

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Kentucky Power

Kentucky Power 101A Enterprise Drive P O Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

February 19, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

RECEIVED

FEB 19 2010 PUBLIC SERVICE COMMISSION

Attention: Aaron D. Greenwell

RE: Monthly Environmental Surcharge Report

Dear Mr. Derouren,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and three copies of its Environmental Surcharge Reports for the month of January 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after March 01, 2010.

ES FORM 3.11 (SO2 Emission Allowances) has been revised to reflect the allowances consumption based on vintage year. For years 2009 and prior, the consumption ratio per allowance is 1:1 and for years 2010 to 2014 the consumption per allowance is 2:1.

Attached is a schedule that reflects the major changes in environmental facilities net investment at Ohio Power Company's share of Amos Plant Unit 3 (Es FORM 3.14, Page 3 of 11) and Ohio Power Company's Gavin Plant (ES FORM 3.14, Page 5 of 11) for year 2009. The primary investment at Amos Plant Unit 3 was a Scrubber (FGD). At Gavin Plant, the primary change was the capitalization of the Scrubber (FGD) that had been under lease with JMG Funding. The lease was terminated and the Scrubber was capitalized as part of generation plant in 2009.

If there are any questions please contact me at 502-696-7010.

Errol K. Wagner / Director Regulatory Services Enclosures

Kentucky Power Company ES FORM 3.14 - Changes in Utility Plant at Original Cost

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Plant	Description	Amount
Ohio Power Company's share of Amos Plant - Unit 3 ES FORM 3.14 Page 3 of 11	Environmental Facilities Investment as of December 31, 2008	\$91,985,591
	Year 2009 Net Additions - SCR SCR Catalyst Precipitator Modifications FGD (Scrubber) Landfill Coal Blending Facilities Environmental Facilities Investment as of December 31, 2009	(\$2,315,748) \$1,602,730 \$132,334,171 \$372,173,897 \$1,876,775 \$3,575,879 \$601,233,295
Ohio Power Company's Gavin Plant ES FORM 3.14 Page 5 of 11	Environmental Facilities Investment as of December 31, 2008 Year 2009 Net Additions - SCR SCR Catalyst FGD (Scrubber) Low NOx Burners SO3 Mitigration	\$258,204,701 \$220,954 \$4,851,957 \$691,102,005 \$2,687,177 (\$10,501)
	Environmental Facilities Investment as of December 31, 2009	\$957,056,293

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of January 2010

	CALCULATION OF E(m)			
	E(m) = CRR - BRR			
LINE 1	CRR from ES FORM 3.00	\$4,719,203		
LINE 2	Brr from ES FORM 1.10	\$2,531,784		
LINE 3	E(m) (LINE 1 - LINE 2)	\$2,187,419		
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	77.2%		
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,688,688		
LINE 5A	Environmental Surcharge Clause Adjustment per Order in Case No. 2009 - 00316 dated January 20, 2010	(\$85,082)		
LINE 6	(Over)/Under Recovery Adjustment from ES FORM 3.30	(\$455,165)		
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,148,441		
	SURCHARGE FACTOR			
LINE 8	Net KY Retail E(m) (Line 7)	\$1,148,441		
LINE 9	KY Retail R(m) from ES FORM 3.30	\$50,334,032		
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	2.2816%		

Effective Date for Billing:

March 2010

ð:

Director Regulatory Services

Submitted By :

Title :

Date Submitted :

February 19, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of January 2010

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MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$2,531,784 3,003,995 2,845,066 2,095,535 1,514,859 1,913,578 2,818,212 2,342,883 2,852,305 2,181,975 2,598,522 1,407,969 \$28,106,683 =========

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of January 2010

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CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE			
NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,673,363
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$45,918
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$78	
	Total Net Proceeds from SO2 Allowances	\$78	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$78
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,719,203

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

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For the Expense Month of January 2010

