### **BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

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### **IN THE MATTER OF:**

THE APPLICATION OF KENTUCKY POWER	2
COMPANY FOR (1) GENERAL ADJUSTMENT	
<b>OF ITS RATERS FOR ELECTRIC SERVICE; (2)</b>	
AN ORDER APPROVING ITS 2014	
ENVIRONMENTAL COMPLIANCE PLAN;	
(3) AN ORDER APPROVING ITS TARIFFS	
AND RIDERS; AND (45) AN ORDER	
GRANTING ALL OTHER REQUIRED	
APPROVALS AND RELIEF	

Case No. 2014-00396

**DIRECT TESTIMONY** 

### AND EXHIBITS

OF

**STEPHEN J. BARON** 

### **ON BEHALF OF THE**

### KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

### J. KENNEDY AND ASSOCIATES, INC. ROSWELL, GEORGIA

March 2015

### **BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

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### **IN THE MATTER OF:**

Case No. 2014-00396

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THE APPLICATION OF KENTUCKY POWER COMPANY FOR (1) GENERAL ADJUSTMENT OF ITS RATERS FOR ELECTRIC SERVICE; (2) AN ORDER APPROVING ITS 2014 ENVIRONMENTAL COMPLIANCE PLAN; (3) AN ORDER APPROVING ITS TARIFFS AND RIDERS; AND (45) AN ORDER GRANTING ALL OTHER REQUIRED APPROVALS AND RELIEF

Case No. 2014-00396

### DIRECT TESTIMONY OF STEPHEN J. BARON

#### I. INTRODUCTION AND SUMMARY

2	Q.	Please state your name and business address.
3	A.	My name is Stephen J. Baron. My business address is J. Kennedy and Associates,
4		Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell,
5		Georgia 30075.
6		
7	Q.	What is your occupation and by whom are you employed?
8	A.	I am the President and a Principal of Kennedy and Associates, a firm of utility rate,
9		planning, and economic consultants in Atlanta, Georgia.
10		
11	Q.	Please describe briefly the nature of the consulting services provided by
12		Kennedy and Associates.

1	А.	Kennedy and Associates provides consulting services in the electric and gas utility
2		industries. Our clients include state agencies and industrial electricity consumers.
3		The firm provides expertise in system planning, load forecasting, financial analysis,
4		cost-of-service, and rate design. Current clients include the Georgia and Louisiana
5		Public Service Commissions, and industrial consumer groups throughout the United
6		States.
7		
8	Q.	Please state your educational background and experience.
9	Α.	I graduated from the University of Florida in 1972 with a B.A. degree with high
10		honors in Political Science and significant coursework in Mathematics and
11		Computer Science. In 1974, I received a Master of Arts Degree in Economics, also
12		from the University of Florida.
13		
14		I have more than thirty years of experience in the electric utility industry in the areas
15		of cost and rate analysis, forecasting, planning, and economic analysis.
16		
17		I have presented testimony as an expert witness in Arizona, Arkansas, Colorado,
18		Connecticut, Florida, Georgia, Indiana, Kentucky, Louisiana, Maine, Michigan,
19		Minnesota, Maryland, Missouri, New Jersey, New Mexico, New York, North
20		Carolina, Ohio, Pennsylvania, Texas, Utah, Virginia, West Virginia, Wisconsin,
21		Wyoming, the Federal Energy Regulatory Commission and in United States
22		Bankruptcy Court.

A complete copy of my resume and my testimony appearances is contained in Baron Exhibit (SJB-1).

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### Q. Have you previously presented testimony before the Kentucky Public Service Commission?

A. Yes. I have testified before the Kentucky Public Service Commission
("Commission") in eighteen cases over the past thirty years, including numerous
Kentucky Power cases. I have also testified in numerous American Electric Power
("AEP") cases in other jurisdictions, including Ohio, West Virginia, Virginia,
Indiana, Louisiana, and before the Federal Energy Regulatory Commission.

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

A. I am testifying on behalf of the Kentucky Industrial Utility Customers, Inc.
("KIUC"). KIUC members take service on a number of Kentucky Power Company
("Kentucky Power" or "Company") rate schedules. The members of KIUC
participating in this proceeding are: Air Products and Chemicals, Inc., Air
Liquide Industrial U.S. LP, AK Steel Corporation, EQT Corporation, and
Marathon Petroleum Company LP.

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### 21 Q. What is the purpose of your testimony?

1 Α. I address four general issues in my testimony. First, I respond to the Company's 2 proposed class cost of service study and the apportionment of the overall revenue 3 increase to rate classes. The Company filed a 12 CP class cost of service study in this case, as it has done in prior cases. While I do not object to the Company's 4 5 study, I do have concerns about KPCo's proposed apportionment of the revenue increase to rate classes. As I will discuss, the Company has not directly attempted to 6 reduce the substantial subsidies that currently exist among rate classes. However, 7 8 through an adjustment to facilitate the Company's transmission cost recovery 9 proposal, there has been some impact on subsidies. I will propose an alternative revenue apportionment that directly and transparently reduces inter-class subsidies at 10 11 proposed rates and is independent of the Company's OATT transmission cost recovery proposal and PJM Rider. 12

13

I address two rate design issues that impact large industrial customers. The first is 14 the Company's proposal to merge rates QP and CIP-TOD into a new Industrial 15 16 General Service ("IGS") rate class. I support the rate merger proposal which was 17 approved as part of the Mitchell Stipulation and recommend that it be adopted by the 18 Commission. I also discuss the Company's Contract Service - Interruptible Power 19 tariff. While I do not have any objections to the tariff per se, recent filings by PJM 20 associated with its Demand Response program may have a direct impact on CS-IRP. 21 The Company has not addressed these potential impacts in its testimony in this case and indicates in discovery responses that it has no current plans to accommodate 22

changes that the Federal Energy Regulatory Commission may adopt that will require
changes to CS-IRP. I will discuss this issue and recommend that the Commission
direct the Company to file a plan to address any required changes to CS-IRP that
may be required pursuant to a FERC decision on PJM's Demand Response program
filing. This is necessary so that interruptible capacity can continue to be used for
meeting the Company's PJM resource requirements.

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I also respond to the Company's proposal to replace the current Kentucky 8 9 Commission determined retail transmission rates with FERC regulated PJM OATT KPCo is proposing to charge its Kentucky retail customers the FERC 10 rates. approved AEP/PJM OATT transmission rates, while eliminating the KPCo 11 transmission revenue requirements from base rates. In addition, the Company is 12 13 proposing a PJM Rider to capture any increases (or decreases) in PJM OATT charges going forward. I oppose both of these proposals and will recommend that 14 the Commission reject the Company's transmission proposals. 15 While the 16 Company's calculations show that there is only a minimal difference in test year 17 revenue requirements associated with this proposal, the Company's transmission 18 cost recovery proposal will result in automatic rate increases that total more than \$35 19 million over the first three years. Moreover, the proposal results in a substitution of 20 FERC ratemaking for Kentucky Public Service Commission ratemaking for 21 recovery of transmission costs.

Finally, I will address the Company's Biomass Energy Rider ("B.E.R."). This tariff 1 is designed to recover the costs associated with the ecoPower biomass facility. The 2 current tariff produces a single, uniform charge per kWh to all rate schedules. As I 3 explain, this recovery mechanism is not consistent with cost of service or cost 4 5 causation and should be replaced by a recovery mechanism that reflects both energy and demand components of cost. The biomass facility provides both energy and 6 capacity, notwithstanding that the payment is through an energy-only contract with 7 KPCo. I will discuss a cost-based B.E.R. tariff that reasonably reflects both energy 8 and demand costs. 9

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### Q. Would you please summarize your testimony?

12 A. Yes.

13 The Commission should reject the Company's proposed base rate decreases because they are premised on the KPCo proposal to substitute FERC 14 regulated OATT transmission costs for the current method that uses both 15 traditional retail KPCo transmission revenue requirements approved by 16 the Kentucky Commission and OATT costs and revenue credits. Without 17 the KPCo OATT transmission adjustment, which should be rejected, the 18 19 Company's base rate decreases would not reflect any subsidy reductions. The Commission should reduce base rate current dollar subsidies by 35%, 20 subject to a mitigation measure that limits the base rate decrease for any 21 rate class to no more than 2.5 times the retail average decrease. If the 22 KIUC recommendation is adopted, then residential customers will receive a 23 lower increase than recommended by the Company. I am proposing to 24 25 retain significant residential subsidies because of the poor economic conditions in Eastern Kentucky. 26 27

 The Commission should adopt the Company's proposal to merge industrial rates QP and CIP-TOD into a new, single large industrial rate I.G.S.
 (Industrial General Service). The Company's proposal is reasonable and follows through on the agreement to propose such a rate that was included in the settlement of the Mitchell acquisition case. The Company's proposal to substitute FERC approved PJM OATT transmission costs for the current Kentucky Commission determination of transmission revenue requirements should be rejected. In addition, the proposed PJM Rider, which would result in automatic rate increases that total more than \$35 million over the first three years, should be rejected. There is no appropriate reason to approve either of these two fundamental changes to ratemaking policy. Together, these proposals would reduce the scope of regulatory authority by the Commission over KPCo's retail rates and result in a direct pass-through of FERC approved transmission costs as the sole basis for KPCo retail transmission charges included in base rates. This would be an unjustified risk transfer from AEP shareholders to consumers.

