. Absent this proposed hedge, customers would generally pay rates comprised of 100% market purchases. Since the proposed PPA Rider would be non-bypassable, this hedge would cover all shopping and non-shopping SSO customers. AEP Ohio has presented its PPA Rider for approval; OEG and other parties will present their proposed modifications, including modifications to the underlying PPA contract itself (or a recommendation for an outright rejection of the proposal). The administrative process of this proceeding provides a platform for the Commission to significantly influence the rates paid by AEP Ohio customers and provide customers the opportunity, through the PPA Rider, to stabilize rates relative what otherwise would be the volatility that typically accompanies 100% market-based pricing.

This can be an important and constructive role for the Commission. If the Commission can approve a reasonable PPA Rider, including requirements for modifications to the PPA contract through this administrative process, then the PPA Rider can be a valuable long-term asset for consumers. A PPA Rider based on the average embedded costs of known Ohio generating assets at a PUCO approved profit margin (return on equity) can act as a hedge against complete reliance on the volatile marginal cost based PJM wholesale energy and capacity markets. If a PPA Rider is approved, then the financial end result will be that consumers would have a blended rate, where part of their electric pricing is at market and part is at cost of service. Consumers would still be able to shop for 100% of their physical generation needs so there would be no adverse impact on CRES providers or on Ohio's customer choice program.

My testimony recommends three ways for the Commission to modify and improve the expanded PPA, if the Commission determines that a PPA Rider should be approved:

1) the PPA term should be fixed for 15 years; not on the life of the units, in order to not unduly expose consumers to retirement costs;

2) the Commission should retain jurisdiction by prohibiting AEP Ohio from agreeing to any PPA changes without Commission approval; and

3) because of expected legal challenges, any PPA charges or credits should be subject to refund so that the parties can be returned to the status quo ante if the transaction is deemed to be unlawful in the future.

In addition to the three modifications I recommend, OEG witness Mr. Taylor is recommending additional modifications that should be made to the PPA Rider.

Finally, OEG witness Mr. Kollen is recommending important contractual clarifications to ensure that consumers receive the full benefit of the PPA contract.

II. A PROPERLY STRUCTURED PPA CAN BE AN APPROPRIATE DEVELOPMENT IN THE EVOLUTION OF OHIO'S ELECTRICITY MARKET

Q. Have you performed an independent review of the economic analysis (costs and benefits) of the proposed PPA?

A. No. I have not attempted to determine if AEP Ohio's projected operating and capital costs are reasonable. Nor have I attempted to determine whether the Company's forecasted energy and capacity revenues are reasonable. The purpose of my testimony is to make recommendations to improve the PPA, if the Commission finds that the PPA Rider should be approved.

Q. Please provide a brief history of electric regulation in Ohio in order to put the proposed PPA into perspective.

A. Before 1999, the Commission regulated Ohio's investor owned utilities using traditional cost-of-service principles. The utilities received a Commission determined just and reasonable return on the average embedded cost of their generation, transmission and distribution investments, with a pass through of fuel and other expenses with no mark-up or added profit margin. This system generally resulted in relatively low and stable rates for AEP Ohio.

In 1999 SB 3 was passed. This legislation unbundled pricing into generation, transmission and distribution components. SB 3 moved Ohio towards complete reliance on federally regulated, wholesale market-based pricing for generation (PJM Regional Transmission Organization). The SB 3 2001-2005 market development period was extended because legacy average embedded cost pricing was well below wholesale market pricing. For 2006-2008, the PUCO imposed Rate Stabilization Plans to prevent rate shock from high market-based energy and capacity prices.

In 2008, SB 221 was passed. This legislation explicitly gave the PUCO the rate authority it claimed for the 2006-2008 Rate Stabilization Plans. SB 221 also gave the PUCO discretion to opt-back into elements of traditional regulation, primarily to stabilize prices. Now, there are two options for utility standard service offers – a market-based MRO or an ESP that can maintain some features of traditional cost-based regulation. Under an ESP, the PUCO can approve rates, terms and conditions to stabilize rates, including financial limitations on customer shopping.

Ohio's Rural Electric Cooperatives (Buckeye Power) and Municipal Utilities (AMP Ohio) still have monopoly service territories, and they are not regulated by the PUCO. Neither SB 3 in 1999 nor SB 221 in 2008 authorized customer choice for the ratepayers of cooperative or municipal utilities.

Q. Is the "market" for capacity in PJM a true competitive market?

A. No, not in any conventional sense of that word. Instead, it is an administrative construct to acquire capacity to meet resource adequacy targets. PJM's capacity market is based on a set of specific tariff provisions that define the Reliability Pricing Model ("RPM"). A major element of the RPM construct is the annual Base Residual Auction (BRA), which sets the market capacity price for a delivery year three years ahead.[1] The BRA sets the market price based on the marginal clearing price for capacity, where the mW supply offered by generation owners intersects the Variable Resource Requirement (VRR) demand curve. The VRR is PJM's administrative determination of its demand curve and it is designed to provide capacity for the RTO to generally meet the administratively determined PJM reliability criterion (for example, capacity sufficient to insure outages no greater than 1 day in 10 years).

The VRR is built upon numerous assumptions and forecasts. The starting point of the VRR demand curve is an estimate of the Cost of New Entry (CONE). Net Cone is the levelized cost of the new-build resource (traditionally a combustion turbine) net of revenue credits that could be produced from sales of energy and ancillary services into the PJM market. After an assumption is made regarding the type of generation technology (gas combustion turbine or gas combined cycle) that will be built, forecasts regarding its construction costs, permitting costs, length of construction, capital structure, cost of equity, cost of debt, state and federal income tax rates, property taxes, insurance costs, gas pipeline and electric transmission line infrastructure costs, and more, must be made. Then assumptions must be made regarding how much energy and ancillary services revenue the plant will earn over its useful life. This requires long-term assumptions regarding gas costs, fixed and variable operating costs, depreciation costs, capital additions, plant capacity factor and on-peak and off-peak energy prices. Net Cone is merely the starting point of administratively determining the VRR demand curve. Then the shape and slope of

[1] There are also up to three Incremental Auctions conducted prior to the start of an applicable delivery year.

the VRR demand curve must be administratively determined. This can have significant effects on the BRA results.

The supply side of the BRA process is also administratively determined, including the determination of what non-PJM resources are allowed to bid in, the capacity value to assign to different generation technologies, and the determination of how demand response and energy efficiency are allowed to participate. All of this demonstrates that the PJM capacity market construct is not a true competitive market, but rather is an attempt to approximate the results of such a market.

Q. Does PJM recognize that its administrative construct for determining market capacity prices is not currently functioning properly?

A. Yes. PJM recognizes that its capacity "market" is not sending appropriate price signals to ensure reliability and it has implemented a number of significant changes through its Capacity Performance Proposal that created a new category of more reliable capacity, Capacity Performance Resources. On June 9, 2015, FERC approved PJM's Capacity Performance Proposal. The Capacity Performance modification to the PJM tariff penalizes poor generator performance during Performance Assessment Hours (emergencies) and provides bonus payments for good performance. Reliable base load coal resources are expected to benefit from the Capacity Performance modifications. While the Capacity Performance modifications are expected to increase costs to consumers by increasing revenue for the owners of reliable capacity, it may add to price volatility through the penalty and bonus provisions. When selling capacity, generation owners must now factor in the possibility of significant penalties or bonuses.

Q. Is the PJM energy market impacted by the same administrative imposed provisions as the PJM capacity market?

A. No. On a relative basis, the PJM energy market is designed to be a competitive market wherein supply and demand determine the market price. The PJM energy market is based on marginal cost pricing where all suppliers are paid the incremental clearing price for the last mWh to clear across the entire PJM footprint regardless of the supplier's actual cost of production, subject to regional reliability constraints that generally result in differences in energy prices geographically within PJM. Marginal cost energy pricing is very beneficial to consumers during times of surplus and when fuel costs are low. But during times of shortage and high fuel costs, marginal energy prices can escalate to extremely high levels. Unlike all other commodities, energy cannot be stored on a large scale and supply must consistently and instantaneously be in balance with demand. This is a primary reason why the competitive market for energy is unique and inherently volatile.

Q. Is a properly structured PPA Rider an appropriate development in the evolution of Ohio's electricity?

A. Yes, I believe so. If properly amended by the Commission, AEP Ohio's Expanded PPA proposal can be an appropriate development in the ongoing evolution of Ohio's electricity market. Under the Expanded PPA, Customers will continue to shop or take SSO service for all of their generation needs. There is no detrimental effect on the SSO auctions or CRES providers. A properly structured Expanded PPA can stabilize prices through a financial limitation on shopping by providing a blend of cost of service and market pricing.

Q. Please describe your understanding of the structure of the proposed PPA.

A. Under the Expanded PPA (excepting OVEC which is an existing AEP Ohio contractual entitlement pursuant to a rate on file at FERC), energy and capacity will be purchased by AEP Ohio at the average embedded cost of existing generation owned by AEPGR

The result of a properly structured and amended Expanded PPA will be a non-bypassable charge/credit recovered through a Commission approved PPA Rider that is a financial limitation on shopping to stabilize rates. The energy purchased under the Expanded PPA represents approximately 44% of AEP Ohio's native load mWh sales. Therefore, the effective result would be that consumers would have a blend of 56% market (marginal cost) pricing and 44% cost of service (average embedded cost) pricing.

Q. Is the proposed sale between AEPGR and AEP Ohio a wholesale sale subject to FERC jurisdiction?

A. Yes, that is my understanding. Under the Federal Power Act, wholesale sales in interstate commerce must be "*just and reasonable.*" FERC has two basic methods for determining just and reasonable rates: 1) market-based pricing if the seller does not have market power; and 2) cost of service pricing based on the average embedded cost of particular generation plants. Before the advent of RTOs and open access transmission, almost all FERC approved wholesale rates were based on the seller's cost of service.

Q. Will approval of the PPA Rider have any undue impact on wholesale market pricing?

A. No, I do not believe so. It is my understanding that the generating units subject to the PPA are going to sell into the PJM energy and capacity markets on the same basis, with or without the PPA. AEP has publically stated its intent to either dedicate the PPA units to Ohio consumers pursuant to a Commission approved PPA Rider determined in this proceeding, or to sell the units. Either way, the units are expected to operate. This means that the supply/demand mix of energy and capacity in PJM should not change. Because the units will participate in the PJM energy and capacity markets in the same manner, with or without the PPA, approval of the PPA Rider should have no substantive effect on wholesale pricing.

Q. Despite your view that the PPA should not affect pricing in the PJM energy or capacity markets, is a legal challenge likely?

A. Based upon the strong opposition of many parties to the PPA, I would expect there to be such legal challenges. Because of the near certainty of legal challenges, any PPA Rider charges or credits should explicitly be subject to refund until these legal issues are resolved. This would allow the parties to be returned to the status quo ante should a court find any aspect of this transaction unlawful.

Q. If a generating unit that is subject to cost-of-service rate recovery participates in the PJM energy or capacity markets, is that a form of subsidization?

A. No. I do not agree that this argument, advanced by many parties, is correct. There are numerous examples of power plants being paid for by consumers on a cost of service basis in PJM (and MISO). Yet, these units fully participate in PJM's energy or capacity markets.

First, cost of service power plants can only earn the return authorized by the state commission. This puts a floor on earnings during periods of low pricing (which is the main complaint of many parties), but it also puts a ceiling on earnings during periods of high pricing. The ceiling on earnings therefore could be considered a "negative subsidy." Furthermore, as I indicated above, power plants that receive cost of service pricing from ratepayers routinely participate in PJM's capacity auctions. There are a number of traditionally regulated cost of service utilities with captive customers that are PJM members and bid their capacity into the capacity auctions. I have identified at least four utilities in PJM that participate in the RPM by bidding their generation resources into the BRA and Incremental Auctions. These utilities, Dominion Virginia Power (VA), Monongahela Power (WV), Old Dominion Electric Power Cooperative (VA, DL, MD), and East Kentucky Power Cooperative (KY) own (or have entitlements to) approximately 27,000 mW of capacity in PJM. This equates to about 15% of the total mW of capacity offered into the PJM 2017/2018 BRA capacity auction.

Additionally, PJM FRR entities such as Kentucky Power Company and Appalachian Power Company can bid excess cost of service generation into the capacity auctions, subject to certain limitations. Finally, if they have firm transmission, traditionally regulated cost of service utilities outside of PJM can and do participate in the PJM capacity auctions.

Q. Is cost-of-service (average embedded cost) pricing inherently more stable than market (marginal cost) pricing?

A. Yes. Cost of service rates based on average embedded cost are more stable than market based pricing. Historically, cost based capacity prices are determined by the Commission approved rate of return applied to the approved rate base, plus actual operating costs. These rate components generally move slowly and predictably over time. Cost of service energy pricing is primarily a function of the actual average cost of fuel and purchased power, with no added profit margin or mark up. Energy costs in the PJM market are determined by the day-ahead and real time locational marginal costs based on offers from market participants. These market energy prices can be extremely volatile from hour to hour, as the 2014 Polar Vortex event demonstrated. Real-time PJM LMPs during this period exceeded $1,000/mWh at times. Figure 1 below shows a recent 4 week chart of PJM LMP energy prices in February 2015. Figure 2 shows the RPM capacity prices from each of PJM's BRAs, beginning with the 2007/2008 Delivery Year.[2]

[2] The RPM price shown in Figure 2 for the 2018/2019 Delivery Year is the price for Capacity Performance resources.