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of January 2010

		(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost	
		WORLD		of Addivity		, tronago coot	
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209	
Additions -							
EPA Allowances		0	403,260	\$0	\$0	\$0.000	
Gavin Reallocation		10,582	94,744	\$0	\$0	\$0.000	
P & E Transfers In		1,332	327,201	\$130,472	\$4,855,695	\$14.840	
Intercompany Purchases		13,191	33,930	\$6,208,212	\$9,455,560	\$278.678	
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014	
SO2 Emissions Allowance		0	4	\$0	\$0	\$0.000	
Adjustment		0	4	ψυ	φυ	φ0.000	
Withdrawals -							
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459	
Intercompany Sales		0	52,690	\$0	\$4,758,135	\$90.304	
Off - System Sales		0	303,050	\$0	\$29,780,273	\$98.269	
SO2 Emissions Allowance							
Adjustment		0	0	\$0	\$0	\$0.000	
SO2 Emissions Allowances							
Consumed By Kentucky Power - 1:1							
(Year 2009 & Prior)	1,897						
SO2 Emissions Allowances							
Consumed By Kentucky Power - 2:1							
(Years 2010 to 2014)	7,140	9,037	563,033	\$385,323	\$38,115,277	\$67.696	
ENDING INVENTORY - Record				· · · · · · · · ·			
Balance in Column (4) on							
ES FORM 3.10, Line 5			1,116,798		\$12,660,047	\$11.336	
Expense Month Member Load Ratio	for AEP/k	Kentucky Power		-		0.07173	

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of January 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions - EPA Allowances P&E Transfers In Intercompany Purchases Other (List)	0 0 0 0	0 36,954 0 0 0	\$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0.000 \$0.000 \$0.000
Withdrawals - P & E Transfers Out Intercompany Sales Off - System Sales ERC Consumed By Kentucky Power NOx Consumed By Kentucky Power	0 0 0 0 0	0 2,425 930 16,218	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0.000 \$0.000 \$0.000 \$0.000 \$0.000 \$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		17,381		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,622	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	470	\$441,600	\$565,871	\$1,203.981
Other (List)	0	0	\$0	\$0	. \$0.000
Withdrawals -					60,000
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$O	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	1,005	8,837	\$9,010	\$527,905	\$59.738
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		36,255		\$37,966	\$1.047

For the Expense Month of January 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of January 2010

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LINE NO.	O&M Expenses		
1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$411,684 <u>\$385,323</u>	\$827,558
5 6 7 8 9 10 11	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	\$0 \$395,987 \$0 \$9,010 \$1,281 <u>\$6,981</u>	<u>\$413,258</u>
12 13	Total Monthly O&M Expenses Cash Working Capital Allowance (Line 12 X 1/8)		<u>\$1,240,816</u> \$155,102

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs January 2010

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$163.62	\$0.00	\$0.00	\$163.62
Boiler Acoustic Horns	\$460.00	\$0.00	\$0.00	\$460.00
SCR Acoustic Horns	\$3,499.43	\$0.00	\$0.00	\$3,499.43
SCR Boiler Outlet Ductwork	\$44.28	\$1,765.90	\$0.00	\$1,810.18
SCR NOx Monitoring	\$1,363.97	\$0.00	\$0.00	\$1,363.97
SCR Reactor	\$1,500.00	\$0.00	\$0.00	\$1,500.00
SCR Seal Layup Fan	\$217.09	\$0.00	\$0.00	\$217.09
Total SCR January 2010 O & M Expense	\$7,248.39	\$1,765.90	\$0.00	\$9,014.29
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$1,280.58	\$1,280.58
Emission Testing Required Under Permit -				
Operation Maintenance	\$0.00 (\$2,033.53)	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 (\$2,033.53)
January 2010				

January 2010 O & M Expenses Filed

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\$8,261

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> ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of January 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$393,588		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$298,584		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$818,844		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$4,524		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$737,412		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$72,384		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$9,048		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$4,524	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$18,096	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,334,384	\$22,620	\$2,357,004

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

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For the Expense Month of January 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$771,283	-	
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$1,354,790		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$5,681,839		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$18,549		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$1,357,459		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$250,930		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$15,159		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$9,450,009	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,425,000	5,366,000	
13	Environmental Base (\$/kw)	\$1.12	\$0.01	
14	Company Surplus Weighting	81.00%	17.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.91	\$0 .00	
16	Kentucky Power Capacity Deficit (kw)	452,400	452,400	
17	Fixed O&M Environmental Cost to Kentucky Power	\$411,684	\$0	\$411,684