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 The Company's Biomass Energy Rider (B.E.R.) should be modified to more reasonably reflect cost of service and cost causation. Specifically, tariff
 B.E.R. should be changed so that cost recovery reflects an allocation of both energy and demand costs to rate classes. The energy portion of costs should be assigned on the basis of rate class energy at generation (i.e., recognize voltage differences and energy losses) and the demand portion should be allocated on the basis of the 12 CP demands of each rate class.

### II. CLASS COST OF SERVICE AND REVENUE APPORTIONMENT

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# Q. Would you please discuss the Company's proposed allocation of its proposed base rate decrease to rate classes?

5 A. First, while the Company's schedules show a base rate decrease of \$4,823,218 (0.84% base rate decrease), it is critical to recognize that this is simply the result of 6 moving a substantial amount of the KPCo revenue requirement to riders (for 7 8 example, the Big Sandy Retirement Rider, Big Sandy Unit 1 Operations Rider, Economic Development Rider and the Mitchell cost impact on the Environmental 9 10 Surcharge). The actual net increase being requested by KPCo in this case is \$69,962,367, or 12.5%. However, because the current dollar subsidies paid and 11 received by each rate class at issue in this case are contained in base rates, and will 12 13 continue be so in the future, the apportionment of the base rate decrease is critical to 14 addressing the subsidy issue in this case.

- 15
- 16

Q. What are the subsidies paid and received by each rate class at current rates?

17

A. Table 1 below summarizes these current rate subsidies.

Table 1Subsidies (Paid)/Received By Each Rate Class						
Current <u>Class</u>	Current <u>ROR %</u>	Current <u>Subsidy</u>				
RS	4.55	33,770,821				
SGS	14.68	(3,841,212)				
MGS	15.60	(12,470,969)				
LGS	11.88	(8,180,149)				
QP	10.84	(4,183,649)				
CIP-TOD	9.10	(3,424,957)				
MW	14.41	(61,499)				
OL	11.39	(1,225,683)				
SL	<u>17.03</u>	<u>(382,707)</u>				
Total	7.89	(4)				

Each rate class pays a subsidy to the residential class, the total of which for the 12 months ending September 2014 was \$33.8 million. This means that residential customers are paying rates that are \$33.8 million below the cost to serve these customers.

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# Q. Did the Company attempt to reduce the subsidies received by the residential class in its proposed base rates?

A. Not explicitly. Normally, in a KPCo base rate case, it is readily apparent the extent
to which the Company is proposing to moderate the current rate class subsidies. The
KPCo residential class has been subsidized by other rate classes for many years. In
the last KPCo base rate case (2009-00459), the Company proposed to reduce interclass subsidies by 10%.

In this case, Company witness Ranie Wohnhas states on page of his testimony that 1 "The Company is proposing to make a slight movement towards equalizing rates 2 of return across all customer classes." In fact, all of the subsidy reduction is 3 produced by the Company's substitution of PJM OATT transmission charges for 4 the current arrangement, which includes KPCo retail transmission revenue 5 requirements, PJM transmission owner revenue credits and PJM OATT 6 transmission expenses. Table 2 below is an excerpt from Mr. Stegall's JMS-3, 7 page 3. The base rate decrease proposed by the Company for each rate class, 8 9 before the OATT transmission adjustment, is 100% of the current subsidies received/paid by each class. This is shown in column 12 of Table 2. For 10 11 example, the residential base rate decrease is equal to the revenue increase required for the residential class to produce the overall retail requested rate of 12 return (\$31,269,716) plus the existing subsidy of \$33,770,821. The net result is a 13 residential decrease of \$2,501,105. The residential decrease occurs because of the 14 \$33,770,821 subsidy contributed to the residential class by all other rate classes. 15

Table 2 KPCo Proposed Base Rate Decreases W/O OATT Transmission Adjustment (no subsidiy reduction)							
Current <u>Class</u> (1)	Current <u>Revenue</u> (2)	Equal ROR Revenue Increase (7)	100% of Current <u>Subsidy</u> (12)	Proposed <u>Increase</u> (13)=(7)-(12)	Percent Increase (14)		
RS	230,140,574	31,269,716	33,770,821	(2,501,105)	-1.09		
SGS	19,611,844	(3,981,079)	(3,841,212)	(139,867)	-0.71		
MGS	59,677,591	(12,870,445)	(12,470,969)	(399,476)	-0.67		
LGS	70,569,638	(8,686,041)	(8,180,149)	(505,892)	-0.72		
QP	54,126,867	(4,534,107)	(4,183,649)	(350,458)	-0.65		
CIP-TOD	117,423,244	(4,125,269)	(3,424,957)	(700,312)	-0.60		
MW	364,284	(63,831)	(61,499)	(2,332)	-0.64		
OL	7,256,325	(1,312,203)	(1,225,683)	(86,520)	-1.19		
SL	1,422,710	(393,055)	(382,707)	(10,348)	-0.73		
Total	560,593,075	(4,696,314)	(4)	(4,696,310)	-0.84		

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Recall that the Company is proposing a base rate decrease due to shifts in cost recovery for some items to riders. The overall base rate decrease of \$4,823,218 is comprised of an actual base rate decrease of \$4,696,311 (JMS-3, page 1) and a net OATT "adjustment" related decrease of \$126,908. As shown in Table 2, the Company is holding the current dollar subsidies constant to arrive at the allocation for the first component of the decrease (\$4,696,311). It is in the second component

(OATT related decrease of \$126,908) that all of the subsidy changes in this case occur.

3

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Q. Would you explain how under the Company's proposal the \$126,908 net 4 5 adjustment to substitute OATT transmission costs for the current KPCo 6 transmission revenue requirements results in a subsidy reduction in this case? 7 Α. First, KIUC opposes the Company's proposal to substitute the OATT transmission 8 charges as the sole basis for determining the transmission revenue requirements for 9 retail Kentucky customers. I will address this OATT/PJM Rider issue later in my 10 testimony.

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As I will discuss more fully later in my testimony, the current ratemaking treatment for KPCo transmission costs is based on the net amount of three components: 1) KPCo owned transmission revenue requirements (return on and of transmission rate base and O&M expenses, 2) PJM OATT transmission charges (primarily Network Integrated Transmission Service – "NITS") and 3) PJM transmission owner revenue credits ("TO revenues") received by KPCo from PJM for payment of its transmission facilities dedicated to PJM.

In this case, the Company is proposing to remove the owned transmission revenue requirements (item 1) and the TO revenue credits (item 3) from KPCo's overall revenue requirements, leaving just the PJM OATT charges. The net impact on KPCo retail revenue requirements in this base rate case from removing these two

items is a \$126,908 reduction, meaning that the owned transmission revenue 1 2 requirements are slightly greater than the TO revenue credits on a total retail basis. Removing both items results in a \$126,908 net reduction. The Company refers to 3 this net adjustment as the "Adjust Trans to OATT." (see JMS-3, page 1, column 10). 4 Table 3 below shows the details of the net adjustment, which includes losses of both 5 6 the TO revenue credits (an increase in revenue requirements) and the owned transmission revenue requirement (a decrease in revenue requirements) for each rate 7 class. 8

	c	alculation of	OATT Adjustme	Table 3 ent - Transmissi	on Net Reve	nue Requir	ements	
Current Class (1)	Total Rate Base (2)	Proposed Class Rate of Return (3)	Proposed Net Operating Income (4) (2) × (3)	Transmission Agreement Expenses (5)	Total Other Expenses Proposed (6)	Less: AFUDC Offsets (7)	Less: Other Operating Revenue (8)	Required Revenue from Sales (9) (4)+(5)+(6)-(7)-(8)
RS	141,054,240	4.30%	6,066,258	(26,875,533)	13,548,492	889,767	(246,620)	(7,903,930
SGS	6,124,081	14.43%	883,605	(1,171,127)	968,965	38,772	(927)	643,599
MGS	23,658,665	15.36%	3,633,170	(4,501,392)	3,878,183	149,027	(10,403)	2,871,337
LGS	32,000,077	11.64%	3,723,608	(6,027,738)	4,297,876	199,560	(34,869)	1,829,055
QP	29,501,503	10.59%	3,124,205	(5,556,864)	3,931,641	183,971	(33,498)	1,348,509
CIP-TOD	71,628,059	8.85%	6,337,505	(13,365,803)	8,698,745	442,501	(85,522)	1,313,469
MW	140,362	14.16%	19,873	(26,192)	21,814	867	(167)	14,795
OL	76,562	11.14%	8,530	(14,303)	13,480	474	(71)	7,305
SL	17,527	16.78%	2,941	(3,268)	3,183	108	(21)	2,769
Total	304,201,077	7.82%	23,799,694	(57,542,217)	35,362,379	1,905,047	(412,099)	126,908