Figure 1
PJM DAY AHEAD LMP VALUES FOR AEP ZONE
4 Week Period Beginning Monday February 9, 2015

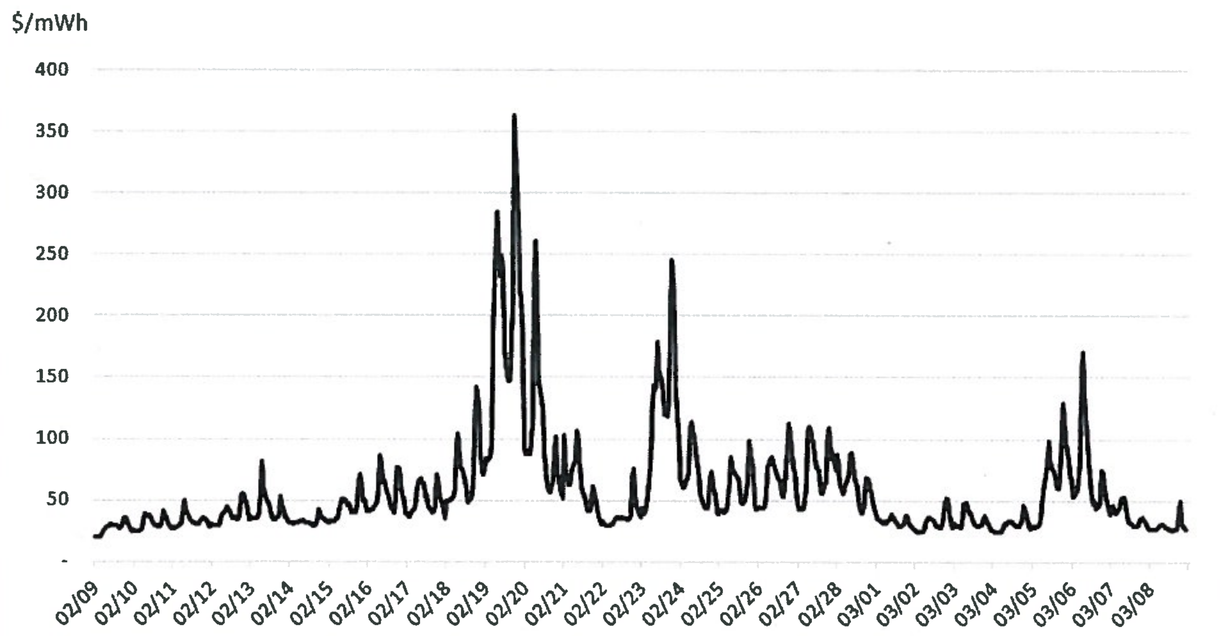
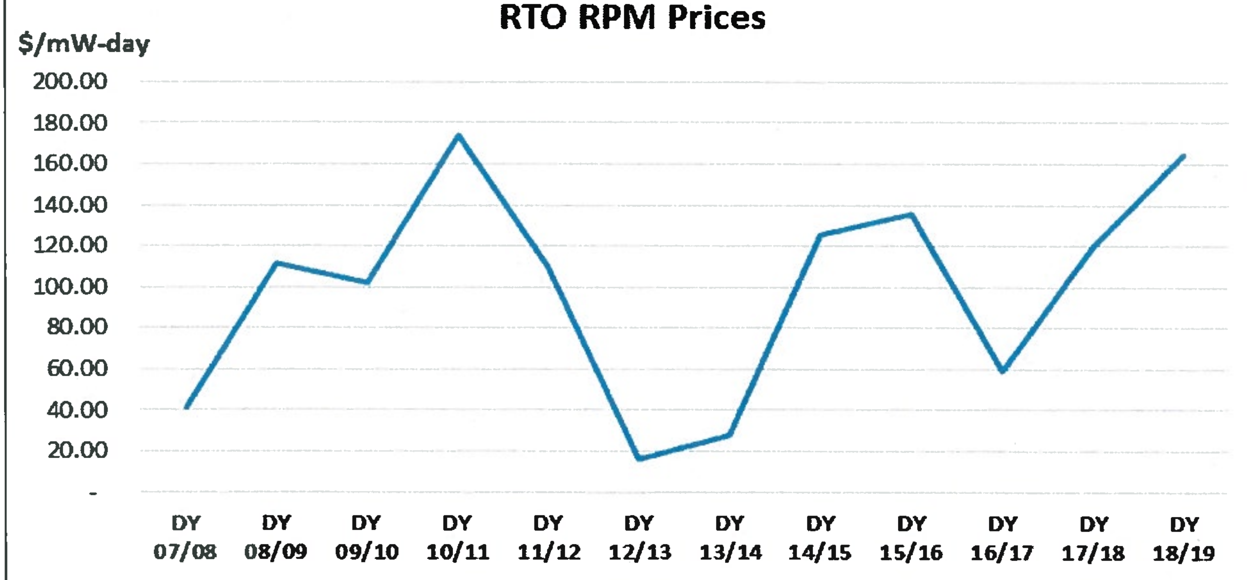


Figure 2
PJM Base Residual Auction Results
RTO RPM Prices



Q. If the Commission believes that a PPA Rider can stabilize rates, then what is the appropriate portfolio balance of cost-of-service/market pricing?

A. The appropriate portfolio balance of market based and cost of service based prices is a policy decision for the Commission. Based on the PPA contract that has been filed, the proposed PPA Rider would financially result in consumers paying a rate that is approximately 44% cost-of-service and 56% market.

Q. Can a PPA Rider result in pricing diversity and a lower risk for consumers?

A. Yes. By providing consumers with a just and reasonable blended rate based on cost of service (based on average embedded cost) and market (based on marginal cost), consumers should face potentially prices that have a lower volatility. This is generally the reason that utilities have traditionally engaged in fuel hedging strategies. It is my understanding that this type of blended pricing arrangement in order to stabilize rates is permitted in Ohio, pursuant to SB 221.

Q. Is it possible for consumers to achieve the same type of rate stability through CRES product offerings?

A. I would not expect this to be available from a CRES provider. Most, if not all, CRES providers who do not own generation base their retail price offerings on energy and capacity purchased through PJM. This means that unlike most competitive markets (i.e. autos, computers, food, clothing), most non-generation owning CRES providers have the same basic commodity cost structure. Even CRES providers who do own or contract for generation would be expected to price their retail products based on PJM energy and capacity prices, since that is their opportunity cost.

In contrast, the PPA is an entirely different product that consumers cannot buy on their own unless they can individually engage in bilateral contract negotiations with a generation owner or equivalent party (i.e., a party that has an entitlement to such a resource through contract).

Q. Is it a sound policy for this Commission to remain involved in the generation market?

A. Yes, I believe so. It is important for Ohio to stay in generation business. Full reliance on the federally regulated wholesale power market is a risky policy that was modified by the Legislature when it enacted SB 221.

Q. The U.S. EPA recently released its final Clean Power Plan (CPP) rule to regulate CO2 emissions from existing fossil fuel electric generating units. How does that impact the evaluation of the PPA proposal?

A. First, there is considerable uncertainty as to whether the EPA exceeded its legal authority under the new rule. But assuming that the rule survives, it is not certain that all coal plants will have adverse economics for the long term. Also, it is my understanding that AEP's economic evaluation of the PPA units included a $15/ton CO2 tax adder beginning in 2022. While I have not made any evaluation of the reasonableness of this assumption, Company witness John McManus testifies that this accounts for a reasonable approximation of the potential impact of CPP regulation.

There are two basic ways for a state to comply with the CPP: 1) a rate based approach measured in lbs. of CO2 per mWh; and 2) a mass based approach measured in total short tons of CO2. The EPA estimates that under either approach, coal will continue to be a significant generation resource across the nation. In 2030, under a rate based approach, EPA estimates that 27.4% of the nation's energy supply will come from coal generation. Under a mass based approach, EPA estimates that 27.8% of the nation's energy supply will come from coal. In EPA's base case, which assumes no CPP, coal is projected to be 32.8% of the country's energy supply. Because national percentage numbers include parts of the country that currently do not rely heavily on coal, coal plants can be expected to make up an even greater percentage of Ohio's and PJM generation mix. Thus, according to EPA, even if the CPP rule survives legal challenge, coal generation will continue to be an important part of Ohio's energy future.

III. SPECIFIC RECOMMENDED MODIFICATIONS TO THE PPA

Q. Should the PPA underlying the PPA Rider be for the entire useful lives of the generating units?

A. No. The term of the PPA should be 15 years. If any of the PPA assets retire before the end of 15 years, then those assets would simply be removed from the PPA. The term of Expanded PPA should not be the life of units since this provision could be used to expose consumers to the payment of all retirement related costs. The PPA proposed depreciation rates only include a component for gross salvage, not removal cost. At most, consumers should only pay a pro-rated share of any retirement related costs actually incurred and not already recovered through depreciation (i.e. if the PPA is for 25% of the plant's useful life, then at most only 25% of removal costs should be recoverable in the PPA). This issue is addressed in detail in the testimony of Mr. Kollen.

Q. **Should the Commission require that the Company agree to PUCO jurisdiction to ensure that no changes to the PPA are made without prior PUCO consent?**

A. Yes. The PUCO needs to retain jurisdiction to ensure that the bilateral PPA contract it is implicitly negotiating on behalf of consumers is not changed without its consent. AEP Ohio should be prohibited from agreeing with AEPGR to any PPA changes without the approval of the PUCO. Also, AEP Ohio should be prohibited from seeking any PPA modifications at FERC without the consent of the PUCO.

Q. **Should any PPA charges and credits be made subject to refund during the pendency of any legal challenge?**

A. Yes. Because of the expected legal challenges, any PPA Rider charges and credits should be subject to refund pending the outcome of those proceedings. This would allow the Commission to return the parties to the status quo ante if the PPA is found to be unlawful. I am advised by counsel, that under the KECO doctrine, refunds are not always allowed under Ohio law, except where rates are explicitly made subject to refund.

Q. **Has the Company made a specific proposal in this case to recover the charges or credits from the PPA Rider from each rate class?**

A. Company witness William Allen discusses the PPA Rider and presents Exhibit WAA-1, which shows a template for the various revenues and charges that will be netted in the PPA Rider and charged to customers on a non-bypassable basis. However, Mr. Allen does not present a specific proposal to allocate these charges or credits to rate schedules.

Q. Do you have a recommendation to allocate the PPA Rider charges or credits to rate schedules, if the Commission approves the rider?

A. Yes. I recommend that the PPA Rider charges or credits be allocated on a demand basis using each rate classes' contribution to the Ohio Power coincident peaks during the summer months of June through September. These months correspond to the likely occurrence of the 5 highest PJM peaks that are used to assign capacity costs in PJM. While I do not oppose the direct use of the PJM 5 highest peaks as an allocator, a traditional 4 CP allocator (average of each classes' contribution to the month peaks in each of the 4 summer months) may provide more stability.

Q. Why is it appropriate to allocate the net PPA Rider charges or credits on a demand basis?

A. The predominant costs that will be included in the PPA Rider are the fixed revenue requirements associated with the PPA generating units. These are demand related costs and it is appropriate to allocate them based on a demand allocation factor. To the extent that the PPA Rider provides energy savings based on the net margins from selling the output of the PPA units into the PJM market, these margins should be treated as credits to the otherwise applicable fixed costs recovered in the PPA Rider.

Also, to the extent that the PPA units provide capacity revenues from sales into the BRA and Incremental Auctions, these revenue credits are appropriately classified as demand related and serve to reduce the fixed revenue requirements recovered in the PPA Rider.

Q. Is your proposal consistent with the proposal of the FirstEnergy Companies for rate recovery of its proposed Retail Rate Stability Rider ("RRS")?

A. Yes, that is my understanding based on reviewing the testimony FirstEnergy witness Joanne Savage.[3]

Q. What is your ultimate recommendation?

A. If the Commission determines that a PPA should be approved, then the modification and recommendations that OEG is recommending in my testimony and in the testimony of OEG witnesses Taylor and Kollen should also be adopted.

Q. Does this conclude your testimony?

A. Yes.

[3] Direct Testimony of Joanne Savage at page 4, Case No. 14-1297-EL-SSO, August 4, 2014.

BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In The Matter Of The Application Seeking Approval Of Ohio Power Company's Proposal To Enter Into An Affiliate Power Purchase Agreement For Inclusion In The Power Purchase Agreement Rider	:	**Case No. 14-1693-EL-RDR**
In The Matter Of The Application Of Ohio Power Company For Approval Of Certain Accounting Authority	:	**Case No. 14-1694-EL-AAM**

EXHIBITS

OF

STEPHEN J. BARON

Professional Qualifications

Of

Stephen J. Baron

Mr. Baron graduated from the University of Florida in 1972 with a B.A. degree with high honors in Political Science and significant coursework in Mathematics and Computer Science. In 1974, he received a Master of Arts Degree in Economics, also from the University of Florida. His areas of specialization were econometrics, statistics, and public utility economics. His thesis concerned the development of an econometric model to forecast electricity sales in the State of Florida, for which he received a grant from the Public Utility Research Center of the University of Florida. In addition, he has advanced study and coursework in time series analysis and dynamic model building.

Mr. Baron has more than thirty years of experience in the electric utility industry in the areas of cost and rate analysis, forecasting, planning, and economic analysis.

Following the completion of my graduate work in economics, he joined the staff of the Florida Public Service Commission in August of 1974 as a Rate Economist. His responsibilities included the analysis of rate cases for electric, telephone, and gas utilities, as well as the preparation of cross-examination material and the preparation of staff recommendations.

In December 1975, he joined the Utility Rate Consulting Division of Ebasco Services, Inc.

as an Associate Consultant. In the seven years he worked for Ebasco, he received successive promotions, ultimately to the position of Vice President of Energy Management Services of Ebasco Business Consulting Company. His responsibilities included the management of a staff of consultants engaged in providing services in the areas of econometric modeling, load and energy forecasting, production cost modeling, planning, cost-of-service analysis, cogeneration, and load management.

He joined the public accounting firm of Coopers & Lybrand in 1982 as a Manager of the Atlanta Office of the Utility Regulatory and Advisory Services Group. In this capacity he was responsible for the operation and management of the Atlanta office. His duties included the technical and administrative supervision of the staff, budgeting, recruiting, and marketing as well as project management on client engagements. At Coopers & Lybrand, he specialized in utility cost analysis, forecasting, load analysis, economic analysis, and planning.