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

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LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$601,233,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$8,236,896
4	Ohio Power Company's Percentage Ownership - Environmental Investment	100.00%
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
5	Operations :	1-1
6	Disposal (5010000)	\$0
7	Urea (5020002)	\$451,711
8	Trona (5020003)	\$271,560
9	Lime Stone (5020004)	\$423,417
10	Air Emission Fee	\$10,17 <u>8</u>
11	Total Operations (Lines 6 thru 10)	\$1,156,866
.,	Maintenance :	
12	SCR Maintenance (5120000)	\$0
13	Scrubber (FGD) Maintenance (5120000)	<u>\$0</u>
14	Total Maintnenance (12) + (13)	<u>\$0</u>
15	1/2 of Maintenance (14) * 50%	\$0
	Fixed $O&M(11) + (15)$	\$1,156,866
17	Ohio Power Company's Percentage Ownership - O&M Cost	66.67%
18	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	\$771,283
	Total Revenue Requirement,	
19	Cost Associated with Amos Unit No. 3 (5) + (18)	\$9,008,179
20	Ohio Power Company Steam Capacity (kw)	8,425,000
21	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.07
22	Ohio Power Surplus Weighing	81.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.87
	Amos Unit No. 3 Costs to Kentucky Power :	
24	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.87
25	Kentucky Power Capacity Deficit (kw)	<u>452,400</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 1)	\$393,588

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
		\$398,290,892
1	Utility Plant at Original Cost	
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u> \$5,456,585
3	Total Rate Base	φ0,400,000
	Operations :	\$149,410
4	Disposal (5010000)	\$195,386
5	Urea (5020002)	\$94,420
6	Trona (5020003)	\$442,538
7	Lime Stone (5020004)	\$10,606
8 9	Air Emission Fee	\$892,360
9	Total Operations (Line 4 thru 8) Maintenance :	ψ092,000
10	SCR Maintenance (5120000)	\$12,272
11	Scrubber (FGD) Maintenance (5120000)	\$912,587
12	Total Maintenance (11) + (12)	\$924,859
12	1/2 Maintnenance (12) * 50%	\$462,430
13	Fixed $O&M(9) + (11)$	<u>\$402,430</u> <u>\$1,354,790</u>
14	Total Revenue Requirement,	<u>\u03c4,130</u>
15	Cost Associated with Cardinal Unit No. 3 (3) + (12)	\$6,811,375
16	Ohio Power Company's Percentage Ownership	100.00%
17	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)	\$6,811,375
18	Ohio Power Company Steam Capacity (kw)	8,425,000
19	Cardinal Unit No. 1 (\$/kw)	\$0.81
20	Ohio Power Surplus Weighing	81.00%
21	Portion of Weighted Average Capacity Rate	01.0070
21	Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)	\$0.66
	Cardinal Unit No. 1 Costs to Kentucky Power :	<i>\$0.00</i>
22	Cardinal Unit No. 1 Portion (\$/kw) (21)	\$0.66
23	Kentucky Power Capacity Deficit (kw)	452,400
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	<u></u>
24	(ES FORM 3.14, Page 1 of 10, Line 2)	\$298,584
<u> </u>		<i>+_</i> ,

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

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LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$957,056,293
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$13,111,671
	Operations :	
4	Sludge Disposal (5010000)	\$761,664
5	Lime (5020001)	\$3,490,483
6	Urea (5020002)	\$789,641
7	Trona (5020003)	\$412,306
8	Lime Stone (5020004)	\$0
9	Air Emission Fee	\$36,017
10	Lease (5070005)	<u>\$0</u>
11	Total Operations (Lines 4 thru 10)	\$5,490,111
	Maintenance :	
12	SCR Maintenance (5120000)	\$22,179
13	Scrubber Maintenance (5120000)	<u>\$361,276</u>
14	Total Maintenance (12) + (13)	\$383,455
15	1/2 of Maintenance (13) * 50%	<u>\$191,728</u>
16	Fixed O&M (11) + (15)	<u>\$5,681,839</u>
	Total Revenue Requirement,	
17	Cost Associated with Gavin Plant (3) + (16)	\$18,793,510
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$18,793,510
20	Ohio Power Company Steam Capacity (kw)	8,425,000
21	Gavin Plant (\$/kw)	\$2.23
22	Ohio Power Surplus Weighing	81.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.81
	Gavin Plant Costs to Kentucky Power :	
24	Gavin Plant Portion (\$/kw) (23)	\$1.81
25	Kentucky Power Capacity Deficit (kw)	<u>452,400</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 3)	\$818,844
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
		M7 470 774
1	Utility Plant at Original Cost	\$7,173,774
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$98,281
	Operations :	ф О
4	Urea (5020002)	\$0 \$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$18,549</u>
7	Total Operations $(4) + (5) + (6)$	\$18,549
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	. <u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$18,549</u>
	Total Revenue Requirement,	
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$116,830</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$116,830
14	Ohio Power Company Steam Capacity (kw)	8,425,000
15	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	81.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>452,400</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$4,524