9 10

1		The results of column 13 from Table 2 (the base rate changes) less the results of
2		column 9 from Table 3 (the OATT adjustment) produces the overall base rate
3		change for each rate class that are included in Mr. Stegall's Exhibit No. JMS-3, page
4		1 of 3 (his columns 9 plus 10). For the residential class, the net base rate change is
5		an increase of \$5,402,825. For total retail, the base rate change is a decrease of
6		\$4,823,218. This, of course, does not include the increases that occur in various
7		riders.
8		
9	Q.	Under the Company's proposal, why is the residential class receiving an
10		increase in base revenues while all other classes are receiving decreases as a
11		result of the "Adjust Trans to OATT" adjustment?
12	A.	The reason is that for the residential class, the TO revenue credit included in the
13		class cost of service study is substantially greater than the owned transmission
14		revenue requirements. Removing the TO revenue credit increases the residential
15		cost of service more than removing the owned transmission revenue requirements.
16		The net impact for the residential class of removing these two items is an increase in
17		costs of \$7,903,930. For all other rate classes, this OATT adjustment produces a net
18		reduction in costs, as is the case for total KPCo retail (a decrease of \$126,908).
19		
20	Q.	Under the Company's proposal, what is the cause of this different result for the
21		residential class when the TO revenue credits and the owned transmission
22		revenue requirements are removed?

1	Α.	This residential impact from the OATT adjustment is due to the fact that the owned
2		transmission revenue requirements that are removed reflect the subsidized rate of
3		return on transmission rate base that is built into proposed residential rates (4.30%
4		versus the retail average rate of return of 7.64%). <sup>1</sup> However, for the TO revenue
5		credits there is no subsidy effect - it is simply a straight forward allocation of total
6		retail TO revenue credits on the basis of 12 CP. Because the residential class owned
7		transmission revenue requirements are highly subsidized but the TO revenue credit
8		assigned to the residential class do not include any subsidy effect, the net impact of
9		removing both components is a \$7,903,930 increase to residential rates from the
10		OATT adjustment, even though on a total retail basis the net effect is a \$126,908
11		decrease.
12		
13	Q.	Previously you stated that the Company did not explicitly reduce subsidies in
14		its proposed base rate changes in this case. Does the OATT adjustment result
15		in a subsidy change?
16	А.	Yes. Effectively, because the subsidized owned transmission revenue requirements
17		are being removed from each rate class, a portion of the overall current dollar
18		subsidies paid and received by each class (see Table 1) are being reduced under the
19		

<sup>1</sup> The proposed residential class ROR is 4.30% based on the residential class income after the proposed \$2.5 million base rate decrease.

1		Company's proposal to substitute OATT charges for the current three part
2		transmission revenue requirement that I discussed above. However, with the KPCo
3		methodology, these subsidy reductions will only occur if the OATT transmission
4		proposal is included. <sup>2</sup> There is no reason that subsidies cannot be reduced, even if
5		(as KIUC recommends) the OATT transmission adjustment is rejected.
6		
7	Q.	What is your recommendation for subsidy reductions and the apportionment
8		of the base revenue changes in this case?
9	А.	First, as I will discuss later, I recommend that the Company's transmission proposals
10		be rejected (both the OATT adjustment and the PJM Rider). As a result, the implicit
11		subsidy reductions that are produced by the Company's OATT adjustments would
12		no longer occur.
13		
14		Notwithstanding my objections to the Company's OATT adjustments, I do believe
15		that there should be a reduction of rate class subsidies in this case. The current
16		subsidies received by the residential class of \$33 million should be reduced in this
17		case. These subsidies amount to almost 14.7% of current residential base rates. In
18		other words, absent any overall change in the Company's revenues, the residential
19		class would require an increase of 14.7% just to produce rates at the level of cost of
20		service. All other rate classes are paying rates in excess of cost of service in order to

<sup>&</sup>lt;sup>2</sup> In response to Commission Staff's Third Set of Data Requests, Item No. 47, the Company appears to be stating that it would recommend subsidy reductions if the OATT adjustment is not approved. This appears to be a change from the position implied by the tables shown on pages 6 and 7 of the Application.

facilitate these residential subsidies. At the same time, KIUC is sensitive to the
 depressed economic conditions in Eastern Kentucky, including the recent loss of
 about 7,000 coal mining jobs.

4

# Q. In the Company's Application in this case, KPCo presented proposed increases to each rate class with and without the OATT transmission adjustment. Is this comparison by the Company a fair representation?

- A. No. As I explained above, while the Company states that it has not reduced 8 9 subsidies in proposed rates, the proposed OATT transmission adjustment results in a subsidy reduction. The tables of proposed increases shown on pages 6 and 7 of the 10 Company's Application compare 1) the increases with the OATT transmission 11 adjustment, which includes a subsidy reduction to 2) rate class increases without the 12 13 OATT transmission adjustment, which do not include any subsidy reduction. This appears to suggest that no subsidy reductions should occur unless the Commission 14 adopts the OATT transmission adjustment.<sup>3</sup> This is no reason to tie subsidy 15 reductions with the proposed OATT adjustment. Given the substantial 16 17 misalignment of rates with cost of service, there can and should be subsidy reductions if the OATT adjustment is rejected by the Commission. 18
- 19
- 20

### Q. Are you recommending a full elimination of subsidies in this case?

<sup>3</sup> However, per the data response discussed in footnote 2, KPCo may have a different position now.

Α. No. It is not reasonable to fully eliminate all of the subsidies in a single rate case. 1 This would not be consistent with the ratemaking principle of gradualism. I believe 2 that it is reasonable for the approved base rates in this case to include subsidies, 3 though at a reduced level from the current amounts. My recommendation in this 4 5 case is to initially reduce subsidies by 35% for each rate class and then apply a 6 mitigation cap to the decreases that any rate class receives such that no class receives 7 a decrease greater than 2.5 times the retail average decrease (0.84% based on KPCo's filing). Any excess decrease amounts greater than the "2.5 times cap" 8 9 would be used to mitigate the residential class increase (the residential class is the 10 only rate class that would receive an increase using a 35% subsidy reduction 11 Baron Exhibit (SJB-2) shows the development of the KIUC method). 12 recommended increases and subsidy reductions with the mitigation method that I just described. 13

14

15 Table 4 below shows the current subsidies, proposed subsidies and the revenue changes for each rate class that would occur if the KIUC recommendation is adopted 16 by the Commission. Also shown are the increases proposed by the Company. As 17 can be seen, the KIUC proposal, which incorporates mitigation, produces a lower 18 overall increase to the residential class. This, of course, assumes that the Company 19 20 received its entire requested base revenue amount. To the extent that the Commission authorizes a lower base revenue amount, the total revenues shown (not 21 22 the increases/decreases) should be scaled back on a proportionate basis.