In January 1984, he joined the consulting firm of Kennedy and Associates as a Vice President and Principal. Mr. Baron became President of the firm in January 1991.

During the course of his career, he has provided consulting services to more than thirty utility, industrial, and Public Service Commission clients, including three international utility clients.

He has presented numerous papers and published an article entitled "How to Rate Load Management Programs" in the March 1979 edition of "Electrical World." His article on "Standby Electric Rates" was published in the November 8, 1984 issue of "Public Utilities Fortnightly." In February of 1984, he completed a detailed analysis entitled "Load Data Transfer Techniques" on behalf of the Electric Power Research Institute, which published the study.

Mr. Baron has presented testimony as an expert witness in Arizona, Arkansas, Colorado, Connecticut, Florida, Georgia, Indiana, Kentucky, Louisiana, Maine, Michigan, Minnesota, Maryland, Missouri, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Texas, Utah, Virginia, West Virginia, Wisconsin, Wyoming, the Federal Energy Regulatory Commission and in United States Bankruptcy Court. A list of his specific regulatory appearances follows.

Expert Testimony Appearances
of
Stephen J. Baron
As of August 2015

Date	Case	Jurisdict.	Party	Utility	Subject
4/81	203(B)	KY	Louisville Gas & Electric Co.	Louisville Gas & Electric Co.	Cost-of-service.
4/81	ER-81-42	MO	Kansas City Power & Light Co.	Kansas City Power & Light Co.	Forecasting.
6/81	U-1933	AZ	Arizona Corporation Commission	Tucson Electric Co.	Forecasting planning.
2/84	8924	KY	Airco Carbide	Louisville Gas & Electric Co.	Revenue requirements, cost-of-service, forecasting, weather normalization.
3/84	84-038-U	AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Excess capacity, cost-of-service, rate design.
5/84	830470-EI	FL	Florida Industrial Power Users' Group	Florida Power Corp.	Allocation of fixed costs, load and capacity balance, and reserve margin. Diversification of utility.
10/84	84-199-U	AR	Arkansas Electric Energy Consumers	Arkansas Power and Light Co.	Cost allocation and rate design.
11/84	R-842651	PA	Lehigh Valley Power Committee	Pennsylvania Power & Light Co.	Interruptible rates, excess capacity, and phase-in.
1/85	85-65	ME	Airco Industrial Gases	Central Maine Power Co.	Interruptible rate design.
2/85	I-840381	PA	Philadelphia Area Industrial Energy Users' Group	Philadelphia Electric Co.	Load and energy forecast.
3/85	9243	KY	Alcan Aluminum Corp., et al.	Louisville Gas & Electric Co.	Economics of completing fossil generating unit.
3/85	3498-U	GA	Attorney General	Georgia Power Co.	Load and energy forecasting, generation planning economics.
3/85	R-842632	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Generation planning economics, prudence of a pumped storage hydro unit.
5/85	84-249	AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Cost-of-service, rate design return multipliers.
5/85		City of Santa Clara	Chamber of Commerce	Santa Clara Municipal	Cost-of-service, rate design.

Expert Testimony Appearances
of
Stephen J. Baron
As of August 2015

Date	Case	Jurisdict.	Party	Utility	Subject
6/85	84-768-E-42T	WV	West Virginia Industrial Intervenors	Monongahela Power Co.	Generation planning economics, prudence of a pumped storage hydro unit.
6/85	E-7 Sub 391	NC	Carolina Industrials (CIGFUR III)	Duke Power Co.	Cost-of-service, rate design, interruptible rate design.
7/85	29046	NY	Industrial Energy Users Association	Orange and Rockland Utilities	Cost-of-service, rate design.
10/85	85-043-U	AR	Arkansas Gas Consumers	Arkla, Inc.	Regulatory policy, gas cost-of-service, rate design.
10/85	85-63	ME	Airco Industrial Gases	Central Maine Power Co.	Feasibility of interruptible rates, avoided cost.
2/85	ER-8507698	NJ	Air Products and Chemicals	Jersey Central Power & Light Co.	Rate design.
3/85	R-850220	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Optimal reserve, prudence, off-system sales guarantee plan.
2/86	R-850220	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Optimal reserve margins, prudence, off-system sales guarantee plan.
3/86	85-299U	AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Cost-of-service, rate design, revenue distribution.
3/86	85-726-EL-AIR	OH	Industrial Electric Consumers Group	Ohio Power Co.	Cost-of-service, rate design, interruptible rates.
5/86	86-081-E-GI	WV	West Virginia Energy Users Group	Monongahela Power Co.	Generation planning economics, prudence of a pumped storage hydro unit.
8/86	E-7 Sub 408	NC	Carolina Industrial Energy Consumers	Duke Power Co.	Cost-of-service, rate design, interruptible rates.
10/86	U-17378	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Excess capacity, economic analysis of purchased power.
12/86	38063	IN	Industrial Energy Consumers	Indiana & Michigan Power Co.	Interruptible rates.

Expert Testimony Appearances
of
Stephen J. Baron
As of August 2015

Date	Case	Jurisdict.	Party	Utility	Subject
3/87	EL-86-53-001 EL-86-57-001	Federal Energy Regulatory Commission (FERC)	Louisiana Public Service Commission Staff	Gulf States Utilities, Southern Co.	Cost/benefit analysis of unit power sales contract.
4/87	U-17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Load forecasting and imprudence damages, River Bend Nuclear unit.
5/87	87-023-E-C	WV	Airco Industrial Gases	Monongahela Power Co.	Interruptible rates.
5/87	87-072-E-G1	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Analyze Mon Power's fuel filing and examine the reasonableness of MP's claims.
5/87	86-524-E-SC	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Economic dispatching of pumped storage hydro unit.
5/87	9781	KY	Kentucky Industrial Energy Consumers	Louisville Gas & Electric Co.	Analysis of impact of 1986 Tax Reform Act.
6/87	3673-U	GA	Georgia Public Service Commission	Georgia Power Co.	Economic prudence, evaluation of Vogtle nuclear unit - load forecasting, planning.
6/87	U-17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Phase-in plan for River Bend Nuclear unit.
7/87	85-10-22	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power Co.	Methodology for refunding rate moderation fund.
8/87	3673-U	GA	Georgia Public Service Commission	Georgia Power Co.	Test year sales and revenue forecast.
9/87	R-850220	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Excess capacity, reliability of generating system.
10/87	R-870651	PA	Duquesne Industrial Intervenors	Duquesne Light Co.	Interruptible rate, cost-of-service, revenue allocation, rate design.
10/87	I-860025	PA	Pennsylvania Industrial Intervenors		Proposed rules for cogeneration, avoided cost, rate recovery.
10/87	E-015/	MN	Taconite	Minnesota Power	Excess capacity, power and

Expert Testimony Appearances
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Stephen J. Baron
As of August 2015

Date	Case	Jurisdict.	Party	Utility	Subject
	GR-87-223		Intervenors	& Light Co.	cost-of-service, rate design.
10/87	8702-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Revenue forecasting, weather normalization.
12/87	87-07-01	CT	Connecticut Industrial Energy Consumers	Connecticut Light Power Co.	Excess capacity, nuclear plant phase-in.
3/88	10064	KY	Kentucky Industrial Energy Consumers	Louisville Gas & Electric Co.	Revenue forecast, weather normalization rate treatment of cancelled plant.
3/88	87-183-TF	AR	Arkansas Electric Consumers	Arkansas Power & Light Co.	Standby/backup electric rates.
5/88	870171C001	PA	GPU Industrial Intervenors	Metropolitan Edison Co.	Cogeneration deferral mechanism, modification of energy cost recovery (ECR).
6/88	870172C005	PA	GPU Industrial Intervenors	Pennsylvania Electric Co.	Cogeneration deferral mechanism, modification of energy cost recovery (ECR).
7/88	88-171-EL-AIR 88-170-EL-AIR Interim Rate Case	OH	Industrial Energy Consumers	Cleveland Electric/ Toledo Edison	Financial analysis/need for interim rate relief.
7/88	Appeal of PSC	19th Judicial Docket U-17282	Louisiana Public Service Commission Circuit Court of Louisiana	Gulf States Utilities	Load forecasting, imprudence damages.
11/88	R-880989	PA	United States Steel	Carnegie Gas	Gas cost-of-service, rate design.
11/88	88-171-EL-AIR 88-170-EL-AIR	OH	Industrial Energy Consumers	Cleveland Electric/ Toledo Edison. General Rate Case.	Weather normalization of peak loads, excess capacity, regulatory policy.
3/89	870216/283 284/286	PA	Armco Advanced Materials Corp., Allegheny Ludlum Corp.	West Penn Power Co.	Calculated avoided capacity, recovery of capacity payments.
8/89	8555	TX	Occidental Chemical Corp.	Houston Lighting & Power Co.	Cost-of-service, rate design.

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Date	Case	Jurisdict.	Party	Utility	Subject
8/89	3840-U	GA	Georgia Public Service Commission	Georgia Power Co.	Revenue forecasting, weather normalization.
9/89	2087	NM	Attorney General of New Mexico	Public Service Co. of New Mexico	Prudence - Palo Verde Nuclear Units 1, 2 and 3, load fore-casting.
10/89	2262	NM	New Mexico Industrial Energy Consumers	Public Service Co. of New Mexico	Fuel adjustment clause, off-system sales, cost-of-service, rate design, marginal cost.
11/89	38728	IN	Industrial Consumers for Fair Utility Rates	Indiana Michigan Power Co.	Excess capacity, capacity equalization, jurisdictional cost allocation, rate design, interruptible rates.
1/90	U-17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Jurisdictional cost allocation, O&M expense analysis.
5/90	890366	PA	GPU Industrial Intervenors	Metropolitan Edison Co.	Non-utility generator cost recovery.
6/90	R-901609	PA	Armco Advanced Materials Corp., Allegheny Ludlum Corp.	West Penn Power Co.	Allocation of QF demand charges in the fuel cost, cost-of-service, rate design.
9/90	8278	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Cost-of-service, rate design, revenue allocation.
12/90	U-9346 Rebuttal	MI	Association of Businesses Advocating Tariff Equity	Consumers Power Co.	Demand-side management, environmental externalities.
12/90	U-17282 Phase IV	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Revenue requirements, jurisdictional allocation.
12/90	90-205	ME	Airco Industrial Gases	Central Maine Power Co.	Investigation into interruptible service and rates.
1/91	90-12-03 Interim	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power Co.	Interim rate relief, financial analysis, class revenue allocation.
5/91	90-12-03 Phase II	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power Co.	Revenue requirements, cost-of-service, rate design, demand-side management.

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Stephen J. Baron
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Date	Case	Jurisdict.	Party	Utility	Subject
8/91	E-7, SUB SUB 487	NC	North Carolina Industrial Energy Consumers	Duke Power Co.	Revenue requirements, cost allocation, rate design, demand-side management.
8/91	8341 Phase I	MD	Westvaco Corp.	Potomac Edison Co.	Cost allocation, rate design, 1990 Clean Air Act Amendments.
8/91	91-372 EL-UNC	OH	Armco Steel Co., L.P.	Cincinnati Gas & Electric Co.	Economic analysis of cogeneration, avoid cost rate.
9/91	P-910511 P-910512	PA	Allegheny Ludlum Corp., Armco Advanced Materials Co., The West Penn Power Industrial Users' Group	West Penn Power Co.	Economic analysis of proposed CWIP Rider for 1990 Clean Air Act Amendments expenditures.
9/91	91-231 -E-NC	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Economic analysis of proposed CWIP Rider for 1990 Clean Air Act Amendments expenditures.
10/91	8341 - Phase II	MD	Westvaco Corp.	Potomac Edison Co.	Economic analysis of proposed CWIP Rider for 1990 Clean Air Act Amendments expenditures.
10/91	U-17282	LA	Louisiana Public Service Commission Staff	Gulf States Utilities	Results of comprehensive management audit.
Note: No testimony was prefiled on this.					
11/91	U-17949 Subdocket A	LA	Louisiana Public Service Commission Staff	South Central Bell Telephone Co. and proposed merger with Southern Bell Telephone Co.	Analysis of South Central Bell's restructuring and
12/91	91-410- EL-AIR	OH	Armco Steel Co., Air Products & Chemicals, Inc.	Cincinnati Gas & Electric Co.	Rate design, interruptible rates.
12/91	P-880286	PA	Armco Advanced Materials Corp., Allegheny Ludlum Corp.	West Penn Power Co.	Evaluation of appropriate avoided capacity costs - QF projects.
1/92	C-913424	PA	Duquesne Interruptible Complainants	Duquesne Light Co.	Industrial interruptible rate.
6/92	92-02-19	CT	Connecticut Industrial Energy Consumers	Yankee Gas Co.	Rate design.

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Date	Case	Jurisdict.	Party	Utility	Subject
8/92	2437	NM	New Mexico Industrial Intervenors	Public Service Co. of New Mexico	Cost-of-service.
8/92	R-00922314	PA	GPU Industrial Intervenors	Metropolitan Edison Co.	Cost-of-service, rate design, energy cost rate.
9/92	39314	ID	Industrial Consumers for Fair Utility Rates	Indiana Michigan Power Co.	Cost-of-service, rate design, energy cost rate, rate treatment.
10/92	M-00920312 C-007	PA	The GPU Industrial Intervenors	Pennsylvania Electric Co.	Cost-of-service, rate design, energy cost rate, rate treatment.
12/92	U-17949	LA	Louisiana Public Service Commission Staff	South Central Bell Co.	Management audit.
12/92	R-00922378	PA	Armco Advanced Materials Co. The WPP Industrial Intervenors	West Penn Power Co.	Cost-of-service, rate design, energy cost rate, SO_2 allowance rate treatment.
1/93	8487	MD	The Maryland Industrial Group	Baltimore Gas & Electric Co.	Electric cost-of-service and rate design, gas rate design (flexible rates).
2/93	E002/GR-92-1185	MN	North Star Steel Co. Praxair, Inc.	Northern States Power Co.	Interruptible rates.
4/93	EC92 21000 ER92-806-000 (Rebuttal)	Federal Energy Regulatory Commission	Louisiana Public Service Commission Staff	Gulf States Utilities/Entergy agreement.	Merger of GSU into Entergy System; impact on system
7/93	93-0114-E-C	WV	Airco Gases	Monongahela Power Co.	Interruptible rates.
8/93	930759-EG	FL	Florida Industrial Power Users' Group	Generic - Electric Utilities	Cost recovery and allocation of DSM costs.
9/93	M-009 30406	PA	Lehigh Valley Power Committee	Pennsylvania Power & Light Co.	Ratemaking treatment of off-system sales revenues.
11/93	346	KY	Kentucky Industrial Utility Customers	Generic - Gas Utilities	Allocation of gas pipeline transition costs - FERC Order 636.
12/93	U-17735	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	Nuclear plant prudence, forecasting, excess capacity.