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ES FORM 3.14 Page 7 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$1,139,062,655
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$15,605,158
	Operations :	
4	Disposal (5010000)	\$120,971
5	Lime Stone (5020004)	\$669,270
6	Urea (5020002)	\$510,689
7	Trona (5020003)	\$67,911
8	Air Emission Fee	<u>\$15,502</u>
9	Total Operations (Lines 4 thru 8)	\$1,384,343
	Maintenance :	
10	FDG (5120000)	(\$59,246)
11	SCR Maintenance (5120000)	<u>\$5,477</u>
12	1/2 of Maintenance (10 + 11) * 50%	<u>(\$26,885)</u>
13	Fixed O&M (9) + (12)	<u>\$1,357,459</u>
	Total Revenue Requirement,	
14	Cost Associated with Mitchell Plant (3) + (13)	<u>\$16,962,617</u>
15	Ohio Power Company's Percentage Ownership	100.00%
16	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$16,962,617
17	Ohio Power Company Steam Capacity (kw)	8,425,000
18	Mitchell Plant (\$/kw)	\$2.01
19	Ohio Power Surplus Weighing	81.00%
20	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.63
	Mitchell Plant Costs to Kentucky Power :	
21	Mitchell Plant Portion (\$/kw) (20)	\$1.63
22	Kentucky Power Capacity Deficit (kw)	<u>452,400</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
23	(ES FORM 3.14, Page 1 of 10, Line 5)	\$737,412

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ES FORM 3.14 Page 8 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

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LÍNE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$107,185,185
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,468,437
J	Operations :	φ1,400,407
4	Urea (5020002)	\$212,929
5	Trona (5020003)	\$0
6	Air Emission Fee	\$32,912
7	Total Operations $(4) + (5) + (6)$	\$245,841
·	Maintenance :	12.000
8	SCR Maintenance (5120000)	\$10,177
9	1/2 of Maintenance (8) * 50%	\$5,089
10	Fixed O&M (7) + (9)	\$250,930
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,719,367</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,719,367
14	Ohio Power Company Steam Capacity (kw)	8,425,000
15	Muskingum Plant (\$/kw)	\$0.20
16	Ohio Power Surplus Weighing	81.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.16
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.16
19	Kentucky Power Capacity Deficit (kw)	<u>452,400</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$72,384

ES FORM 3.14 Page 9 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

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LINE NO.	COST	AMOUNTS
		\$20,298,007
1	Utility Plant at Original Cost	\$20,200,007 1.37%
2 3	Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$278,083
3	Operations :	φ210,000
	Urea (5020002)	\$0
4 5	Trona (5020003)	\$0 \$0
5 6	Air Emission Fee	\$15,15 <u>9</u>
7	Total Operations (4) + (5) + (6)	\$15,159
'	Maintenance :	φ10,100
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	\$ <u>0</u>
10	Fixed O&M (7) + (9)	\$15,1 <u>59</u>
10	Total Revenue Requirement,	<u> </u>
11	Cost Associated with Sporn Plant (3) + (10)	\$ <u>293,242</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$293,242
14	Ohio Power Company Steam Capacity (kw)	8,425,000
15	Sporn Plant (\$/kw)	\$0.03
16	Ohio Power Surplus Weighing	81.00%
17	Portion of Weighted Average Capacity Rate	
.,	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.02
	Sporn Plant Costs to Kentucky Power :	,
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.02
19	Kentucky Power Capacity Deficit (kw)	452,400
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$9,048