		1	•		Table 4 ate Revenue Incre Reduction with Mi		95			
Current								Kentucky Power Company Proposed Increases <sup>3</sup>		
<u>Class</u>	<u>Subsidy</u> (JMS-3, P-2)	<u>Subsidy</u> (SJB-2)	Base Rate <sup>1,2</sup> (SJB-2)	Percent	KPCO Riders (KIUC 1-17, Att 36)	Total w/Riders	Percent	Total w/Riders	Percent	
RS	33,770,821	29,045,197	2,224,519	1.0%	\$31,530,078	\$33,754,597	14.67%	36,932,903	16.05	
SGS	(3,841,212)	(3,570,338)	(410,741)	<b>-2</b> .1%	\$2,823,250	\$2,412,510	12.30%	2,039,784	10.40	
MGS	(12,470,969)	(11,620,588)	(1,249,857)	-2.1%	\$8,239,026	\$6,989,169	<mark>11.71%</mark>	4,968,213	8.33	
LGS	(8,180,149)	(7,208,066)	(1,477,975)	-2.1%	\$9,765,858	\$8,287,884	11.74%	7,430,911	10.53	
IGS	(7,608,606)	(5,066,517)	(3,592,859)	-2.1%	\$21,163,366	\$17,570,507	10.24%	17,450,618	10.17	
MW	(61,499)	(56,202)	(7,629)	-2.1%	\$47,939	\$40,310	<mark>11.07%</mark>	30,812	8.46	
OL	(1,225,683)	(1,160,230)	(151,973)	-2.1%	\$1,028,817	\$876,844	12.08%	934,992	12.89	
SL	(382,707)	<u>(363,258)</u>	<u>(29,797)</u>	<u>-2.1%</u>	<u>\$200,106</u>	<u>\$170,310</u>	<u>11.97%</u>	186,989	<u>13.14</u>	
Total	(4)	(3)	(4,696,311)	-0.84%	74,798,441	\$70,102,130	12.50%	69,975,223	12.48	
<sup>3</sup> Does no	ot include rate o	design difference	of \$12,809.		rate design differe			case, given th	le	
	ver	y large subsi	dies being	receive	d by the resid	dential clas	s?			
1	A. Wh	ile cost of se	ervice is an	import	ant componer	nt in setting	rates, it	is not the onl	y	
	com	nponent. Of	particular	signific	ance in this ra	ate case is the	he high	poverty level of	of	
		-	-	-				poverty level o 00 mining job		
	resi	dential custor	mers in Ea	stern K	entucky and the	he recent lo	ss of 7,0		s.	
	resi If th	dential custor	mers in Ea	stern Ko	entucky and the	he recent lo ed <u>residentia</u>	ss of 7,0 al rates v	00 mining job	s.	

1		III. RATE DESIGN ISSUES
2		
3	Q.	Have you reviewed the Company's proposal to merge rate schedules Quantity
4		Power ("QP") and Commercial and Industrial Power Time-of-Day ("CIP-
5		TOD")?
6	А.	Yes. Per the Stipulation and Settlement Agreement and the Commission's Order in
7		the Mitchell Transfer (Case No. 2012-00578), the Company is proposing a merger
8		of these two large industrial rate schedules into a new rate Industrial General Service
9		("IGS"). Based on my review of the proposed IGS tariff, I believe that it should be
10		approved by the Commission.
11		
12	Q.	The Company has also modified its Contract Services – Interruptible Power
13		("C.SI.R.P") tariff, pursuant to the Case No. 2012-00578 Stipulation and
14		Settlement Agreement. Do you have any comments on this tariff?
15	А.	Yes. While I do not have any objections to the specific terms, conditions and rate
16		provisions of the Company's proposed C.SI.R.P tariff, I do have a concern with its
17		reliance on the current PJM Demand Response program. Specifically, PJM has filed
18		with the FERC for significant changes in its emergency demand response program.
19		This filing, which was made on January 15, 2015, may have significant impacts on
20		the existing PJM emergency demand response program that is used to qualify the

1		interruptible load that is eligible for this service. <sup>4</sup> Tariff C.SI.R.P states that the
2		interruptible credit will be "provided for interruptible load that qualifies under PJM's
3		rules as capacity for the purposes of the Company's FRR obligation."
4		
5		KIUC's concern is that the existing PJM rules may be a moving target. There is
6		nothing in the proposed tariff that would provide for such changes. Without
7		providing for such changes, Kentucky Power may not be able to use interruptible
8		load as a PJM capacity resource.
9		
10	Q.	Did KIUC request, through discovery, the Company's plans to address the
11		potential changes in the PJM demand response program?
12	A.	Yes. KIUC made such a request in KIUC 1-14. The question and the Company's
13		response is as follows:
14		REQUEST
15		
16		With regard to the Company's proposed tariff C.SIRP, please provide the
17		following:
18		
19		a. The criteria governing "interruptible load that qualifies under PJM's rules as
20		capacity for the purposes of the Company's FRR obligation". Include each
21		and every criteria, including, but not limited to notice provisions, number of
22		hours of interruption, the number of interruptions by season (e.g., summer
23		months only), the maximum number of hours of any single interruption.
24		
25		b. To the extent that any of the criteria identified in (a) above are expected to
26		change as a result of PJM's January 9, 2015 filing (ER15-135-001) on
27		demand response and its January 14, 2015 filing revising the PJM OATT,

<sup>&</sup>lt;sup>4</sup> Revisions to Reliability Pricing Market ("RPM") and Related Rules in the PJM Open Access Transmission Tariff ("Tariff") and Reliability Assurance Agreement Among Load Serving Entities ("RAA"), FERC Docket No. ER15-852-000 (January 14, 2015).

please identify each such change that the Company is aware of, assuming that PJM's filing is approved.

### RESPONSE

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- a. PJM's criteria and rules governing what qualifies as a capacity resource under the RPM and FRR constructs is contained in its tariffs and manuals. These documents are publicly available at http://www.pjm.com/documents/manuals.aspx. Specifically, see Manual 18 - Capacity Market.
- b. The Company cannot speculate as to what portions of, if any, of PJM's January 9th and 14th filings will be approved and how that may affect the criteria, if at all, and rules referenced in the answer to part a.
- 17 While it is correct that the FERC has not yet approved the PJM filing, it is certainly
  - reasonable to assume that material changes that will impact C.S.-I.R.P. could occur.
- 19 Therefore, the Company should be required to file with this Commission proposed
- 20 revisions to C.S.-I.R.P. that would allow interruptible capacity to continue to be used
- 21 as a PJM capacity resource in the event that FERC approves changes to the PJM
- 22 program. This would allow the Commission to rule on the reasonableness of any
- 23 proposed changes to C.S.-I.R.P.. The parties to this case should be given notice of
- 24 any such filings.

1	IV.	PROPOSED PJM RIDER AND TRANSMISSION COST RECOVERY
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Q. Would you please provide your understanding of the Company's transmission

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cost recovery proposals in this case?

- Currently, all transmission related costs incurred by KPCo are recovered from Α. 5
- customers through base rates. As I discussed earlier in my testimony, the current 6
- 7 base rate revenue requirements are comprised of three main components:
- 8 1. KPCo owned transmission revenue requirements, which consists of a rate of return on KPCo's transmission rate base, transmission depreciation 9 expense and transmission O&M expenses. 10
- 12 2. PJM OATT charges to KPCo, which mostly reflects Network Integrated Transmission Service ("NITS") charges.5 Additional PJM 13 transmission charges such as regional transmission expansion plan ("RTEP") 14 charges, ancillary service charges and various PJM administrative charges 15 are also included.<sup>6</sup> The NITS, and other PJM charges reflect the charges to 16 KPCo as a PJM Load Serving Entity ("LSE"). 17 18
- KPCo transmission owner ("TO") revenues. These are revenues 19 3. paid by PJM to KPCo to compensate the Company for its transmission 20 facilities that are dedicated to the PJM RTO. These TO revenues are a credit 21 22 to KPCo cost of service.
- In this case, the Company is proposing to remove items (1) and (3), leaving only 24 item (2) in base rates. This effectively results in KPCo charging retail Kentucky 25 customers for transmission service based solely on the FERC approved PJM OATT 26 tariff. When combined with the Company's proposed PJM Rider, the KPCo
- 27

<sup>&</sup>lt;sup>5</sup> Prior to January 1, 2014, these costs were charged to AEP East and allocated to KPCo per the Interconnection Agreement.

<sup>&</sup>lt;sup>6</sup> There are numerous additional charges that are identified by KPCo witness Alex Vaughan at page 15 of his direct testimony.

proposal replaces traditional Kentucky Commission regulation of transmission rates with a FERC pass-through rate.

3

### 4 Q. Would you describe the proposed PJM Rider?

Α. The PJM Rider is an annual adjustment to the Company's rates reflecting the 5 difference between actual monthly PJM charges (both PJM transmission charges and 6 7 PJM LSE charges) to KPCo and the amounts of the costs included in base rates. The 8 combination of the base rate PJM OATT and LSE charges, plus the PJM Rider 9 would recover FERC approved transmission and LSE charges to KPCo annually. 10 With respect to transmission costs, Kentucky retail customers would thus be charged 11 the FERC rate, adjusted annually, instead of the current Kentucky Commission 12 approved transmission revenue requirement that is based on the three components that I discussed above. 13

14

Q. Do you agree with the Company's proposal to substitute FERC transmission
 ratemaking on a pass-through basis for the current methodology that
 incorporates both traditional transmission revenue requirements and FERC
 PJM OATT costs and revenue credits?