Expert Testimony Appearances
of
Stephen J. Baron
As of August 2015

Date	Case	Jurisdict.	Party	Utility	Subject
4/94	E-015/ GR-94-001	MN	Large Power Intervenors	Minnesota Power Co.	Cost allocation, rate design, rate phase-in plan.
5/94	U-20178	LA	Louisiana Public Service Commission	Louisiana Power & Light Co.	Analysis of least cost integrated resource plan and demand-side management program.
7/94	R-00942986	PA	Armco, Inc.; West Penn Power Industrial Intervenors	West Penn Power Co.	Cost-of-service, allocation of rate increase, rate design, emission allowance sales, and operations and maintenance expense.
7/94	94-0035-E-42T	WV	West Virginia Energy Users Group	Monongahela Power Co.	Cost-of-service, allocation of rate increase, and rate design.
8/94	EC94 13-000	Federal Energy Regulatory Commission	Louisiana Public Service Commission	Gulf States Utilities/Entergy	Analysis of extended reserve shutdown units and violation of system agreement by Entergy.
9/94	R-00943 081 R-00943 081C0001	PA	Lehigh Valley Power Committee	Pennsylvania Public Utility Commission	Analysis of interruptible rate terms and conditions, availability.
9/94	U-17735	LA	Louisiana Public Service Commission	Cajun Electric Power Cooperative	Evaluation of appropriate avoided cost rate.
9/94	U-19904	LA	Louisiana Public Service Commission	Gulf States Utilities	Revenue requirements.
10/94	5258-U	GA	Georgia Public Service Commission	Southern Bell Telephone & Telegraph Co.	Proposals to address competition in telecommunication markets.
11/94	EC94-7-000 ER94-898-000	FERC	Louisiana Public Service Commission	El Paso Electric and Central and Southwest	Merger economics, transmission equalization hold harmless proposals.
2/95	941-430EG	CO	CF&I Steel, L.P.	Public Service Company of Colorado	Interruptible rates, cost-of-service.
4/95	R-00943271	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Cost-of-service, allocation of rate increase, rate design, interruptible rates.
6/95	C-00913424 C-00946104	PA	Duquesne Interruptible Complainants	Duquesne Light Co.	Interruptible rates.

Expert Testimony Appearances
of
Stephen J. Baron
As of August 2015

Date	Case	Jurisdict.	Party	Utility	Subject
8/95	ER95-112 -000	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Open Access Transmission Tariffs - Wholesale.
10/95	U-21485	LA	Louisiana Public Service Commission	Gulf States Utilities Company	Nuclear decommissioning, revenue requirements, capital structure.
10/95	ER95-1042 -000	FERC	Louisiana Public Service Commission	System Energy Resources, Inc.	Nuclear decommissioning, revenue requirements.
10/95	U-21485	LA	Louisiana Public Service Commission	Gulf States Utilities Co.	Nuclear decommissioning and cost of debt capital, capital structure.
11/95	I-940032	PA	Industrial Energy Consumers of Pennsylvania	State-wide - all utilities	Retail competition issues.
7/96	U-21496	LA	Louisiana Public Service Commission	Central Louisiana Electric Co.	Revenue requirement analysis.
7/96	8725	MD	Maryland Industrial Group	Baltimore Gas & Elec. Co., Potomac Elec. Power Co., Constellation Energy Co.	Ratemaking issues associated with a Merger.
8/96	U-17735	LA	Louisiana Public Service Commission	Cajun Electric Power Cooperative	Revenue requirements.
9/96	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Decommissioning, weather normalization, capital structure.
2/97	R-973877	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Competitive restructuring policy issues, stranded cost, transition charges.
6/97	Civil Action No. 94-11474	US Bank-ruptcy Court Middle District of Louisiana	Louisiana Public Service Commission	Cajun Electric Power Cooperative	Confirmation of reorganization plan; analysis of rate paths produced by competing plans.
6/97	R-973953	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Retail competition issues, rate unbundling, stranded cost analysis.
6/97	8738	MD	Maryland Industrial Group	Generic	Retail competition issues

Expert Testimony Appearances
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Stephen J. Baron
As of August 2015

Date	Case	Jurisdict.	Party	Utility	Subject
7/97	R-973954	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Retail competition issues, rate unbundling, stranded cost analysis.
10/97	97-204	KY	Alcan Aluminum Corp. Southwire Co.	Big River Electric Corp.	Analysis of cost of service issues - Big Rivers Restructuring Plan
10/97	R-974008	PA	Metropolitan Edison Industrial Users	Metropolitan Edison Co.	Retail competition issues, rate unbundling, stranded cost analysis.
10/97	R-974009	PA	Pennsylvania Electric Industrial Customer	Pennsylvania Electric Co.	Retail competition issues, rate unbundling, stranded cost analysis.
11/97	U-22491	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Decommissioning, weather normalization, capital structure.
11/97	P-971265	PA	Philadelphia Area Industrial Energy Users Group	Enron Energy Services Power, Inc./ PECO Energy	Analysis of Retail Restructuring Proposal.
12/97	R-973981	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Retail competition issues, rate unbundling, stranded cost analysis.
12/97	R-974104	PA	Duquesne Industrial Intervenors	Duquesne Light Co.	Retail competition issues, rate unbundling, stranded cost analysis.
3/98 (Allocated Stranded Cost Issues)	U-22092	LA	Louisiana Public Service Commission	Gulf States Utilities Co.	Retail competition, stranded cost quantification.
3/98	U-22092		Louisiana Public Service Commission	Gulf States Utilities, Inc.	Stranded cost quantification, restructuring issues.
9/98	U-17735		Louisiana Public Service Commission	Cajun Electric Power Cooperative, Inc.	Revenue requirements analysis, weather normalization.
12/98	8794	MD	Maryland Industrial Group and Millennium Inorganic Chemicals Inc.	Baltimore Gas and Electric Co.	Electric utility restructuring, stranded cost recovery, rate unbundling.
12/98	U-23358	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Nuclear decommissioning, weather normalization, Entergy System Agreement.
5/99 (Cross-Answering Testimony)	EC-98-40-000	FERC	Louisiana Public Service Commission	American Electric Power Co. & Central South West Corp.	Merger issues related to market power mitigation proposals.

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of
Stephen J. Baron
As of August 2015

Date	Case	Jurisdict.	Party	Utility	Subject
5/99 (Response Testimony)	98-426	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co.	Performance based regulation, settlement proposal issues, cross-subsidies between electric. gas services.
6/99	98-0452	WV	West Virginia Energy Users Group	Appalachian Power, Monongahela Power, & Potomac Edison Companies	Electric utility restructuring, stranded cost recovery, rate unbundling.
7/99	99-03-35	CT	Connecticut Industrial \Energy Consumers	United Illuminating Company	Electric utility restructuring, stranded cost recovery, rate unbundling.
7/99	Adversary Proceeding No. 98-1065	U.S. Bankruptcy Court	Louisiana Public Service Commission	Cajun Electric Power Cooperative	Motion to dissolve preliminary injunction.
7/99	99-03-06	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power Co.	Electric utility restructuring, stranded cost recovery, rate unbundling.
10/99	U-24182	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Nuclear decommissioning, weather normalization, Entergy System Agreement.
12/99	U-17735	LA	Louisiana Public Service Commission	Cajun Electric Power Cooperative, Inc.	Ananlysi of Proposed Contract Rates, Market Rates.
03/00	U-17735	LA	Louisiana Public Service Commission	Cajun Electric Power Cooperative, Inc.	Evaluation of Cooperative Power Contract Elections
03/00	99-1658-EL-ETP	OH	AK Steel Corporation	Cincinnati Gas & Electric Co.	Electric utility restructuring, stranded cost recovery, rate Unbundling.

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Date	Case	Jurisdict.	Party	Utility	Subject
08/00	98-0452 E-GI	WVA	West Virginia Energy Users Group	Appalachian Power Co. American Electric Co.	Electric utility restructuring rate unbundling.
08/00	00-1050 E-T 00-1051-E-T	WVA	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Electric utility restructuring rate unbundling.
10/00	SOAH 473-00-1020 PUC 2234	TX	The Dallas-Fort Worth Hospital Council and The Coalition of Independent Colleges And Universities	TXU, Inc.	Electric utility restructuring rate unbundling.
12/00	U-24993	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Nuclear decommissioning, revenue requirements.
12/00	EL00-66-000 & ER00-2854 EL95-33-002	LA	Louisiana Public Service Commission	Entergy Services Inc.	Inter-Company System Agreement: Modifications for retail competition, interruptible load.
04/01	U-21453, U-20925, U-22092 (Subdocket B) Addressing Contested Issues	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Jurisdictional Business Separation - Texas Restructuring Plan
10/01	14000-U	GA	Georgia Public Service Commission Adversary Staff	Georgia Power Co.	Test year revenue forecast.
11/01	U-25687	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Nuclear decommissioning requirements transmission revenues.
11/01	U-25965	LA	Louisiana Public Service Commission	Generic .	Independent Transmission Company ("Transco"). RTO rate design.
03/02	001148-EI	FL	South Florida Hospital and Healthcare Assoc.	Florida Power & Light Company	Retail cost of service, rate design, resource planning and demand side management.
06/02	U-25965	LA	Louisiana Public Service Commission	Entergy Gulf States Entergy Louisiana	RTO Issues
07/02	U-21453	LA	Louisiana Public Service Commission	SWEPCO, AEP	Jurisdictional Business Sep. - Texas Restructuring Plan.

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Date	Case	Jurisdict.	Party	Utility	Subject
08/02	U-25888	LA	Louisiana Public Service Commission	Entergy Louisiana, Inc. Entergy Gulf States, Inc.	Modifications to the Inter-Company System Agreement, Production Cost Equalization.
08/02	EL01-88-000	FERC	Louisiana Public Service Commission	Entergy Services Inc. and the Entergy Operating Companies	Modifications to the Inter-Company System Agreement, Production Cost Equalization.
11/02	02S-315EG	CO	CF&I Steel & Climax Molybdenum Co.	Public Service Co. of Colorado	Fuel Adjustment Clause
01/03	U-17735	LA	Louisiana Public Service Commission	Louisiana Coops	Contract Issues
02/03	02S-594E	CO	Cripple Creek and Victor Gold Mining Co.	Aquila, Inc.	Revenue requirements, purchased power.
04/03	U-26527	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Weather normalization, power purchase expenses, System Agreement expenses.
11/03	ER03-753-000	FERC	Louisiana Public Service Commission Staff	Entergy Services, Inc. and the Entergy Operating Companies	Proposed modifications to System Agreement Tariff MSS-4.
11/03	ER03-583-000 ER03-583-001 ER03-583-002 ER03-681-000, ER03-681-001 ER03-682-000, ER03-682-001 ER03-682-002	FERC	Louisiana Public Service Commission	Entergy Services, Inc., the Entergy Operating Companies, EWO Market-Ing, L.P, and Entergy Power, Inc.	Evaluation of Wholesale Purchased Power Contracts.
12/03	U-27136	LA	Louisiana Public Service Commission	Entergy Louisiana, Inc.	Evaluation of Wholesale Purchased Power Contracts.
01/04	E-01345-03-0437	AZ	Kroger Company	Arizona Public Service Co.	Revenue allocation rate design.
02/04	00032071	PA	Duquesne Industrial Intervenors	Duquesne Light Company	Provider of last resort issues.
03/04	03A-436E	CO	CF&I Steel, LP and Climax Molybedenum	Public Service Company of Colorado	Purchased Power Adjustment Clause.

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Date	Case	Jurisdict.	Party	Utility	Subject
04/04	2003-00433 2003-00434	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co. Kentucky Utilities Co.	Cost of Service Rate Design
0-6/04	03S-539E	CO	Cripple Creek, Victor Gold Mining Co., Goodrich Corp., Holcim (U.S.,), Inc., and The Trane Co.	Aquila, Inc.	Cost of Service, Rate Design Interruptible Rates
06/04	R-00049255	PA	PP&L Industrial Customer Alliance PPLICA	PPL Electric Utilities Corp.	Cost of service, rate design, tariff issues and transmission service charge.
10/04	04S-164E	CO	CF&I Steel Company, Climax Mines	Public Service Company of Colorado	Cost of service, rate design, Interruptible Rates.
03/05	Case No. 2004-00426 Case No. 2004-00421	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Louisville Gas & Electric Co.	Environmental cost recovery.
06/05	050045-EI	FL	South Florida Hospital and Healthcare Assoc.	Florida Power & Light Company	Retail cost of service, rate design
07/05	U-28155	LA	Louisiana Public Service Commission Staff	Entergy Louisiana, Inc. Entergy Gulf States, Inc.	Independent Coordinator of Transmission – Cost/Benefit
09/05	Case Nos. 05-0402-E-CN 05-0750-E-PC	WVA	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Environmental cost recovery, Securitization, Financing Order
01/06	2005-00341	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Company	Cost of service, rate design, transmission expenses. Congestion Cost Recovery Mechanism
03/06	U-22092	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Separation of EGSI into Texas and Louisiana Companies.
04/06	U-25116	LA	Louisiana Public Service Commission Staff	Entergy Louisiana, Inc.	Transmission Prudence Investigation
06/06	R-00061346 C0001-0005	PA	Duquesne Industrial Intervenors & IECPA	Duquesne Light Co.	Cost of Service, Rate Design, Transmission Service Charge, Tariff Issues
06/06	R-00061366 R-00061367 P-00062213 P-00062214		Met-Ed Industrial Energy Users Group and Penelec Industrial Customer Alliance	Metropolitan Edison Co. Pennsylvania Electric Co.	Generation Rate Cap, Transmission Service Charge, Cost of Service, Rate Design, Tariff Issues
07/06	U-22092 Sub-J	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Separation of EGSI into Texas and Louisiana Companies.