ES FORM 3.14 Page 10 of 11

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of January 2010

NO.					LOCKDOL	
	COST	Common	AMOUNTS	AMOUNTS	Common	Total
	(2)	(3)	(4)	(2)	(6)	(7)
	Utility Plant at Original Cost	\$1 777 228	\$10 544 676	\$16 700 416	\$2 207 020	
	Member Primary Capacity Investment Rate (16.44% / 12)	-	1.37%	#10,00,110 1.37%	46,606,060 1.37%	
	Total Rate Base	\$24,348	\$144.462	\$228,919	\$30,168	
	Operations :					
	Urea (5020002)	\$0	\$0	20 \$	\$0	
	Trona (5020003)	80	\$0	80	\$0	
	Air Emission Fee	\$15,625	\$0	\$0 \$	\$0	
	Total Operations (4) + (5) + (6)	\$15,625	ß	\$	S S	
	Maintenance :					
	SCR Maintenance (5120000)	\$0	\$0	\$0	\$0	
	1/2 of Maintenance (8) * 50%	\$0 \$	\$0	\$0	\$0	
	Fixed O&M (7) + (9)	\$15,625	8	8	8	
	Total Revenue Requirement,					
_	Cost Associated with Rockport Plant (3) + (10)	\$39,973	\$144,462	\$228,919	\$30,168	
_	Indiana Michigan Power Company's Percentage Ownership	50%	85.00%	65.08%	50.00%	
_	&M's Share of Cost Associated with Rockport Plant (11) X (12)	\$19,987	\$122,793	\$148,980	\$15,084	
•	Total Rockport Plant Common and Units 1 & 2					\$306,844
	Indiana Michigan Power Company Steam Capacity (kw)					5,366,000
	Rockport Plant (\$/kw) (14) / (15)					\$0.06
	Kentucky Power Portion of Rockport Plant /					
	itualia inicirigari Power Surpius vveigning Portion of Meinhtad Averana Canacity Bata					17.00%
	Attributed to Rockport Plant (\$/kw) (17) X (18)					\$0.01
****	Rockport Plant Costs to Kentucky Power :					
	<pre>Cockport Plant Portion (\$/kw) (18)</pre>					\$0.01
<u>x</u> u	Kentucky Power Capacity Deficit (kw)					<u>452,400</u>
	Nockpoir Units 1 & 2 Environmental to Nemticky Power (19) * (20) ES FORM 3.14 Page 1 of 10.1 ine 8)					2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
-						47C'4¢

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

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2 M 3 Ta 0 4 U 5 Ta 6 Ai 7 Ta M 8 Sa 9 1/ 10 Fi	Jtility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Fotal Rate Base Operations : Jrea (5020002) Frona (5020003) Air Emission Fee Fotal Operations (4) + (5) + (6)	\$98,439,622 <u>1.37%</u> \$1,348,623 \$0 \$0 \$15,625
2 M 3 Ta 0 4 U 5 Ta 6 Ai 7 Ta M 8 Sa 9 1/ 10 Fi	Member Primary Capacity Investment Rate (16.44% / 12) Fotal Rate Base Operations : Jrea (5020002) Frona (5020003) Air Emission Fee	<u>1.37%</u> \$1,348,623 \$0 \$0
3 To 4 U 5 To 6 Ai 7 To 8 So 9 1/ 10 Fi	Fotal Rate Base Operations : Jrea (5020002) Frona (5020003) Air Emission Fee	\$1,348,623 \$0 \$0
0 4 U 5 Ti 6 Ai 7 Tc M 8 Sc 9 1/ 10 Fi	Dperations : Jrea (5020002) Trona (5020003) Air Emission Fee	\$0
4 U 5 Ti 6 Ai 7 Tc M 8 Sc 9 1/ 10 Fi	Jrea (5020002) Frona (5020003) Air Emission Fee	\$0
5 Ti 6 Ai 7 Ta M 8 Sa 9 1/ 10 Fi	Trona (5020003) Air Emission Fee	
6 Ai 7 To M 8 So 9 1/ 10 Fi	Air Emission Fee	\$15,625
8 S(9 1/ 10 Fi	Total Operations (4) + (5) + (6)	<u> </u>
8 S 9 1/ 10 Fi		\$15,625
9 1/ 10 Fi	Maintenance:	
10 Fi	SCR Maintenance (5120000)	\$0
	I/2 of Maintenance (8) * 50%	<u>\$0</u>
	Fixed O&M (7) + (9)	<u>\$15,625</u>
To	fotal Revenue Requirement,	
11 C	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,248</u>
	ndiana Michigan Power Company's Percentage Ownership	100.00%
13 8	&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
14 In	ndiana Michigan Power Company Steam Capacity (kw)	5,366,000
	Tanners Creek Plant (\$/kw)	\$0.25
	ndiana Michigan Power Surplus Weighing	17.00%
	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	anners Creek Plant Costs to Kentucky Power :	
	anners Creek Plant Portion (\$/kw) (17)	\$0.04
	Kentucky Power Capacity Deficit (kw)	<u>452,400</u>
	anners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20 (E	ES FORM 3.14, Page 1 of 10, Line 9)	\$18,096

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

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For the Expense Month of January 2010