A. No. The Company's OATT transmission proposal should be rejected for a number
 of reasons. First, the Company's proposal will effectively eliminate the current
 Kentucky Commission jurisdiction and ratemaking authority over retail KPCo
 transmission charges. Because the only transmission costs that will be included in

rates are the costs passed through from PJM, the FERC and not the Kentucky
Commission will solely determine the transmission portion of retail rates. This is a
significant change from the longstanding practice in Kentucky. The Company's
proposal provides no benefits to customers. Rather, it removes state jurisdiction,
substituting federal jurisdiction in its place for these costs.

6

7 The second reason to reject the Company's OATT adjustment/PJM Rider proposal is that it may substantially increase costs to Kentucky customers in future years. 8 Under the current regulatory framework, KPCo must file a base rate case to recover 9 increases in net transmission revenue requirements (the net of items 1, 2 and 3 that I 10 11 discussed above) and PJM LSE charges. For KPCo LSE transmission costs (primarily consisting of NITS costs), the PJM Rider would permit an annual 12 adjustment in a substantial amount of costs, based only on FERC regulatory 13 approval. While KPCo's OATT NITS charges typically increase each year, so do 14 15 the corresponding OATT TO revenues (these TO revenues are KPCo's share of the revenues associated with payments of NITS and other PJM transmission charges by 16 transmission users, including KPCo, based on the AEP East transmission revenue 17 requirements. If KPCo's NITS charges increase, it is reasonable to expect that the 18 KPCo TO revenue credits would increase as well, all else being equal. Under the 19 Company's proposal, it would be allowed to automatically increase transmission 20 rates through a rider even if its earnings would otherwise be adequate. In fact, it 21 could increase transmission rates through a rider even if it were over-earning. On 22

the other hand, in a base rate case, other KPCo revenue requirements can be evaluated to determine if there are offsetting cost decreases. With the PJM Rider, transmission costs are considered only as a single issue. Since the Company does not typically file base rate cases each year, it is likely that customers would not be subject to the same level of net transmission cost increases under the current regulatory framework as they would be under the Company's proposal to rely solely on FERC determined transmission charges and an adjustment clause (PJM Rider).

8

9 Q. Is there any evidence to indicate that customers will face significant increases 10 associated with the Company's OATT adjustment/PJM Rider proposal?

Yes. While the Company has reported that the net effect of its proposal in this case 11 A. is a \$126,908 reduction in revenue requirements, this is only the test year effect. 12 Based on the Company's response to the Attorney General's First Set of Discovery, 13 Item No. 1-337, KPCo expects substantial increases in the PJM Rider transmission 14 15 costs over the next few years. Specifically, KPCo projects that the PJM LSE transmission costs that would be subject to the PJM Rider will be \$60.629 million in 16 2015, \$63.718 million in 2016 and \$72.295 million in 2017 [Baron Exhibit (SJB-17 3) contains a copy of this data response]. Based on Mr. Vaughan's exhibit AEV-5, 18 the corresponding going-level amounts for these same PJM LSE transmission costs 19 were \$53.799 million. As a result, the PJM Rider amount associated with PJM LSE 20 transmission costs, which is \$0 in the test year, will increase to \$6.85 million in 21

1		2015, \$9.9 million in 2016 and \$18.5 million in 2017. <sup>7</sup> These automatic rate
2		increases total more than \$35 million over the first three years.
3		
4	Q.	What is your recommendation regarding the OATT adjustment/PJM Rider
5		issues?
6	А.	For the reasons that I discussed above, I recommend that the Commission reject the
7		Company's proposals.
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<sup>&</sup>lt;sup>7</sup> These amounts reflect the difference between the total PJM Rider LSE transmission cost in each year compared to the going-level test year amount of these costs. Other PJM Rider cost increases may occur as a result of increases in PJM LSE costs that are also recovered in the rider.

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#### **BIOMASS ENERGY RIDER** V.

#### Would you please explain your concerns with the Company's Biomass Energy Q. 3 Rider (B.E.R.)?

A. While KIUC continues to oppose this biomass project, the issue that I am addressing 5 in this case is the recovery mechanism used by KPCo to charge customers for its 6 payments to the biomass facility. The B.E.R. tariff, as currently constructed, 7 recovers the payments that the Company will make to the ecoPower Biomass 8 Facility from all rate classes on a uniform \$/kWh basis [see Baron Exhibit (SJB-4)] 9 10 for a copy of the current tariff. The B.E.R. tariff is not a cost based recovery mechanism and unreasonably overcharges larger, high load factor customers that 11 take service at primary, subtransmission and transmission voltages. Specifically, the 12 13 B.E.R. tariff does not distinguish between energy and demand components, nor does the current recovery mechanism reflect voltage loss differences among rate classes 14 that are almost always reflected in a generating unit (or other power resource) energy 15 16 charge.

17

18 Q. Is it your understanding that the Renewable Energy Purchase Agreement ("REPA") between Kentucky Power Company and the ecoPower Biomass 19 Facility is priced as an energy only (\$/mWh) rate? 20

21 A. Yes.

2

**Q**.

## Why is it appropriate to design a rate recovery mechanism for payments to the Biomass Facility on both an energy and demand basis?

While the payments by KPCo to the Biomass Facility are priced on an energy only A. 3 basis, Kentucky Power would be buying both energy and capacity. In its 4 Application in Case No. 2013-00144, the Company states "Kentucky Power has a 5 unique opportunity to satisfy a portion of its needs by procuring energy and capacity 6 from Kentucky-based biomass-fueled generation. Specifically, Kentucky Power has 7 entered into, subject to further action by the Commission, the EcoPower REPA for 8 58.5 MW (net) of energy and capacity from biomass."<sup>8</sup> In response to a KIUC data 9 request in that case (KIUC First Set of Data Requests Dated May 10, 2013, Item No. 10 20), the Company stated that "the expected capacity value from a PJM perspective is 11 estimated to be in the 85% to 95% range."<sup>9</sup> In its order of October 10, 2013 12 13 approving the Biomass Facility, the Commission discussed the retirement of the 800-MW Big Sandy Unity 2, the acquisition of the Mitchell Generating Station and 14 the conversion of Big Sandy Unit 1 from coal to natural gas, and the stated at page 15 16 16 "This change would leave Kentucky Power with approximately 30 MW less 17 capacity, which would be mitigated by the 58.5 MW to be purchased from the 18 REPA." Nonetheless, the B.E.R. tariff assigns 100% of the cost of the Biomass

<sup>&</sup>lt;sup>8</sup> Application in Case No. 2013-00144 at page 2.

<sup>&</sup>lt;sup>9</sup> See Baron Exhibit (SJB-5) for a copy of this data response.

Facility to customer classes on the basis of metered kWh energy. Since KPCo is
 buying both energy and capacity, it is reasonable to reflect both of these products in
 the B.E.R. tariff cost recovery mechanism.

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- 5

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### Q. Have you developed an alternative B.E.R. recovery mechanism that reflects both energy and demand components?

7 Α. Yes. The approach that I recommend involves two steps. First, the Company should compute, on a monthly basis, an all-hours average AEP East Locational 8 Marginal Price ("LMP") energy price. This price, on a \$/mWh basis, is an accurate 9 10 measure of the avoided energy cost associated with the Biomass Facility output. Effectively, this is the cost of energy that would otherwise be incurred by KPCo, 11 absent the Biomass Facility generation.<sup>10</sup> This amount will be the energy value of 12 13 the Biomass Facility and allocated to rate classes in the B.E.R. tariff on the basis of 14 loss adjusted mWh energy.

15

The second step would determine the residual amount of the monthly cost (after subtracting the energy value), which will be the monthly capacity value of the project. This capacity value will be assigned to customer classes using the KPCo 12 CP demand allocation factors from the most recent base rate case cost of service study.

<sup>&</sup>lt;sup>10</sup> Alternatively, the average hourly LMP can also be considered the energy cost credit to KPCo customers as a result of offering the Biomass Facility output into the PJM market.