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Date	Case	Jurisdict.	Party	Utility	Subject
07/06	Case No. 2006-00130 Case No. 2006-00129	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Louisville Gas & Electric Co.	Environmental cost recovery.
08/06	Case No. PUE-2006-00065	VA	Old Dominion Committee For Fair Utility Rates	Appalachian Power Co.	Cost Allocation, Allocation of Rev Incr, Off-System Sales margin rate treatment
09/06	E-01345A-05-0816	AZ	Kroger Company	Arizona Public Service Co.	Revenue alllocation, cost of service, rate design.
11/06	Doc. No. 97-01-15RE02	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power United Illuminating	Rate unbundling issues.
01/07	Case No. 06-0960-E-42T	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Retail Cost of Service Revenue apportionment
03/07	U-29764	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc. Entergy Louisiana, LLC	Implementation of FERC Decision Jurisdictional & Rate Class Allocation
05/07	Case No. 07-63-EL-UNC	OH	Ohio Energy Group	Ohio Power, Columbus Southern Power	Environmental Surcharge Rate Design
05/07	R-00049255 Remand	PA	PP&L Industrial Customer Alliance PPLICA	PPL Electric Utilities Corp.	Cost of service, rate design, tariff issues and transmission service charge.
06/07	R-00072155	PA	PP&L Industrial Customer Alliance PPLICA	PPL Electric Utilities Corp.	Cost of service, rate design, tariff issues.
07/07	Doc. No. 07F-037E	CO	Gateway Canyons LLC	Grand Valley Power Coop.	Distribution Line Cost Allocation
09/07	Doc. No. 05-UR-103	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Electric Power Co.	Cost of Service, rate design, tariff Issues, Interruptible rates.
11/07	ER07-682-000	FERC	Louisiana Public Service Commission Staff	Entergy Services, Inc. and the Entergy Operating Companies	Proposed modifications to System Agreement Schedule MSS-3. Cost functionalization issues.
1/08	Doc. No. 20000-277-ER-07	WY	Cimarex Energy Company	Rocky Mountain Power (PacifiCorp)	Vintage Pricing, Marginal Cost Pricing Projected Test Year
1/08	Case No. 07-551	OH	Ohio Energy Group	Ohio Edison, Toledo Edison Cleveland Electric Illuminating	Class Cost of Service, Rate Restructuring, Apportionment of Revenue Increase to Rate Schedules
2/08	ER07-956	FERC	Louisiana Public Service Commission Staff	Entergy Services, Inc. and the Entergy Operating Companies	Entergy's Compliance Filing System Agreement Bandwidth Calculations.
2/08	Doc No. P-00072342	PA	West Penn Power Industrial Intervenors	West Penn Power Co.	Default Service Plan issues.

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Date	Case	Jurisdict.	Party	Utility	Subject
3/08	Doc No. E-01933A-05-0650	AZ	Kroger Company	Tucson Electric Power Co.	Cost of Service, Rate Design
05/08	08-0278 E-GI	WV	West Virginia Energy Users Group	Appalachian Power Co. American Electric Power Co.	Expanded Net Energy Cost "ENEC" Analysis.
6/08	Case No. 08-124-EL-ATA	OH	Ohio Energy Group	Ohio Edison, Toledo Edison Cleveland Electric Illuminating	Recovery of Deferred Fuel Cost
7/08	Docket No. 07-035-93	UT	Kroger Company	Rocky Mountain Power Co.	Cost of Service, Rate Design
08/08	Doc. No. 6680-UR-116	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Power and Light Co.	Cost of Service, rate design, tariff Issues, Interruptible rates.
09/08	Doc. No. 6690-UR-119	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Public Service Co.	Cost of Service, rate design, tariff Issues, Interruptible rates.
09/08	Case No. 08-936-EL-SSO	OH	Ohio Energy Group	Ohio Edison, Toledo Edison Cleveland Electric Illuminating	Provider of Last Resort Competitive Solicitation
09/08	Case No. 08-935-EL-SSO	OH	Ohio Energy Group	Ohio Edison, Toledo Edison Cleveland Electric Illuminating	Provider of Last Resort Rate Plan
09/08	Case No. 08-917-EL-SSO 08-918-EL-SSO	OH	Ohio Energy Group	Ohio Power Company Columbus Southern Power Co.	Provider of Last Resort Rate Plan
10/08	2008-00251 2008-00252	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co. Kentucky Utilities Co.	Cost of Service, Rate Design
11/08	08-1511 E-GI	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Expanded Net Energy Cost "ENEC" Analysis.
11/08	M-2008-2036188, M-2008-2036197	PA	Met-Ed Industrial Energy Users Group and Penelec Industrial Customer Alliance	Metropolitan Edison Co. Pennsylvania Electric Co.	Transmission Service Charge
01/09	ER08-1056	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	Entergy's Compliance Filing System Agreement Bandwidth Calculations.
01/09	E-01345A-08-0172	AZ	Kroger Company	Arizona Public Service Co.	Cost of Service, Rate Design
02/09	2008-00409	KY	Kentucky Industrial Utility Customers, Inc.	East Kentucky Power Cooperative, Inc.	Cost of Service, Rate Design

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Date	Case	Jurisdict.	Party	Utility	Subject
5/09	PUE-2009 -00018	VA	VA Committee For Fair Utility Rates	Dominion Virginia Power Company	Transmission Cost Recovery Rider
5/09	09-0177- E-GI	WV	West Virginia Energy Users Group	Appalachian Power Company	Expanded Net Energy Cost "ENEC" Analysis
6/09	PUE-2009 -00016	VA	VA Committee For Fair Utility Rates	Dominion Virginia Power Company	Fuel Cost Recovery Rider
6/09	PUE-2009 -00038	VA	Old Dominion Committee For Fair Utility Rates	Appalachian Power Company	Fuel Cost Recovery Rider
7/09	080677-EI	FL	South Florida Hospital and Healthcare Assoc.	Florida Power & Light Company	Retail cost of service, rate design
8/09	U-20925 (RRF 2004)	LA	Louisiana Public Service Commission Staff	Entergy Louisiana LLC	Interruptible Rate Refund Settlement
9/09	09AL-299E	CO	CF&I Steel Company Climax Molybdenum	Public Service Company of Colorado	Energy Cost Rate issues
9/09	Doc. No. 05-UR-104	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Electric Power Co.	Cost of Service, rate design, tariff Issues, Interruptible rates.
9/09	Doc. No. 6680-UR-117	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Power and Light Co.	Cost of Service, rate design, tariff Issues, Interruptible rates.
10/09	Docket No. 09-035-23	UT	Kroger Company	Rocky Mountain Power Co.	Cost of Service, Allocation of Rev Increase
10/09	09AL-299E	CO	CF&I Steel Company Climax Molybdenum	Public Service Company of Colorado	Cost of Service, Rate Design
11/09	PUE-2009 -00019	VA	VA Committee For Fair Utility Rates	Dominion Virginia Power Company	Cost of Service, Rate Design
11/09	09-1485 E-P	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Expanded Net Energy Cost "ENEC" Analysis.
12/09	Case No. 09-906-EL-SSO	OH	Ohio Energy Group	Ohio Edison, Toledo Edison Cleveland Electric Illuminating	Provider of Last Resort Rate Plan
12/09	ER09-1224	FERC	Louisiana Public Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	Entergy's Compliance Filing System Agreement Bandwidth Calculations.
12/09	Case No. PUE-2009-00030	VA	Old Dominion Committee For Fair Utility Rates	Appalachian Power Co.	Cost Allocation, Allocation of Rev Increase, Rate Design

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Date	Case	Jurisdict.	Party	Utility	Subject
2/10	Docket No. 09-035-23	UT	Kroger Company	Rocky Mountain Power Co.	Rate Design
3/10	Case No. 09-1352-E-42T	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Retail Cost of Service Revenue apportionment
3/10	E015/ GR-09-1151	MN	Large Power Intervenors	Minnesota Power Co.	Cost of Service, rate design
4/10	EL09-61	FERC	Louisiana Public Service Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	System Agreement Issues Related to off-system sales
4/10	2009-00459	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Company	Cost of service, rate design, transmission expenses.
4/10	2009-00548 2009-00549	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co. Kentucky Utilities Co.	Cost of Service, Rate Design
7/10	R-2010-2161575	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Company	Cost of Service, Rate Design
09/10	2010-00167	KY	Kentucky Industrial Utility Customers, Inc.	East Kentucky Power Cooperative, Inc.	Cost of Service, Rate Design
09/10	10M-245E	CO	CF&I Steel Company Climax Molybdenum	Public Service Company of Colorado	Economic Impact of Clean Air Act
11/10	10-0699-E-42T	WV	West Virginia Energy Users Group	Appalachian Power Company	Cost of Service, Rate Design, Transmission Rider
11/10	Doc. No. 4220-UR-116	WI	Wisconsin Industrial Energy Group, Inc.	Northern States Power Co. Wisconsin	Cost of Service, rate design
12/10	10A-554EG	CO	CF&I Steel Company Climax Molybdenum	Public Service Company	Demand Side Management Issues
12/10	10-2586-EL-SSO	OH	Ohio Energy Group	Duke Energy Ohio	Provider of Last Resort Rate Plan Electric Security Plan
3/11	20000-384-ER-10	WY	Wyoming Industrial Energy Consumers	Rocky Mountain Power Wyoming	Electric Cost of Service, Revenue Apportionment, Rate Design
5/11	2011-00036	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corporation	Cost of Service, Rate Design
6/11	Docket No. 10-035-124	UT	Kroger Company	Rocky Mountain Power Co.	Class Cost of Service
6/11	PUE-2011-00045	VA	VA Committee For Fair Utility Rates	Dominion Virginia Power Company	Fuel Cost Recovery Rider

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Date	Case	Jurisdict.	Party	Utility	Subject
07/11	U-29764	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc. Entergy Louisiana, LLC	Entergy System Agreement - Successor Agreement, Revisions, RTO Day 2 Market Issues
07/11	Case Nos. 11-346-EL-SSO 11-348-EL-SSO	OH	Ohio Energy Group	Ohio Power Company Columbus Southern Power Co.	Electric Security Rate Plan, Provider of Last Resort Issues
08/11	PUE-2011-00034	VA	Old Dominion Committee For Fair Utility Rates	Appalachian Power Co.	Cost Allocation, Rate Recovery of RPS Costs
09/11	2011-00161 2011-00162	KY	Kentucky Industrial Utility	Louisville Gas & Electric Co. Kentucky Utilities Company	Environmental Cost Recovery
09/11	Case Nos. 11-346-EL-SSO 11-348-EL-SSO	OH	Ohio Energy Group	Ohio Power Company Columbus Southern Power Co.	Electric Security Rate Plan, Stipulation Support Testimony
10/11	11-0452 E-P-T	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Energy Efficiency/Demand Reduction Cost Recovery
11/11	11-1272 E-P	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Expanded Net Energy Cost "ENEC" Analysis
11/11	E-01345A-11-0224	AZ	Kroger Company	Arizona Public Service Co.	Decoupling
12/11	E-01345A-11-0224	AZ	Kroger Company	Arizona Public Service Co.	Cost of Service, Rate Design
3/12	Case No. 2011-00401	KY	Kentucky Industrial Utility Consumers	Kentucky Power Company	Environmental Cost Recovery
4/12	2011-00036 Rehearing Case	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corporation	Cost of Service, Rate Design
5/12	2011-346 2011-348	OH	Ohio Energy Group	Ohio Power Company	Electric Security Rate Plan Interruptible Rate Issues
6/12	PUE-2012 -00051	VA	Old Dominion Committee For Fair Utility Rates	Appalachian Power Company	Fuel Cost Recovery Rider
6/12	12-00012 12-00026	TN	Eastman Chemical Co. Air Products and Chemicals, Inc.	Kingsport Power Company	Demand Response Programs
6/12	Docket No. 11-035-200	UT	Kroger Company	Rocky Mountain Power Co.	Class Cost of Service
6/12	12-0275-E-GI-EE	WV	West Virginia Energy Users Group	Appalachian Power Company	Energy Efficiency Rider

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Date	Case	Jurisdict.	Party	Utility	Subject
6/12	12-0399-E-P	WV	West Virginia Energy Users Group	Appalachian Power Company	Expanded Net Energy Cost ("ENEC")
7/12	120015-EI	FL	South Florida Hospital and Healthcare Assoc.	Florida Power & Light Company	Retail cost of service, rate design
7/12	2011-00063	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corporation	Environmental Cost Recovery
8/12	Case No. 2012-00226	KY	Kentucky Industrial Utility Consumers	Kentucky Power Company	Real Time Pricing Tariff
9/12	ER12-1384	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Entergy System Agreement, Cancelled Plant Cost Treatment
9/12	2012-00221 2012-00222	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co. Kentucky Utilities Co.	Cost of Service, Rate Design
11/12	12-1238 E-GI	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Expanded Net Energy Cost Recovery Issues
12/12	U-29764	LA	Louisiana Public Service Commission Staff	Entergy Gulf States Louisiana	Purchased Power Contracts
12/12	EL09-61	FERC	Louisiana Public Service Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	System Agreement Issues Related to off-system sales Damages Phase
12/12	E-01933A-12-0291	AZ	Kroger Company	Tucson Electric Power Co.	Decoupling
1/13	12-1188 E-PC	WV	West Virginia Energy Users Group	Appalachian Power Company	Securitization of ENEC Costs
1/13	E-01933A-12-0291	AZ	Kroger Company	Tucson Electric Power Co.	Cost of Service, Rate Design
4/13	12-1571 E-PC	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Generation Resource Transition Plan Issues
4/13	PUE-2012 -00141	VA	Old Dominion Committee For Fair Utility Rates	Appalachian Power Company	Generation Asset Transfer Issues
6/13	12-1655 E-PC	WV	West Virginia Energy Users Group	Appalachian Power Company	Generation Asset Transfer Issues
06/13	U-32675	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc. Entergy Louisiana, LLC	MISO Joint Implementation Plan Issues