LINE NO	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 04/30/2009							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$420,000,000 \$156,177,865	40.964% 15.233%	6.05% 2.43%		2.48% 0.37%			2.48% 0.37%
3 4	FINANCING C EQUITY	\$44,758,222 \$404,345,136	4.365% 39.437%	3.17% 10.50%	1/	0.14% 4.14%	1.5760	2/	0.14% 6.53%:
5	TOTAL	\$1,025,281,223	100.000%			7.13%			9.52%
1/		nted Average Cost o on Common Equity		09 - 00316		<u> </u>			
2/		Conversion Factor - 00316 dated - Jan		tion:					
1 2 3		EVENUE LE ACCOUNTS EX Service Commissio					100.0000 0.2600 0.1500		
4 5		LE PRODUCTION II E TAX EXPENSE, N				ow)	99.5900 5.6372		
6 7	FEDERAL TAX/ 199 DEDUCTIO	ABLE PRODUCTIO	N INCOME BEF	ORE 199 DEDU	СТІС	м	93.9528 5.6372		
8 9		ABLE PRODUCTION OME TAX EXPENSE		EDUCTION (35%	6)		88.3156 _30.9105		
10	AFTER-TAX PR	ODUCTION INCOM	1E				57.4051		
11 12 13 14 15	AFTER-TA) 199 DEDU(UNCOLLEC	CTOR FOR PRODU K PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS ublic Service Comm					57.4051 5.6372 0.2600 0.1500		
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION I	NCOME (ROUN	IDE))	63.4523		
17 18 19 20	BLENDED FEDI FEDERAL (STATE (LIN BLENDED TAX	IE 4)	TAX RATE:				30.9105 5.6372 36.5477		
21	GROSS REVEN	UE CONVERSION	FACTOR (100.0	000 / Line 14)		=	1.5760		
1 2 3	PRE-TAX P COLLECTIE	TAX CALCULATIC RODUCTION INCO BLE ACCOUNTS EX ublic Service Comm		100.0000 0.2600 0.1500					
4 5		ABLE PRODUCTIC		FORE 199 DEDU	JCTI	ON	99.5900 5.6372		
6 7		ABLE PRODUCTIO OME TAX RATE	N INCOME BEF	ORE 199 DEDU	JCTI	ON	93.9528 6.0000		
8	STATE INC	OME TAX EXPENS	E (LINE 5 X LIN	E 6)		=	5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 04/30/2009 based on Case No. 2009-00316, dated January 20, 2010. ES FORM 3.20

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of January 2010

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Total	(6)									÷	1	
Rockport Plant Common	(8)		32, 100, 232 (\$52,380) (\$14,950)	\$2,117,962	0.8432% \$17,859	\$4,365 \$0	\$4,365	\$22,224	\$6,667			
Total Units 1 & 2 (C5 + C6)	(1)			\$9,125,741	0.8432%	\$39 <mark>.968</mark> \$0	\$39,968	\$116,916	\$35,075			
Unit No. 2	(9)	\$8,353,084	(\$1,688,930) (\$1,020,076)	\$5,644,078		\$24,502 \$0						
Unit No. 1	(2)	\$5,272,657	(\$1,141,777) (\$ <u>6</u> 49,217)	\$3,481,663		\$15,466 \$0						
Rockport Plant Common	(4)	\$1,777,206	(\$792,961) (\$153,494)	\$830,751	0.8432%	\$5,212 \$15,625	\$20,837	\$27,842	\$4,176			
10.1180%												
COST COMPONENT	(2)	Reckport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOX Burners (LNB) Installed Cost	Less Accumulated Depreciation Less Accum. Def. Income Taxes	Total Rate Base Weighted Average Cost of Capital - ES FORM 3.21 Monthy Woltherd Aver Cost of Costal A INF 7.4 00	Monthly Return of Rate Base (Line 6 * Line 8) Onthly Return of Rate Base (Line 6 * Line 8) Operating Expenses :	Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%) Kentucky Power's Portion of Rockport Plants'	Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8, Line 16 is to be Recorded on CC ECDM 3 on Line 3.		
LINE. NO.	Ê	- N A			<u>່</u> ວດ		12	-	4 0 7 7 7	<u>ب</u> پ ۲		