### Q. Can you provide an illustration of how your proposal would work?

A. Yes. Baron Exhibit\_\_(SJB-6) shows the development of the allocation of the cost of
the Biomass Facility using the initial REPA around-the-clock contract price of
\$112.58/mWh.<sup>11</sup> For purposes of this illustration, I have developed the analysis on
an annual basis. The actual operation of the B.E.R. can be on either a monthly basis,
or some longer period (3 months, 6 months), as long as there is a true-up provision.
I would recommend a 6 month period, with true-ups as a reasonable mechanism.

8

At an 88% annual capacity factor, the estimated initial cost to KPCo and its 9 customers would be \$50,769,617 on an annual basis. Based on 2014 PJM data, the 10 all-hours AEP Zone LMP was \$44.76/mWh. This produces an energy value of 11 \$20,183,168. The remaining amount of \$30,586,449 would be the demand value. 12 13 These calculations are shown in the first portion of the exhibit. In the second portion 14 of the exhibit, the energy value of \$20,183,168 is allocated to rate classes on the basis of loss adjusted energy, while the demand portion of \$30,586,449 is allocated 15 16 on 12 CP. The final column shows the total amount allocated to each rate class (the 17 allocated energy and demand costs to each rate class).

18

19 The KIUC proposed allocation can be compared with the amount shown in the first 20 column, which is allocated to rate classes on the basis of metered mWh in the 21 current formulation of the B.E.R. tariff. On an actual basis, when the project is

<sup>&</sup>lt;sup>11</sup> Source: Commission Order of October 10, 2013 at page 4.

- generating energy and providing capacity, the actual PJM AEP Zone LMPs should
   be used to compute the energy portion of cost.
- 3
- 4

- Q. How should the allocated energy and demand costs for each rate class be converted into rates?
- A. For the residential and other classes that have energy-only (kWh) rates, the allocated
  costs should be unitized by metered kWh to develop an energy charge. For demand
  metered rate classes, it is appropriate to develop both an energy charge and a
  demand charge. The energy charge would be based on the allocated energy cost
  divided by rate class metered kWh and the demand charge would be calculated by
  dividing the allocated demand cost by billing demands for the rate class.
- 12

### 13 Q. Does that complete your testimony?

14 A. Yes.

### **AFFIDAVIT**

STATE OF GEORGIA ) COUNTY OF FULTON )

STEPHEN J. BARON, being duly sworn, deposes and states: that the attached is his sworn testimony and that the statements contained are true and correct to the best of his knowledge, information and belief.

stephen J. Ba

Sworn to and subscribed before me on this 23rd day of March 2015.

Notary Public



### **BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

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### **IN THE MATTER OF:**

THE APPLICATION OF KENTUCKY POWER COMPANY FOR (1) GENERAL ADJUSTMENT OF ITS RATERS FOR ELECTRIC SERVICE; (2) AN ORDER APPROVING ITS 2014 ENVIRONMENTAL COMPLIANCE PLAN; (3) AN ORDER APPROVING ITS TARIFFS AND RIDERS; AND (45) AN ORDER GRANTING ALL OTHER REQUIRED APPROVALS AND RELIEF

Case No. 2014-00396

**EXHIBITS** 

OF

**STEPHEN J. BARON** 

### **ON BEHALF OF THE**

### KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

J. KENNEDY AND ASSOCIATES, INC. ROSWELL, GEORGIA

March 2015

#### **COMMONWEALTH OF KENTUCKY**

#### **BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

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#### IN THE MATTER OF:

THE APPLICATION OF KENTUCKY POWER
COMPANY FOR (1) GENERAL ADJUSTMENT
OF ITS RATERS FOR ELECTRIC SERVICE; (2)
AN ORDER APPROVING ITS 2014
ENVIRONMENTAL COMPLIANCE PLAN;
(3) AN ORDER APPROVING ITS TARIFFS
AND RIDERS; AND (45) AN ORDER
GRANTING ALL OTHER REQUIRED
APPROVALS AND RELIEF

Case No. 2014-00396

EXHIBIT\_(SJB-1)

OF

**STEPHEN J. BARON** 

#### **ON BEHALF OF THE**

# KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

#### J. KENNEDY AND ASSOCIATES, INC. ROSWELL, GEORGIA

March 2015

Exhibit (SJB-1) Page 1 of 25

#### **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.

Date	Case	Jurisdict.	Party	Utility	Subject
4/81	203(B)	КY	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 <b>-84</b> 0381	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.

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	ОН	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.

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, Southem 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	СТ	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

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	i 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	OH Case	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	ОН	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	тх	Occidental Chemical Corp.	Houston Lighting & Power Co.	Cost-of-service, rate design.

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-
10/89	2262	NM	New Mexico Industrial Energy Consumers	Public Service Co. of New Mexico	casting. 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	СТ	Connecticut Industrial Energy Consumers	Connecticut Light & Power Co.	Interim rate relief, financial analysis, class revenue allocation.
5/91	90-12-03 Phase II	СТ	Connecticut Industrial Energy Consumers	Connecticut Light & Power Co.	Revenue requirements, cost-of- service, rate design, demand-side management.

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	OH	Armco Steel Co., L.P.	Cincinnati Gas &	Economic analysis of
	EL-UNC			Electric Co.	cogeneration, avoid cost rate.
9/91	P-910511 P-910512	ΡΑ	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.
	o testimony îled 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	ОН	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	СТ	Connecticut Industrial Energy Consumers	Yankee Gas Co.	Rate design.

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 <i>1</i> 93	346	КҮ	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.

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 ER94-898-00	-	Louisiana Public Service Commission	El Paso Electric and Central and Southwest	Merger economics, transmission equalization hold harmless proposals.
2/95	941-430EG	СО	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.

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	1-940032	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

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
12/97	R-974104	PA	Duquesne Industrial Intervenors	Duquesne Light Co.	analysis. Retail competition issues, rate unbundling, stranded cost analysis.
3/98 (Allocate Cost Issu	U-22092 d Stranded ues)	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- 4 Answeri	EC-98- 10-000 ng Testimony)	FERC	Louisiana Public Service Commission	American Electric Power Co. & Central South West Corp.	Merger issues related to market power mitigation proposals.

Date	Case	Jurisdict.	Party	Utility	Subject
5/99 (Respon Testimo		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	СТ	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	СТ	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	ОН	AK Steel Corporation	Cincinnati Gas & Electric Co.	Electric utility restructuring, stranded cost recovery, rate Unbundling.

Date	Case	Jurisdict.	Party	Utility	Subject
08/00	98-0452 E-Gl	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-1	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	ТХ	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 EL95-33-002		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) Addressing	LA B) Contested Issue	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.

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	ER03-753-00	00 FERC	Louisiana Public Service Commission Staff	Entergy Services, Inc. and the Entergy Operating Companies	Proposed modifications to System Agreement Tariff MSS-4.
11/03	ER03-583-00 ER03-583-00 ER03-583-00	01	Louisiana Public Service Commission	Entergy Services, Inc., the Entergy Operating Companies, EWO Market-	Evaluation of Wholesale Purchased Power Contracts.
	ER03-681-00 ER03-681-00			Ing, L.P, and Entergy Power, Inc.	
	ER03-682-0( ER03-682-0( ER03-682-0(	01			
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 Intervenor <del>s</del>	Duquesne Light Company	Provider of last resort issues.
03/04	03A-436E	СО	CF&I Steel, LP and Climax Molybedenum	Public Service Company of Colorado	Purchased Power Adjustment Clause.

Date	Case	Jurisdict.	Party	Utility	Subject
04/04	2003-00433 2003-00434	КҮ	Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co. Kentucky Utilities Co.	Cost of Service Rate Design
0-6/04	03S-539E	СО	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-C 05-0750-E-P		West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Environmental cost recovery, Securitization, Financing Order
01/06	2005-00341	КҮ	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Company	Cost of service, rate design, transmission expenses. Congestion
03/06	U-22092	LA	Louisiana Public Service Commission Staff	Entergy Gulf States, Inc.	Cost Recovery Mechanism 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.