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Date	Case	Jurisdict.	Party	Utility	Subject
7/13	130040-EI	FL	WCF Health Utility Alliance	Tampa Electric Company	Cost of Service, Rate Design
7/13	13-0467-E-P	WV	West Virginia Energy Users Group	Appalachian Power Company	Expanded Net Energy Cost ("ENEC")
7/13	13-0462-E-P	WV	West Virginia Energy Users Group	Appalachian Power Company	Energy Efficiency Issues
8/13	13-0557-E-P	WV	West Virginia Energy Users Group	Appalachian Power Company	Right-of-Way, Vegetation Control Cost Recovery Surcharge Issues
10/13	2013-00199	KY	Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corporation	Ratemaking Policy Associated with Rural Economic Reserve Funds
10/13	13-0764-E-CN	WV	West Virginia Energy Users Group	Appalachian Power Company	Rate Recovery Issues – Clinch River Gas Conversion Project
11/13	R-2013-2372129	PA	United States Steel Corporation	Duquesne Light Company	Cost of Service, Rate Design
11/13	13A-0686EG	CO	CF&I Steel Company Climax Molybdenum	Public Service Company of Colorado	Demand Side Management Issues
11/13	13-1064-E-P	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Right-of-Way, Vegetation Control Cost Recovery Surcharge Issues
4/14	ER-432-002	FERC	Louisiana Public Service Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	System Agreement Issues Related to Union Pacific Railroad Litigation Settlement
5/14	2013-2385 2013-2386	OH	Ohio Energy Group	Ohio Power Company	Electric Security Rate Plan Interruptible Rate Issues
5/14	14-0344-E-P	WV	West Virginia Energy Users Group	Appalachian Power Company	Expanded Net Energy Cost ("ENEC")
5/14	14-0345-E-PC	WV	West Virginia Energy Users Group	Appalachian Power Company	Energy Efficiency Issues
5/14	Docket No. 13-035-184	UT	Kroger Company	Rocky Mountain Power Co.	Class Cost of Service
7/14	PUE-2014 -00007	VA	Old Dominion Committee For Fair Utility Rates	Appalachian Power Company	Renewable Portfolio Standard Rider Issues
7/14	ER13-2483	FERC	Bear Island Paper WB LLC	Old Dominion Electric Cooperative	Cost of Service, Rate Design Issues
8/14	14-0546-E-PC	WV	West Virginia Energy Users Group	Appalachian Power Company	Rate Recovery Issues – Mitchell Asset Transfer
8/14	PUE-2014	VA	Old Dominion Committee	Appalachian Power	Biennial Review Case - Cost

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Date	Case	Jurisdict.	Party	Utility	Subject
	-00026			Company	of Service Issues
9/14	14-841-EL-SSO	OH	Ohio Energy Group	Duke Energy Ohio	Electric Security Rate Plan Standard Service Offer
10/14	14-0702-E-42T	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Cost of Service, Rate Design
11/14	14-1550-E-P	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Expanded Net Energy Cost ("ENEC")
12/14	EL14-026	SD	Black Hills Power Industrial Intervenors	Black Hills Power, Inc.	Cost of Service Issues
12/14	14-1152-E-42T	WV	West Virginia Energy Users Group	Appalachian Power Company	Cost of Service, Rate Design transmission, lost revenues
2/15	14-1297 El-SS0	OH	Ohio Energy Group	Ohio Edison, Toledo Edison Cleveland Electric Illuminating	Electric Security Rate Plan Standard Service Offer
3/15	2014-00396	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Company	Cost of service, rate design, transmission expenses.
3/15	2014-00371 2014-00372	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co. Kentucky Utilities Co.	Cost of Service, Rate Design
5/15	EL10-65	FERC	Louisiana Public Service Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	System Agreement Issues Related to Interruptible load
615	14-1580-EL-RDR	OH	Ohio Energy Group	Duke Energy Ohio	Energy Efficiency Rider Issues
7/15	EL10-65	FERC	Louisiana Public Service Service Commission	Entergy Services, Inc. and the Entergy Operating Companies	System Agreement Issues Related to Off-System Sales and Bandwidth Tariff
8/15	PUE-2015 -00034	VA	Old Dominion Committee For Fair Utility Rates	Appalachian Power Company	Renewable Portfolio Standard Rider Issues
8/15	87-0669-E-P	WV	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Cost of Service, Rate Design

BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In The Matter Of The Application Seeking Approval Of Ohio Power Company's Proposal To Enter Into An Affiliate Power Purchase Agreement For Inclusion In The Power Purchase Agreement Rider	:	**Case No. 14-1693-EL-RDR**
In The Matter Of The Application Of Ohio Power Company For Approval Of Certain Accounting Authority	:	**Case No. 14-1694-EL-AAM**

DIRECT TESTIMONY

OF

ALAN S. TAYLOR

ON BEHALF OF

THE OHIO ENERGY GROUP

SEDWAY CONSULTING, INC.
BOULDER, COLORADO

September 11, 2015

BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In The Matter Of The Application Seeking Approval Of Ohio Power Company's Proposal To Enter Into An Affiliate Power Purchase Agreement For Inclusion In The Power Purchase Agreement Rider	:	**Case No. 14-1693-EL-RDR**
In The Matter Of The Application Of Ohio Power Company For Approval Of Certain Accounting Authority	:	**Case No. 14-1694-EL-AAM**

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I. QUALIFICATIONS AND SUMMARY

Q. Please state your name and business address.

A. My name is Alan S. Taylor. My business address is Sedway Consulting, Inc. ("Sedway Consulting"), 821 15th Street, Boulder, Colorado 80302.

Q. What is your occupation and by who are you employed?

A. I am the President of Sedway Consulting, a firm that specializes in providing independent evaluation services to utilities around the country in procuring and negotiating contracts for new power supplies and hedging products.

Q. Please describe your education and professional experience.

A. I earned a Bachelor of Science Degree in energy engineering from the Massachusetts Institute of Technology and a Masters of Business Administration from the Haas School of Business at the University of California, Berkeley, where I specialized in corporate finance.

I have worked in the utility planning and operations area for 29 years, predominantly as a consultant specializing in integrated resource planning, competitive bidding analysis, utility industry restructuring, market price forecasting, and asset valuation. I have testified before state commissions in proceedings involving resource solicitations, environmental surcharges, fuel adjustment clauses, and other rate riders.

I began my career at Baltimore Gas & Electric Company (BG&E), where I performed efficiency and environmental compliance testing on the utility system's power plants. I subsequently worked for five years as a senior consultant at Energy Management Associates (EMA, subsequently New Energy Associates and now a division of Ventyx), training and assisting over two dozen utilities in their use of EMA's operational and strategic planning models, PROMOD III and PROSCREEN II. During my graduate studies, I was employed by Pacific Gas & Electric Company (PG&E), where I analyzed the utility's proposed demand side management (DSM) incentive ratemaking mechanism, and by Lawrence Berkeley Laboratory (LBL), where I evaluated utility regulatory policies surrounding the development of brownfield generation sites.

Subsequently, I worked at PHB Hagler Bailly (and its predecessor firms) for ten years, serving ultimately as a vice president in the firm's Global Economic Business Services practice and then as a senior member of the Wholesale Energy Markets practice of PA Consulting Group when that firm acquired PHB Hagler Bailly in 2000. In 2001, I founded Sedway Consulting, Inc. and have continued to specialize in economic analyses associated with electricity wholesale markets. I have been the project lead in overseeing dozens of conventional and renewable resource solicitations and have evaluated thousands of proposals for power supply contracts. In addition, I have monitored and evaluated offers in hedging product solicitations and auctions where utility clients were seeking fixed-for-floating swaps, call options, or other hedging products to stabilize their customers' exposure to electric or natural gas market fluctuations.

In recent years, I have been very active in California – a state that took a similar path to the one Ohio has chosen, requiring in the 1990s that investor-owned utilities divest most of their generation and rely on an energy market exchange for their primary power supplies. As I describe later, this led to disastrous results, ultimately causing the state to change course and adopt stabilizing policies that I have helped implement and which may be applicable and valuable for Ohio.

My resume is attached as Taylor Exhibit __ (AST-1).

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of The Ohio Energy Group ("OEG"), a group of large industrial customers of Ohio Power Company ("AEP Ohio" or "the Company"). The members of OEG who take service from the Company are: AK Steel Corporation, ArcelorMittal USA, E.I. duPont de Nemours and Company, Ford Motor Company, Linde, Inc., POET Biorefining, Praxair Inc., TimkenSteel Corporation and Worthington Industries.

Q. Please summarize your testimony.

A. My testimony addresses and makes recommended modifications to AEP Ohio's proposed rider associated with the utility's proposed purchase power agreement (PPA) with its unregulated affiliate, AEP Generation Resources (AEPGR). That PPA is a cost-of-service-based contract that is associated with AEPGR's ownership portion of generating units at four existing power plants (Cardinal, Conesville, Stuart, and Zimmer). The PPA Rider would also include costs and benefits associated with AEP Ohio's entitlement to a portion of the Ohio Valley Electric Cooperative (OVEC) facilities. However, because the OVEC entitlement is not owned by AEPGR, there is a slightly different treatment that I propose for those costs and benefits. Therefore, my testimony addresses two distinct sets of resources – the "AEPGR units" and the "OVEC units" – whereas AEP Ohio's testimony refers to the combined set as the "PPA Rider units." Generally speaking, AEP Ohio's proposed PPA Rider would credit or charge customers for the financial difference between the ongoing cost-of-service revenue requirements of these PPA Rider units/contracts and the energy and capacity market revenues associated with the units' ongoing operations.

In its February 25, 2015 ESP III Order, the Commission recognized that a properly designed PPA rider can be authorized under Ohio law as a financial limitation on customer shopping to stabilize rates. The Commission listed a number of factors it would consider in deciding whether to approve a PPA rider, including an appropriate allocation of financial risk between the utility and ratepayers. I propose modifications to AEP Ohio's proposed PPA Rider to address that risk-allocation issue in two ways. First, I recommend that the return on equity (ROE) component in the cost-of-service rate between AEP Ohio and AEPGR contain a "flex-down" provision. The ROE flex-down would lower the profit margin earned by AEPGR on the AEPGR units, thereby reducing AEP Ohio's purchase price, in order to off-set or eliminate PPA Rider charges associated with the AEPGR units. Using the

Company's information, every 1% reduction in the ROE earned by AEPGR would reduce AEP Ohio's purchase cost by approximately $12.2 million. So, for example, if the PPA Rider that is associated with the AEPGR units is projected to be a charge of $12.2 million in any given year, the ROE flex-down would reduce AEPGR's ROE by 1% so as to result in no AEPGR-related PPA Rider charge. My proposal is to allow for the flex-down of the ROE all the way to zero if necessary. This would ensure that customers would not be exposed any AEPGR-related PPA Rider charges while AEPGR was simultaneously earning a profit from the PPA. Instead, customers would only bear AEPGR-related PPA Rider charges under the circumstances that AEPGR's PPA-related profits had been reduced to zero. There would be no flex-down so long as the AEPGR-related PPA Rider was a credit, and AEPGR would earn its full Commission-accepted ROE in those circumstances – and indeed perhaps more, based on an incentivizing costs/benefits-sharing concept that is the second proposed modification that I think should be implemented. Note that there would not be any ROE flex-down adjustments associated with the OVEC net costs/benefits because AEPGR has no ownership involvement with OVEC.

This second proposed modification to allocate financial risk between the utility and ratepayers is through ensuring that the utility bears or enjoys a portion of the PPA Rider's net costs or credits on an ongoing basis throughout the term of the PPA Rider (i.e., the utility would have "skin in the game"). I propose that AEP Ohio retain a 20% interest in the PPA Rider's total costs or benefits. AEP Ohio would absorb 20% of any PPA Rider costs and retain 20% of any PPA Rider credits. This would align the interests of ratepayers and shareholders, effectively putting them in the same boat. The concept of a 20% utility/80% customer split of the costs or benefits of the PPA is a self-policing mechanism that will incentivize AEP Ohio to maximize PJM market revenues and minimize the operating and capital costs of the PPA Rider units. For the AEPGR-related portion of the PPA Rider, there would be no sharing of the costs within the "ROE flex zone" (i.e., where the ROE is being flexed-down to eliminate any AEPGR-related portion of the PPA Rider). In essence, the ROE flex zone would be a dead-band where the AEPGR-related portion of the PPA Rider for customers would be zero. The 20% utility/80% customer split would only apply outside of that zone where the AEPGR-related portion of the PPA Rider became either a charge or a credit.

Lastly, I propose that the PPA Rider be structured and tracked in generating unit-specific pieces that would be aggregated into a single rider that would show up on customer bills. However, by tracking the economics of individual generating units, chronically uneconomic generating units can be identified and removed from the PPA Rider. I propose a six-year test (three historical years and three prospective years). If one or more of the PPA Rider units prove to be uneconomic and therefore contribute to a PPA Rider charge for more than three historical years in a row and are projected to continue to do so for the next three-year period (based on known PJM capacity auction results, energy market quotes, and AEP Ohio's base case estimates of a unit's expected costs), then such unit(s) should be permanently removed from the PPA Rider unless AEP Ohio/AEPGR propose to write-down the invested capital to a point that would make the unit(s) prospectively economic. The proposal would require Commission review and approval in order for the unit(s) to stay in the PPA Rider. In addition, during the term of the PPA Rider, AEP Ohio and AEPGR should be prohibited from selling any of the PPA Rider units without Commission review and approval. Also, any retirements of PPA Rider units should be subject to Commission review and approval.