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

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LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 01/31/2010							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	78,090,337 49,025,442	36.573 3% 22.9609%	4.9445% 0.1567%		1.8084% 0.0360%			1.8084% 0.0360%
3 4	OFFSETS DFBT	0	-0.0001%	3.0979%		0.0000%			0.0000%
5	C EQUITY	86,401,719	40.4659%	12.1600%	1/	4.9207%	1.681379	2/	8.2736%
6	• TOTAL	213,517,498	100.0000%			6.7651%			10.1180%
1/	WACC = Weighted Cost Rates per the			ower Agreemer	nt				ľ
2/	Gross Revenue Col	nversion Factor ((GRCF) Calculati	ion:					
1	OPERATING REVE						100.00		
2 3 4 5	LESS: INDIANA ADJUSTED GROSS INCOME (LINE 1 X .085) INCOME BEFORE FED INC TAX						<u>8.500</u> 91.500		
6 7	LESS: FEDERAL INCOME TAX (LINE 4 X .35) OPERATING INCOME PERCENTAGE GROSS REVENUE CONVERSION						<u>32.025</u> 59.475		
9	FACTOR (100						<u>1.681379</u>		

For the Expense Month of January 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of January 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Description Monthly Revenues	
1 2 3 4	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$50,334,032 \$634,952 \$5,589,209 \$8,590,463	77.2% 1.0% 8.6% 13.2%
5	Total Revenues for Surcharges Purposes	\$65,148,656	100.0%
6	Non-Physical Revenues for Month	\$579,320	
7	Total Revenues for Month	\$65,727,976	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for November 2009	3.0150%
2	Kentucky Retail Revenues for Current Expense Month	\$48,968,955
3	Surcharge Collected (1) * (2)	\$1,476,414
4	Surcharge Amount To Be Collected	\$1,021,249
5	Over/(Under) Recovery (3) - (4) = (5)	\$455,165

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



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Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

March 19, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

RECEIVED

MAR 19 2010 PUBLIC SERVICE COMMISSION

Attention: Aaron D. Greenwell

RE: Monthly Environmental Surcharge Report

Dear Mr. Derouren,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and three copies of its Environmental Surcharge Reports for the month of February 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after March 30, 2010.

On ES FORM 3.12 B Column 4, the Cumulative Dollar Balance is a credit of (\$2,269). There are two reasons, one was in December 2009, an accrual purchase of 370 NOx allowances for \$441,600 was reported, but the actual purchase was 340 NOx allowances for \$404,603. In February 2010, there is a credit of 30 NOx allowances for (\$36,997). The other reason was also in December 2009, there was an accrual of 51 NOx allowances consumed for a consumption cost of \$21,017. This accrual is for the estimated number of annual NOx allowances for the year 2009 expected to be surrendered to the EPA resulting from the New Source Review (NSR) consent review.

If there are any questions please contact me at 502-696-7010.

Errol K. Wagner Director Regulatory Services Enclosures

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of February 2010

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	CALCULATION OF E(m)						
	E(m) = CRR - BRR						
LINE 1	CRR from ES FORM 3.00	\$4,311,383					
LINE 2	Brr from ES FORM 1.10	\$3,003,995					
LINE 3	E(m) (LINE 1 - LINE 2)	\$1,307,388					
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	81.3%					
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,062,907					
LINE 6	(Over)/Under Recovery Adjustment from ES FORM 3.30	(\$363,212)					
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$699,695					
	SURCHARGE FACTOR						
LINE 8	Net KY Retail E(m) (Line 7)	\$699,695					
LINE 9	KY Retail R(m) from ES FORM 3.30	\$52,396,461					
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	1.3354%					

Effective Date for Billing: April 2010
Submitted By :
Title : Director Regulatory Services

Date Submitted :

March 19, 2010

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of February 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$2,531,784 3,003,995 2,845,066 2,095,535 1,514,859 1,913,578 2,818,212 2,342,883 2,852,305 2,181,975 2,598,522 1,407,969 \$28,106,683

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of February 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

COMPONENTS	. <u></u>	
First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,264,708
Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$46,675
Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during		
Expense Month	\$0	
 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
Total Net Proceeds from SO2 Allowances	\$0	
1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
Total Net Proceeds from NOx Allowances	\$0	
Total Net Gain or (Loss) from Emission Allowance Sales		\$0
Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,311,383
	 First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20 Second Component: Associated with Rockport Plant [((RB IM(C))) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 2) SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month Total Net Proceeds from SO2 Allowances 1) NOx - ERC Sales Proceeds, received during Expense Month 2) NOx - EPA Auction Proceeds, received during Expense Month Total Net Gain or Loss from NOx Allowances Sales, received during Expense Month Total Net Proceeds from NOx Allowances Sales, received during Expense Month 	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20 Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month \$0 2) SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month \$0 1) NOx - ERC Sales Proceeds, received during Expense Month \$0 2) NOx - ERC Sales Proceeds, received during Expense Month \$0 3) NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month \$0 3) NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month \$0 3) NOx - Net Gain or Loss from NOx Allowances \$0 Total Net Proceeds from NOx Allowances \$0 Total Net Proceeds from NOx Allowances \$0 Total Net Gain or (Loss) from Emission Allowance Sales \$0 Total Net Gain or (Loss) from Emission Allowance Sales \$0 Total Net Gain or (Loss) from Emission Allowance Sales \$0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