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-2006-0	VA 00065	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. 97-01-15RE	CT 202	Connecticut Industrial Energy Consumers	Connecticut Light & Power United Illuminating	Rate unbundling issues.
01/07	Case No. 06-0960-E-∕	WV 12T	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-UN	OH IC	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	ER07-682-00	00 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-E	WY R-07	Cimarex Energy Company	Rocky Mountain Power (PacifiCorp)	Vintage Pricing, Marginal Cost Pricing Projected Test Year
1/08	Case No. 07-551	ОН	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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#### Expert Testimony Appearances of Stephen J. Baron As of February 2015

Date	Case	Jurisdict.	Party	Utility	Subject
3/08	Doc No. E-01933A-0	AZ 5-0650	Kroger Company	Tucson Electric Power Co.	Cost of Service, Rate Design
05/08	08-0278 E-Gl	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-A	OH ATA	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-11	WI 16	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-11	WI 19	Wisconsin Industrial Energy Group, Inc.	Wisconsin Public Service Co.	Cost of Service, rate design, tariff lssues, Interruptible rates.
09/08	Case No. 08-936-EL-		Ohio Energy Group	Ohio Edison, Toledo Edison Cleveland Electric Illuminating	Provider of Last Resort Competitive Solicitation
09/08	Case No. 08-935-EL-		Ohio Energy Group	Ohio Edison, Toledo Edison Cleveland Electric Illuminating	Provider of Last Resort Rate Plan
09/08	Case No. 08-917-EL- 08-918-EL-	SSO	Ohio Energy Group	Ohio Power Company Columbus Southern Power Co.	Provider of Last Resort Rate Plan
10/08	2008-00251 2008-00252		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- 2008-203619		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

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-11	WI 17	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-S	OH SO	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-	VA 00030	Old Dominion Committee For Fair Utility Rates	Appalachian Power Co.	Cost Allocation, Allocation of Rev Increase, Rate Design

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-	₩V 42T	West Virginia Energy Users Group	Mon Power Co. Potomac Edison Co.	Retail Cost of Service Revenue apportionment
3/10	E015/ GR-09-115	MN 1	Large Power Intervenors	Minnesota Power Co.	Cost of Service, rate design
4/10	EL09-61 FE	ERC	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	СО	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	СО	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	КY	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

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-S 11-348-EL-S	SO	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	КҮ	Kentucky Industrial Utility	Louisville Gas & Electric Co. Kentucky Utilities Company	Environmental Cost Recovery
09/11	Case Nos. 11-346-EL-S 11-348-EL-S	SO	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 C		Kentucky Industrial Utility Customers, Inc.	Big Rivers Electric Corporation	Cost of Service, Rate Design
5/12	2011-346 2011-348	ОН	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

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		Kentucky Industrial Utility Customers, Inc.	Louisville Gas & Electric Co. Kentucky Utilities Co.	Cost of Service, Rate Design
11/12	12-1238 E-G!	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 FE	ERC	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

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	ОН	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.	UT	Kroger Company	Rocky Mountain Power Co.	Class Cost of Service
7/14	13-035-184 PUE-2014 -00007	VA	Old Dominion Committee For Fair Utility Rates	Appalachian Power Company	Renewable Portíolio 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 -00026	VA	Old Dominion Committee	Appalachian Power Company	Biennial Review Case - Cost of Service Issues

Date	Case	Jurisdict.	Party	Utility	Subject
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 EI-SS0	ОН	Ohio Energy Group	Ohio Edison, Toledo Edison Cleveland Electric Illuminating	Electric Security Rate Plan Standard Service Offer

#### **COMMONWEALTH OF KENTUCKY**

# BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

#### IN THE MATTER OF:

THE APPLICATION OF KENTUCKY POWER	)	
COMPANY FOR (1) GENERAL ADJUSTMENT	)	
OF ITS RATERS FOR ELECTRIC SERVICE; (2)	)	
AN ORDER APPROVING ITS 2014	ý	Case
ENVIRONMENTAL COMPLIANCE PLAN;	Ś	
(3) AN ORDER APPROVING ITS TARIFFS	Ś	
AND RIDERS; AND (45) AN ORDER	Ś	
GRANTING ALL OTHER REQUIRED	Ś	
APPROVALS AND RELIEF	Ś	

Case No. 2014-00396

EXHIBIT (SJB-2)

OF

**STEPHEN J. BARON** 

#### **ON BEHALF OF THE**

# KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

#### J. KENNEDY AND ASSOCIATES, INC. ROSWELL, GEORGIA

March 2015

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# KIUC Proposed Revenue Allocation with 35% Subsidy Reduction Tweive Months Ended September 30, 2014

Subsidv	Reduction w/Mitigation (17)	4,725,624	(270,874)	(850,381)	(972,083)	(2,542,089)	(5,297)	(65,453)	(19,449)	(1)
Mitjaated	Percent Increase (16)	1.0%	-2.1%	-2.1%	-2.1%	-2.1%	-2.1%	-2.1%	-2.1%	
	Mitigated Increase (15)	2,224,519	(410,741)	(1,249,857)	(1,477,975)	(3,592,859)	(7,629)	(151,973)	(29,797)	(4,696,311)
	Percent Increase (14)	4.05%	-7.57%	-7.98%	-4.77%	-2.16%	-6.55%	-7.10%	-10.14%	-0.84%
	Proposed <u>increase</u> (13)=(7)-(12)	9,318,682	(1,484,291)	(4,764,315)	(3,368,944)	(3,713,782)	(23,857)	(515,509)	(144,295)	(4,696,311)
65% of	Current <u>Subsidy</u> (12)	21,951,034	(2,496,788)	(8,106,130)	(5,317,097)	(4,945,594)	(39,974)	(796,694)	(248,760)	(3)
turn	Income (9)	47,116,782	2,634,820	7,525,438	9,530,172	19,794,765	43,932	1,629,889	194,935	88,470,733
zed Rate of Re	Income Increase (8)	19,064,819	(2,427,222)	(7,846,976)	(5,295,788)	(5,279,531)	(38,917)	(800,036)	(239,641)	(2,863,293)
oposed Equali	Revenue <u>increase</u> (7)	31,269,716	(3,981,079)	(12,870,445)	(8,686,041)	(8,659,376)	(63,831)	1,629,889 (796,694) (515,509) -7.10% (151,973) -2.1% 194,935 (248,760) (144,295) -10.14% (29,797) -2.1% 88,470,733 (3) (4,696,311) -0.84% (4,696,311)	(4,696,314)	
	Percent Increase (6)	13.59	-20.30	-21.57	-12.31	-5.05	-17.52	-18.08	-27.63	-0.84
	Current ROR % (5)	4.55	14.68	15.60	11.88	9.68	14.41	11.39	17.03	7.89
	Current Income (4)	28,051,963	5,062,042	15,372,414	14,825,960	25,074,296	3         171,550,110         259,136,885         25,074,296         9.68         -5.05         (8,659,376)         (5,279,531)         19,794,765         (4,945,594)         (3,713,782)         -2.16%         (3,592,859)         -2.1%           V         364,284         575,126         82,849         14.41         -17.52         (63,831)         (38,917)         43,932         (39,974)         (23,857)         -6.55%         (7,629)         -2.1%           7         364,284         575,126         82,849         14.41         -17.52         (63,831)         (38,917)         43,932         (39,974)         (23,857)         -6.55%         (7,629)         -2.1%           7         7,266,325         21,337,177         2,429,925         11.39         -18.08         (1,312,203)         (800,036)         1,629,889         (796,694)         (515,509)         -7.10%         (151,973)         -2.1%           1,422,710         2,551,935         434,576         17.03         -27.63         (393,055)         (239,641)         194,935         (10,144,295)         -10.14%         (29,797)         -2.1%			
	Rate <u>Base</u> (3)	616,814,372	34,492,915	98,516,888	124,761,218	259,136,885	575,126	21,337,177	2,551,935	1,158,186,516
	Current <u>Revenue</u> (2)	230,140,574	19,611,844	59,677,591	70,569,638	171,550,110	364,284	7,256,325	1,422,710	
	Current Class (1)	RS	SGS	MGS	rcs	IGS	MW	ы	SL	Total

#### **COMMONWEALTH OF KENTUCKY**

#### **BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

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#### **IN THE MATTER OF:**

THE APPLICATION OF KENTUCKY POWER COMPANY FOR (1) GENERAL ADJUSTMENT OF ITS RATERS FOR ELECTRIC SERVICE; (2) AN ORDER APPROVING ITS 2014 ENVIRONMENTAL COMPLIANCE PLAN; (3) AN ORDER APPROVING ITS TARIFFS AND RIDERS; AND (45) AN ORDER GRANTING ALL OTHER REQUIRED APPROVALS AND RELIEF

Case No. 2014-00396

EXHIBIT\_(SJB-3)