II. PROPOSED PPA RIDER MODIFICATIONS

Q. Have you performed an independent economic analysis (costs and benefits) of the proposed PPA and PPA Rider?

A. No. I have not attempted to determine if AEP Ohio's projected operating and capital costs are reasonable. Nor have I attempted to determine whether the Company's forecasted energy and capacity revenues are reasonable. The purpose of my testimony is to make recommendations to improve the PPA and associated PPA Rider, if the Commission finds that one should be approved.

Q. What is the return on equity (profit margin) that AEPGR is requesting through the PPA cost-of-service contract?

A. AEPGR is seeking a self-adjusting ROE of 650 basis points above the December Moody's Baa Corporate Bond Index for the preceding calendar year. Under this proposal, the ROE included in the cost-of-service rate charged by AEPGR to AEP Ohio would change annually, either up or down, as interest rates change. In its May 15, 2015 Application, AEP Ohio developed all of its financial modeling using a December 2014 Moody's Index bond rate of 4.74%, which resulted in an after-tax

ROE of 11.24%. The pre-tax ROE needed to yield an after-tax ROE of 11.24% is 17.59%. The cost-of-service PPA would recover the pre-tax ROE of 17.59%.

Q. Since December 2014, have bond yields increased?

A. Yes. Since December 2014, the Moody's Baa Corporate Bond Index has increased to 5.19% as of August 2015. Under the formula proposed by AEPGR, adding 650 basis points to that bond rate yields an after-tax ROE of 11.69% (18.30% pre-tax).

Q. Did AEPGR propose a floor and a ceiling on its self-adjusting ROE?

A. Yes. AEPGR would put a floor on its after-tax ROE of 8.90% (13.93% pre-tax) and an after-tax ceiling of 15.90% (24.89% pre-tax). I will leave the assessment of AEPGR's self-adjusting ROE proposal – including the appropriateness of the periodic adjustment itself, the 650 basis point adder, and the ceiling – to the Commission. However, I am recommending a flex-down approach where the ROE floor would be zero.

Q. Is the cost-of-service formula rate proposed in the Application low risk for AEPGR?

A. Yes. It is very low risk, more akin to a bond than a typical equity investment. Under AEP Ohio's proposal, the return that AEPGR will earn is guaranteed, not simply authorized. The return is guaranteed because the wholesale formula rate automatically adjusts to ensure full recovery of all costs on a real time basis, subject to true up. AEPGR does bear some risk that the Commission will deem certain costs to be unreasonable or imprudent, but these risks can be managed by AEPGR through reasonable business practices. If the PPA Rider is approved, then an ROE that reflects the low risk nature of the transaction will be important.

Q. Does the Commission have the authority to require an ROE flex down as part of any PPA approval order?

A. Yes. The ROE flex-down that I am recommending is simply a variation of the self-adjusting ROE proposed by AEPGR. The Commission is essentially negotiating a long-term bilateral cost-of-service contract with AEPGR on behalf of customers. In this negotiation, the Commission can require modifications to the self-adjusting ROE proposed by AEPGR in its initial offer. If AEPGR is unhappy with any of the modifications required by the Commission, then AEPGR is free to walk away from the deal. Even though the Commission is effectively negotiating with AEPGR on behalf of consumers, I recognize that the Commission is not approving the PPA itself as the PPA is a wholesale transaction. Despite this recognition, in my testimony I sometimes refer to a Commission "approved" ROE simply as a matter of grammatical convenience.

Q. Why do you think AEPGR would accept a flex-down ROE all the way to zero when the returns being authorized by state commissions are in the 9%-10% range?

A. The returns being authorized by other state commissions in traditional cost-of-service contexts are for a different purpose. Those ROEs are intended to be sufficient to allow the utility to attract new capital to continue to run its business. Here, the capital associated with the PPA units is sunk. The capital that AEPGR has invested in the PPA units is sunk because that capital is dedicated to those units and cannot be used for competing investments. AEPGR now must decide what is the highest and best use of that sunk capital: 1) dedicate it to a cost-of-service PPA with AEP Ohio; 2) sell the units to a third party; or 3) continue to operate the units in the PJM markets. We know that AEPGR's preferred outcome is a PPA. This administrative process is now concerned with determining the price.

Q. Please explain the flex-down ROE you recommend.

A. An effective way to incentivize AEP Ohio and AEPGR to maximize revenues and minimize costs, as well as to align the interest of ratepayers and shareholders, is to add a flex-down component to the proposed self-adjusting ROE formula. For simplicity sake, I will discuss the ROE math using AEP Ohio's information for the aggregated four AEPGR plants that would be in the proposed PPA Rider. However, the same concepts would apply to my proposed tracking of PPA Rider costs and benefits on a per-generating-unit basis (discussed below). Under the Company's proposal, AEPGR could earn a generous ROE on its generation rate base even in years when the PPA Rider is a charge. Using the Company's information, the currently proposed after-tax ROE of 11.24% increases the costs of the PPA by approximately $137.6 million (each one percentage point increase in ROE increases

PPA costs by approximately $12.3 million). It would be unreasonable for AEPGR to receive this level of profit when the PPA is resulting in a PPA Rider charge to consumers. Instead, AEPGR should be authorized to earn an appropriate ROE (as determined by the Commission) only when the PPA Rider is a credit. But if the PPA Rider is projected to be a charge, then AEPGR's ROE should be flexed down to bring the Rider to break-even. For example, in the Weather Normalized Load Case in 2016, the PPA Rider is projected to be a charge of $49 million. In order to bring the PPA Rider to break-even, the ROE would be flexed down by approximately 4% to reduce the costs paid to AEPGR by $49 million.

The ROE should be allowed to flex all the way down to zero. Allowing the ROE to flex down to zero will ensure that AEPGR will never earn profits on uneconomic PPA Rider units at the customers' expense. The ROE flex-down proposal does not mean that the AEPGR-related portion of the PPA Rider will always be a credit as the full flex-down to zero may still be insufficient to offset a large PPA Rider charge. Ratepayers would still have exposure, but to a much lesser degree. If AEP Ohio's weather normalized forecasts are accurate, then the ROE flex-down would only partially be used in the first few years and in almost all remaining years AEPGR could earn as much as its full requested ROE, if approved by the Commission.

Assuming the Commission accepted and approved AEP Ohio's requested 11.24% after-tax ROE and using the Company's forecasted numbers, with a flex-down all the way to zero, customers would only experience a PPA charge in the unlikely circumstance when the annual loss on the PPA transaction exceeded $137.6 million.

AEP Ohio modeled four scenarios: 5% Higher Load Forecast; Average of High and Low; Weather Normalized Load; and 5% Lower Load Forecast. For the 2016-2024 period, PPA charges are forecasted to exceed $137.6 million only once, and then by only $18.4 million. With the flex-down ROE, the PPA would either be a credit or zero in all other years under all four scenarios.

Q. In addition to the flex-down ROE as a mechanism to allocate financial risk between shareholders and ratepayers, please explain your cost and benefit sharing (i.e., "skin in the game") concept.

A. The flex-down ROE concept would eliminate any AEPGR-related PPA Rider customer charges if the Company's ROE was between zero and the Commission-authorized maximum. Inherently, because it otherwise translates into a direct loss of potential profits, AEP Ohio and AEPGR are appropriately incentivized to maximize revenues and control costs. However, outside of that ROE range – where actual customer AEPGR-related PPA Rider charges or credits would materialize – the utility should retain a 20% stake in the PPA Rider charges or credits to continue to incentivize it to maximize revenues and control costs. If the AEPGR-related PPA Rider was a charge (after flexing the Company's ROE on its PPA assets down to zero), 20% of that charge would be absorbed by the Company as a below-the-line expense. The remaining 80% would be recovered from customers. Similarly, if the AEPGR-related PPA Rider was a credit (after flexing the Company's ROE on its PPA assets up to the Commission-approved maximum), 20% of that credit would be enjoyed by the Company as a below-the-line benefit and the remaining 80% would be credited to customers. This would make the PPA self-policing and would reduce the need for PUCO oversight. Ratepayers and shareholders would be in the same boat. This form of ratepayer/shareholder sharing would strengthen the case supporting the PPA and PPA Rider since it would help counter arguments that the units would be operated or maintained differently with or without a PPA. It would also counter arguments that marketing the generation would be different with or without the PPA. Again, any utility profit or loss from the PPA should be below the line. Profits would not be clawed back in a significantly excessive earnings test (SEET) review. Losses would not be recoverable in distribution rates.

Q. **How would this cost/benefit sharing mechanism work with the OVEC-related PPA Rider?**

A. There is no AEPGR ownership or ROE element associated with the OVEC assets. Thus, there is no ROE flex-down component associated with the OVEC-related PPA Rider, and the 20%/80% sharing mechanism would simply be applied directly to the OVEC-related PPA Rider charges and credits. In other words, 80% of all OVEC-related PPA Rider costs or benefits would be transferred to customer bills, with AEP Ohio retaining the other 20% as a below-the-line cost or profit.

Q. **So there would be two riders on customers' bills: the AEPGR-related PPA Rider and the OVEC-related PPA Rider?**

A. No, not at all. There would be one final rider, but it would be the sum of two components: the AEPGR-related PPA Rider (which would have the ROE flex-down adjustment) and the OVEC-related PPA Rider. The two components will be added together and 80% of the resulting total charge or credit will be transferred to customer bills (with AEP Ohio retaining the other 20%), per the cost/benefit sharing concept.

Q. **You mentioned that the PPA Rider should be tracked and calculated on a unit-by-unit basis. Why do you think that the PPA Rider calculations should be tracked at this level?**

A. I think that packaging all of the PPA Rider units into a single calculation throughout the term of the PPA Rider (as the Company proposes) could allow low-cost, economic, "in the money" units to subsidize chronically high-cost, uneconomic, "out of the money" units that probably should not continue operating or whose sunk investments should probably be marked down. Thus, I think that each of the PPA Rider units (i.e., Cardinal 1, Conesville 4-6, Stuart 1-4, Zimmer 1, and AEP Ohio's OVEC entitlement) should have their own PPA Rider calculation, with the final customer credits or charges being the summation of the components. If any generating unit proves to be uneconomic and contributes to a PPA Rider charge (on an annual basis) for three years in a row, a review of that generating unit's prospective opportunity to become profitable would be triggered. That review would focus on the next three years, with an analysis of known PJM capacity auction results, energy market quotes, and AEP Ohio's/AEPGR's base case estimates of the generating unit's expected costs. The analysis would be filed with the Commission for review and approval. If the generating resource is not expected to be economic (i.e., generating a credit contribution for the aggregated PPA Rider) in any of the prospective three years, the Company would have the option to present the Commission with a proposal for writing down the generating unit's investments to a point that is expected to eliminate that unit's PPA Rider charges for at least the prospective three-year period. If the Company opts not to provide a write-down proposal or if the Commission is not satisfied with the proposal, then such plant should be permanently removed from the PPA and PPA Rider. Under those circumstances, AEPGR would have full flexibility to continue to operate that unit on its own account or sell the facility. But a unit that is chronically contributing to a PPA Rider charge should not continue in the Rider.

Q. **What if the prospective analysis indicated that the generating unit was going to be economic in at least one of the next three years?**

A. The Company could keep the generating unit in the PPA Rider for the prospective three-year period (and potentially beyond). However, if the generating unit failed to actually experience a profitable year in the forward three-year period, it would be removed from the PPA and PPA Rider at the end of the six-year test period.

Q. **Absent the triggering of the uneconomic test you describe above, do you believe that the Company should be allowed to sell one or more of the PPA Rider units during the term of the PPA Rider?**

A. No, certainly not without Commission review and approval. The Commission should protect customers against paying PPA Rider charges in the next couple of years and then having the Company sell the PPA Rider units at a high price as the plants are turning profitable. Under such circumstances, the Commission should ensure that customers receive an appropriate portion of the sales proceeds to compensate them for paying PPA Rider charges when the plants were uneconomic and losing the future benefits of the plants as they turned profitable.

Q. **Do you believe that unit-specific PPAs and PPA Riders which reflect a flex-down ROE and 20% cost/benefit sharing can benefit consumers in the short and long run?**

A. Yes, I do. I think that it is reasonable for AEPGR to earn a full Commission-approved ROE on the AEPGR units in the good years when the AEPGR-portion of the PPA Rider is a credit. In addition, AEP Ohio would enjoy supplemental profits – on top of that full Commission-approved ROE for AEPGR – in the form of the 20% portion of the PPA Rider credit that would accrue to the Company's benefit. But in the bad years when the AEPGR-related PPA Rider would otherwise be a charge, AEPGR should accept a lower profit margin. This aligns the interests of consumers with shareholders as both parties benefit when the PPA Rider is a credit. With a flex-down all the way to zero, customers would experience an AEPGR-related PPA Rider charge only in the unlikely circumstance when the annual loss on the AEPGR PPA transaction exceeded the full Commission-approved ROE. And it would never be the case that the Company enjoyed profits on uneconomic AEPGR units while customers bore AEPGR-related PPA Rider costs and inherently funded those profits.

Over the course of a long-term PPA and PPA Rider, it is impossible to forecast all contingencies or outcomes. But the self-policing nature of the 20% cost/benefit sharing concept will provide a robust safeguard for consumers no matter what the future holds. Consumers and shareholders would be partners with interests that are aligned.

A properly structured PPA Rider can stabilize prices through a financial limitation on shopping by providing a blend of cost-of-service and market pricing. But the cost-of-service pricing must reflect a vigorous negotiation by the Commission on behalf of consumers. The modifications I recommend would form the basis for a balanced and robust PPA and PPA Rider and should be included in any Commission order approving the PPA Rider. The ROE flex-down and 20% cost/benefit sharing concept would appropriately incentivize AEP Ohio and APEGR to minimize the costs and maximize the benefits of the PPA Rider for customers.

Q. Does this complete your testimony?

A. Yes.

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EXHIBITS

OF

ALAN S. TAYLOR

EXHIBIT__(AST-1) RESUME OF ALAN S. TAYLOR

AREAS OF QUALIFICATION

Independent evaluation services for competitive bidding resource selection, integrated resource planning, market analysis, risk assessment, and strategic planning

EMPLOYMENT HISTORY

- President, Sedway Consulting, Inc., Boulder, CO, 2001-present
- Senior Member of PA Consulting, Inc., Boulder, CO, 2001
- Vice President, Global Energy Business Sector, PHB Hagler Bailly, Inc., Boulder, CO, 2000
- From Senior Associate to Principal, Utility Services Group, Hagler Bailly Consulting, Inc., Boulder, CO, 1991-1999
- Senior Consultant, Energy Management Associates, Atlanta, GA, 1983-1988
- Internships at: Pacific Gas & Electric Company, San Francisco, CA (1990)
Lawrence Berkeley National Laboratory, Berkeley, CA (1989-1991)
MIT Resource Extraction Laboratory, Cambridge, MA (1982)
Baltimore Gas and Electric Company, Baltimore, MD (1980)

EDUCATION

- Walter A. Haas School of Business, University of California at Berkeley, MBA, Valedictorian, Corporate Finance, 1991
- Massachusetts Institute of Technology, BS, Energy Engineering, 1983

PROFESSIONAL EXPERIENCE

- Conducted numerous competitive bidding project evaluations for conventional generating resources, renewable facilities, and off-system power purchases; analyzed thousands of such power supply proposals.
- Developed and/or reviewed dozens of requests for proposals for utility resource solicitations.
- Assisted in or monitored contract negotiations with hundreds of shortlisted bidders in utility resource solicitations.
- Testified on utility competitive bidding solicitation results, affiliate transactions, cost recovery procedures, rate case calculations, and incentive ratemaking proposals.
- Managed the development of market price forecasts of North American and European electricity markets under deregulation.
- Performed financial modeling of electric utility bankruptcy workout plans.
- Trained and assisted many of the nation's largest electric and gas utilities in their use of operational and strategic planning computer models.

SELECTED PROJECTS

2015 **California Solicitation for Capacity Resources**
Client: Southern California Edison

Currently serving as the Independent Evaluator (IE) in Southern California Edison's (SCE) annual Resource Adequacy (RA) Request for Offers (RFO). Mr. Taylor is managing a team that is conducting an independent analysis of all offers, monitoring the negotiations with shortlisted bidders, and preparing for the submission and analysis of final offers that will result in contracts that will help the utility fulfill some or all of its California RA capacity requirements for 2016-2019.

2015 **Minnesota Solicitation for New Solar PV Resources**
Client: Minnesota Power Company

Provided independent evaluation services in a focused solicitation for 10 MW of solar photovoltaic (PV) generation at a specific site in Minnesota. Power purchase agreement (PPA) bids were compared to the utility's selected engineering-procurement-construction (EPC) bid in which the utility would oversee the development of a project that it would ultimately own. The PPA bids were required to include buy-out provisions at various milestones during the terms of the PPAs. Mr. Taylor assisted with the development of the request for proposals (RFP), performed a parallel economic evaluation of the utility's EPC and all competing PPA proposals, monitored communications with bidders, and provided a report for filing with the Minnesota Public Utilities Commission regarding the results of the solicitation.

2015 **Florida Solicitation for Resources**
Client: Florida Power & Light

Currently serving as the IE in a solicitation for over 1,600 MW of power supplies for Florida Power & Light's (FPL) supply portfolio that will be needed by mid-2019. Mr. Taylor assisted with the development of the RFP, participated in all bidder conferences, and conducted the bid-opening process for potential resources that might be able to satisfy the utility's capacity need – either instead of or in combination with the utility's proposed self-build resource.

2014- **California Solicitation for Energy Storage Resources**
2015 Client: Southern California Edison

Currently serving as the IE in SCE's Energy Storage RFO that is seeking approximately 16 MW of energy storage resources to be developed in California as part of a regulatory requirement to promote the commercialization of utility-scale energy storage projects. Mr. Taylor is managing a team that has performed a parallel evaluation (to the utility's) of the initial indicative and final energy storage offers (using Sedway Consulting's proprietary model). The team also monitored all negotiations with shortlisted bidders to ensure fair and consistent treatment of counterparties.

2014 **Analysis of Ohio Hedging Transaction**
Client: Ohio Energy Group

Analyzed and provided expert testimony in AEP-Ohio's Energy Security Plan/Standard Service Offer proceeding regarding the hedging and price stabilizing benefits of a proposed rider for the net benefits associated with utility's entitlement to the Ohio Valley Electric Corporation's generating assets.

2013- **California Solicitations for Resources and Energy Auctions**
2014 Client: Southern California Edison

Served as the IE in SCE's Local Capacity Requirements (LCR) RFO for 1,900-2,500 MW of new local capacity resources from energy efficiency, demand response, energy storage and/or gas-fired facilities. Also served as the IE for all five of SCE's 2013 reverse energy auctions of the dispatch rights to facilities under power purchase agreements executed with developers of facilities selected in the utility's 2006 New Generation RFO.

2013- **Florida Solicitation for Resources**
2014 Client: Duke Energy Florida

Provided Independent Monitor/Evaluator services in a solicitation for over 1,600 MW of power supplies for Duke Energy Florida's supply portfolio that were needed by the end of 2018. Mr. Taylor participated in all bidder conferences, was copied on all emails between the utility and bidders, performed an independent evaluation of all proposals, and testified before the Florida Public Service Commission regarding the solicitation's results.

2013 **Minnesota Solicitation for New Resources**
Client: Minnesota Power Company

Provided independent evaluation services in a solicitation for 220 MW of wind generation in Minnesota; bids were compared to the utility's proposal to develop its own wind farm. Mr. Taylor assisted with the development of the request for proposals (RFP), performed a parallel economic evaluation of the utility's facility and all competing proposals, monitored communications and negotiations with shortlisted bidders, and provided a report for filing with the Minnesota Public Utilities Commission regarding the results of the solicitation.

2013 **Kentucky Renewable Resource Analysis**
Client: Kentucky Industrial Utility Customers

Provided expert analysis and testimony on behalf of customers of Kentucky Power regarding a renewable energy purchase agreement for output from a new 58 MW biomass facility that is expected on-line in 2017.

2006- **California Solicitations for Conventional and Renewable Resources**
2013 Client: Southern California Edison

Served as the IE in 23 solicitations for power or gas supplies in southern California – one, as noted above, for SCE's 2013 LCR RFO, an earlier one for over 2,500 MW of new conventional resources, four for renewable energy purchases to help SCE meet its state Renewables Portfolio Standard (RPS) requirements, five for near-term capacity resources, eight for reverse energy auctions of the dispatch rights to facilities under power purchase agreements, and four for gas financial hedging products. Mr. Taylor managed a Sedway Consulting team to perform a parallel evaluation of all proposals, monitor communications and negotiations with power suppliers, and support the review of the final selected proposals by the Procurement Review Group – a collection of non-market-participant stakeholders and regulators who are/were provided confidential access to the evaluation results at intermediate stages. He has filed IE reports and sponsored testimony before the California Public Utilities Commission concerning the results of most of these solicitations.

2012 **Florida Solicitation for New Resources**
Client: Tampa Electric Company

Served as an independent evaluator in a solicitation for 500 MW of power supplies in Florida. New capacity had to be on-line by 2017; bids were compared to the utility's proposal to repower four existing combustion turbines into a larger combined-cycle facility. Mr. Taylor assisted with the development of the RFP, performed a parallel evaluation of all proposals, monitored communications and negotiations with contracting counterparties, and testified before the Florida Public Service Commission regarding the solicitation's results.

2011 **Minnesota Solicitation for Wind Resources**
Client: Minnesota Power

Provided independent evaluation services in a solicitation for 100 MW of wind generation in Minnesota. Proposals competed with a utility proposal to develop its own wind farm. Mr. Taylor assisted with the development of the RFP and performed a parallel economic evaluation of the utility's facility and all competing proposals.

2005- **California Solicitations for Conventional and Renewable Resources**
2010 Client: Pacific Gas & Electric

Served as the Independent Evaluator in four solicitations for new power supplies in northern California – one for 2,200 MW of new conventional resources, another for up to 1,200 MW of new generating resources from any source, and two others for between 1,400 and 2,800 GWh/year of renewable energy purchases. Mr. Taylor managed a Sedway Consulting team to perform a parallel evaluation of all proposals, monitor communications and negotiations with power suppliers, and support the review of the final selected proposals by the Procurement Review Group – a collection of non-market-participant stakeholders and regulators who were provided confidential access to the evaluation results at intermediate stages. He has filed IE reports and sponsored testimony before the California Public Utilities Commission concerning the results of most of these solicitations.

2007- **Florida Solicitation for New Resources**
2008 Client: Florida Power & Light

Provided independent evaluation services in Florida Power & Light's solicitation for 1,250 MW of new power supplies for 2011. Mr. Taylor performed a parallel economic evaluation to that which was undertaken by the utility. His work efforts allowed all proposal parameters to be cross-checked and corrected where necessary. He sponsored testimony before the Florida Public Service Commission concerning the results of the solicitation evaluation.

2007- **Avoided Cost Analysis for Interruptible Loads**
2008 Client: Public Service Company of Colorado

Provided an independent assessment of Public Service Company of Colorado's peaking resource avoided costs for use in the utility's development of customer credits for its interruptible service tariff.

2007- **Florida Solicitations for New Resources**
2008 Client: Tampa Electric Company

Provided independent evaluation services in two separate Tampa Electric Company solicitations for 600 MW of new power supplies for 2013, as a market test for the utility's proposals to develop initially an integrated gasification combined cycle (IGCC) facility and later a gas-fired combined cycle facility.

2004- **Regulatory Support of Commission Staff**
2005 Client: Utah Division of Public Utilities

Assisted staff for the Utah Division of Public Utilities in the division's efforts to analyze PacifiCorp's 2005 rate case. Mr. Taylor reviewed production cost modeling results and forecasts of system-wide fuel and purchase power costs.

2004- **Minnesota Solicitation for New Resources**
2005 Client: Minnesota Power

Provided independent evaluation services in a solicitation for 200 MW of firm power supplies. Mr. Taylor reviewed all proposals and performed a parallel economic evaluation among proposed turnkey facilities and power purchases.

2004 **Canadian Solicitations for Conventional and Renewable Resources**
Client: Ontario Energy Ministry

Participated in a broader consulting team and provided assistance in the development of RFPs for 2,500 MW of conventional resources and 300 MW of renewable resources. New long-term sources of power were sought to replace regional coal-fired generation.

2003- **Florida Solicitation for New Resources**
2004 Client: Florida Power & Light

Provided independent evaluation services in Florida Power & Light's solicitation for 1,100 MW of new power supplies for 2007. Mr. Taylor performed a parallel economic evaluation of all proposals and reviewed, cross-checked, and corrected (where necessary) the utility's analyses. He sponsored testimony before the Florida Public Service Commission concerning the results of the solicitation evaluation.

2002- **Minnesota Solicitation for New Resources**
2003 Client: Northern States Power

Assisted in the evaluation of a large number of multi-option proposals for new power supplies in the 2005-2009 time frame. Mr. Taylor was the independent evaluator in two separate solicitations. He managed a team of individuals in the evaluation of responses for both Requests for Proposals (RFPs). In the first solicitation, contingent proposals were received that could serve as replacement contracts for 1,100 MW of nuclear capacity if NSP were forced to decommission its Prairie Island power plant in 2007. In the second solicitation, NSP sought approximately 1,000 MW of new supplies to supplement its existing supply portfolio. The evaluation included the review of over a dozen proposed wind projects.

2002 **Florida Revisions to Bidding Rule**
Client: Consortium of utilities

Provided the Florida Public Service Commission with recommendations concerning appropriate revisions to the state's bidding rule. Mr. Taylor participated in public workshops to provide the benefits of his extensive experience in performing competitive bidding solicitations and to convey what changes should or should not be made to Florida's existing bid rule to ensure the selection of the best resources for the state's electricity customers.

2002 **Arizona Testimony Concerning Competitive Bidding Solicitations**
Client: Harquahala Generating Company, LLC

Filed testimony before the Arizona Corporation Commission in the Generic Proceedings Concerning Electric Restructuring Issues and Associated Proceedings. Mr. Taylor's testimony provided the Commission with information about competitive bidding processes that he had seen work in other states. Also, his testimony addressed various concerns that were raised by Arizona Public Service as to the feasibility of implementing competitive bidding in Arizona.

2002 **Florida Solicitation for New Resources**
Client: Florida Power & Light

Provided independent evaluation services in Florida Power & Light's solicitation for 1,750 MW of new power supplies in the 2005-2006 time frame. Mr. Taylor performed a parallel economic evaluation to that which was undertaken by the utility. His work efforts allowed all proposal parameters to be cross-checked and corrected where necessary. Also, he provided suggestions on resource optimization modeling approaches that ensured the most comprehensive examination of thousands of potential combinations of proposals.

2001 **Wisconsin Testimony Concerning Competitive Bidding Solicitations**
Client: MidWest Independent Power Suppliers

Provided testimony in a proceeding before the Wisconsin Public Service Commission on behalf of a consortium of independent power producers. Mr. Taylor testified on the benefits and timing of a competitive bidding solicitation that Wisconsin Electric Power Company (WEPCO) should be ordered to conduct prior to the utility's development of $2.8 billion in self-build generation facilities (embodied in a WEPCO proposal called Power the Future – 2). Without the benefits of a competitive solicitation, there would be no defensible means of ensuring that the utility's customers were being offered the best, most cost-effective resources.