OF

**STEPHEN J. BARON** 

#### **ON BEHALF OF THE**

# KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

#### J. KENNEDY AND ASSOCIATES, INC. ROSWELL, GEORGIA

March 2015

# KPCo Base Case Discovery AG 1-337 (\$000s)

#### PJM Rider Transmission Costs

Account	Description	2015	2016	2017
4561035	Network Integrated Transmission Service	41,019	38,343	40,163
5650016	Network Integrated Transmission Service	11,469	14,266	20,019
4561005	Firm and Non-Firm Point to Point Transmission Revenues	(670)	(670)	(670)
4561036	Schedule 1a Charges	508	889	890
5650015	Schedule 1a Charges	66	-	-
4561060	Transmission Enhancement Charges	1,053	1,406	1,596
5650012	Transmission Enhancement Charges	5,530	6,290	6,244
5650019	Transmission Enhancement Charges - Affil	1,452	3,048	, 3,907
4561002	RTO Formation Costs	146	146	, 146
4561003	Expansion Cost Recovery Charge	56	-	-
	Total PJM Rider Transmission Costs	60,629	63,718	72,295

#### **COMMONWEALTH OF KENTUCKY**

# BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

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#### IN THE MATTER OF:

THE APPLICATION OF KENTUCKY POWER
COMPANY FOR (1) GENERAL ADJUSTMENT
OF ITS RATERS FOR ELECTRIC SERVICE; (2)
AN ORDER APPROVING ITS 2014
ENVIRONMENTAL COMPLIANCE PLAN;
(3) AN ORDER APPROVING ITS TARIFFS
AND RIDERS; AND (45) AN ORDER
GRANTING ALL OTHER REQUIRED
APPROVALS AND RELIEF

Case No. 2014-00396

EXHIBIT\_(SJB-4)

OF

**STEPHEN J. BARON** 

#### **ON BEHALF OF THE**

# KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

#### J. KENNEDY AND ASSOCIATES, INC. ROSWELL, GEORGIA

March 2015

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#### P.S.C. KY. NO. 10 ORIGINAL SHEET NO. 23-1 CANCELLING P.S.C. KY. NO. 10 \_\_\_\_\_ SHEET NO. 23-1

#### TARIFF B.E.R. (Biomass Energy Rider)

#### APPLICABLE.

To Tariffs R.S., R.S.-L.M.-T.O.D., R.S.-T.O.D., Experimental R.S.-T.O.D.2, S.G.S., Experimental S.G.S.-T.O.D., M.G.S., M.G.S.-T.O.D., L.G.S., L.G.S.O.D., O.P., C.I.P., T.O.D. I.G.S., C.S.-I.R.P., M.W., O.L. and S.L.

#### RATE.

1. When energy is generated and sold to the Company from the ecopower biomass facility, an additional charge equal to the product of the kWh of sales and a biomass adjustment factor (A) shall be made, where, "A", calculated to the nearest 0.0001 mil per kilowatt=hour, is defined as set forth below.

Biomass Adjustment Factor (A)=(R\*Pm)/Sm

In the above formulas "R" is the rate for the current calendar year approved by this commission in the REPA between ecopower and Kentucky Power Company, "P" is the about of Kwh purchased by Kentucky Power in the current (m) period, and "S" is the kWh sales in the current (m) period, all defined below.

- 2. Rate (R) shall be the dollar per MWh as defined in the REPA between ecopower and Kentucky Power Company, including any applicable escalation factor as defined in the REPA.
- 3. Produced energy (P) shall be the MWh produced and sold to Kentucky Power Company.
- 4. Sales (S) shall be all KWh sold, excluding intersystem sales. Utility used energy shall not be excluded in the determination of sales (S).
- 5. Any over/under recovery will be reflected in the monthly filing for the second billing moth following the month the cost is incurred.
- 6. The monthly bio mass energy rider shall be filed with the Commission ten (10) days before it is scheduled to go into effect, along with all the necessary supporting data to justify the amount of the adjustment, which shall include data, and information as may be required by the Commission.
- 7. Copies of all documents required to be filed with the Commission shall be open and made available for public inspection at the office of the Public Service Commission pursuant to the provisions of KRS61.870 to 61.884.

DATE OF ISSUE: December 23, 2014

DATE EFFECTIVE: Service Rendered On And After January 23, 2015

ISSUED BY: JOHN A. ROGNESS III

**TITLE:** Director Regulatory Services

By Authority Of Order By The Public Service Commission

In Case No. 2014-00396 Dated XXXXXXXX

### **COMMONWEALTH OF KENTUCKY**

# **BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

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#### IN THE MATTER OF:

THE APPLICATION OF KENTUCKY POWER
COMPANY FOR (1) GENERAL ADJUSTMENT
OF ITS RATERS FOR ELECTRIC SERVICE; (2)
AN ORDER APPROVING ITS 2014
ENVIRONMENTAL COMPLIANCE PLAN;
(3) AN ORDER APPROVING ITS TARIFFS
AND RIDERS; AND (45) AN ORDER
<b>GRANTING ALL OTHER REQUIRED</b>
APPROVALS AND RELIEF

Case No. 2014-00396

EXHIBIT\_(SJB-5)

OF

**STEPHEN J. BARON** 

#### **ON BEHALF OF THE**

# KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

#### J. KENNEDY AND ASSOCIATES, INC. ROSWELL, GEORGIA

March 2015

KPSC Case No. 2013-00144 KIUC First Set of Data Requests Dated May 10, 2013 Item No. 20 Page 1 of 1

#### **Kentucky Power Company**

#### REQUEST

Please provide the estimated capacity value of the proposed facility for PJM purposes. Provide all documentation relied on to make this estimate.

#### RESPONSE

PJM has not yet determined the PJM capacity value of the facility. Based on the expected capacity factor of 88%, and the PJM Capacity Factor guidelines as described in PJM Manual 18, the expected capacity value from a PJM perspective is estimated to be in the 85% to 95% range. Please refer to KIUC 1-20 Attachment 1 for the specific PJM guidelines for the calculation of PJM capacity values for new generation resources.

WITNESS: Jay F Godfrey

#### **COMMONWEALTH OF KENTUCKY**

# BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

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#### IN THE MATTER OF:

THE APPLICATION OF KENTUCKY POWER
COMPANY FOR (1) GENERAL ADJUSTMENT
OF ITS RATERS FOR ELECTRIC SERVICE; (2)
AN ORDER APPROVING ITS 2014
ENVIRONMENTAL COMPLIANCE PLAN;
(3) AN ORDER APPROVING ITS TARIFFS
AND RIDERS; AND (45) AN ORDER
GRANTING ALL OTHER REQUIRED
APPROVALS AND RELIEF

Case No. 2014-00396

EXHIBIT\_(SJB-6)

OF

**STEPHEN J. BARON** 

#### **ON BEHALF OF THE**

# KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

#### J. KENNEDY AND ASSOCIATES, INC. ROSWELL, GEORGIA

March 2015

Development of Revised Biomass Energy Rider (B.E.R.) Illustration Using 2014 Data	

 58.5	Capacity - mW
450,965	Estimated mWh @ 88% LF
112.58	\$ Initial Contract Price - \$/mWh
50,769,617	\$ Estimated Annual Cost - 1st Year
44.76	\$ 2014 Average PJM AEP Zone LMP - \$/mWh
20,183,168	\$ Estimated Annual Energy Value
30,586,449	\$ Demand Cost (amount in excess of Energy Value)

	Current Tariff	KIUC Proposed Allocation				
	Total Cost	Energy Cost	Demand Cost	Total Cost		
	(Energy @ Meter)	(Energy @ Gen)	(12 CP)			
RS	17,673,479	7,171,920	14,374,034	21,545,954		
SGS	1,114,769	452,521	629,650	1,082,171		
MGS-SEC	3,935,440	1,597,431	2,371,554	3,968,985		
MGS-PRI	73,169	28,690	42,470	71,160		
MGS-SUB	7,880	3,056	4,446	7,502		
LGS-SEC	4,384,614	1,779,906	2,568,164	4,348,070		
LGS-PRI	877,311	343,827	499,997	843,824		
LGS-SUB	263,878	102,306	147,931	250,237		
LGS-TRA	5,252	2,012	2,920	4,932		
QP-SEC	175,324	71,181	89,744	160,925		
QP-PRI	2,589,976	1,014,474	1,243,353	2,257,828		
QP-SUB	2,681,168	1,039,158	1,317,501	2,356,659		
QP-TRA	518,513	198,600	289,423	488,023		
CIP-TOD-SUB	13,794,203	5,344,938	6,048,085	11,393,023		
CIP-TOD-TRA	2,286,049	875,323	931,470	1,806,793		
MW	30,215	12,268	13,959	26,227		
OL	294,335	119,546	9,563	129,109		
SL	64,043	26,012	2,185	28,197		
Total	50,769,617	20,183,168	30,586,449	50,769,617		