For the Expense Month of February 2010

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the E	xpense l	Vionth of	February	2010
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	1	(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions - EPA Allowances		0	403,260	\$0	\$0	\$0.000
Gavin Reallocation		ŏ	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	33,930	\$0	\$9,455,560	\$278.678
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance		0	4	\$0	\$0	\$0.000
Adjustment		U	7	ψŪ	ΨŬ	¢0.000
Withdrawals -						
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	52,690	\$0 \$0	\$4,758,135	\$90.304
Off - System Sales SO2 Emissions Allowance		0	303,050	\$0	\$29,780,273	\$98.269
Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances						
Consumed By Kentucky Power - 1:1						
(Year 2009 & Prior)	1,298					
SO2 Emissions Allowances						
Consumed By Kentucky Power - 2:1	7 1 4 0	8,438	571,471	\$302,548	\$38,417,825	\$67.226
(Years 2010 to 2014)	7,140	0,430	574,471	φ302,040	φ 30, 417,023	ψ07.220
ENDING INVENTORY - Record						
Balance in Column (4) on ES FORM 3.10, Line 5			1,108,360	<i>,</i>	\$12,357,499	\$11.149
			1,100,000	i	+	÷
Expense Month Member Load Ratio	for AEP/K	Centucky Power				0.07173

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of February 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions - EPA Allowances P&E Transfers In Intercompany Purchases Other (List)	0 0 0 0	0 36,954 0 0 0	\$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0.000 \$0.000 \$0.000
Withdrawals - P & E Transfers Out Intercompany Sales Off - System Sales ERC Consumed By Kentucky Power NOx Consumed By Kentucky Power	0 0 0 0 0	0 0 2,425 930 16,218	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0.000 \$0.000 \$0.000 \$0.000 \$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		17,381		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of February 2010

		Dollar Balance	Average Cost
0 44,622 0 0 0 440 0	\$0 \$0 \$0 (\$36,997) \$0	\$0 \$0 \$0 \$528,874 \$0	\$0.000 \$0.000 \$0.000 \$0.000 \$1,201.986 \$0.000
9,746	\$0 \$0 \$0 \$3,238	\$0 \$0 \$0 \$531,143	\$0.000 \$0.000 \$0.000 \$54.499 (\$0.064)
_			8 9,746 \$3,238 \$531,143

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of February 2010

LINE NO.	O&M Expenses	·····	
1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$372,537 <u>\$302,548</u>	\$705,636
5 6 7 8 9 10 11	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	\$0 \$352,513 \$0 \$3,238 \$0 <u>\$32,643</u>	<u>\$388,394</u>
12 13	Total Monthly O&M Expenses Cash Working Capital Allowance (Line 12 X 1/8)		<u>\$1,094,030</u> \$136,754

.

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs February 2010

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$4,155.87	\$0.00	\$0.00	\$4,155.87
SCR Acoustic Horns	\$3,165.50	\$1,425.00	\$0.00	\$4,590.50
SCR Boiler Outlet Ductwork	\$67.28	\$0.00	\$0.00	\$67.28
SCR NOx Monitoring	\$1,260.68	\$0.00	\$0.00	\$1,260.68
SCR Reactor	(\$73.32)	\$0.00	\$0.00	(\$73.32)
Total SCR February 2010 O & M Expense	\$8,576.01	\$1,425.00	\$0.00	\$10,001.01
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$0.00
Emission Testing Required Under Permit - Operation Maintenance	\$0.00 \$22,642.07	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$22,642.07

February 2010 O & M Expenses Filed

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\$32,643

ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

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For the Expense Month of February 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$334,907		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$319,855		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$681,103		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,763		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$632,184		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$63,971		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,289		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,763	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,052	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,047,072	\$18,815	\$2,065,887

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 ES FORM 3.14 Page 38 of 609 Page 2 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of February 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$619,518		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$2,963,667		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$4,890,750		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$18,549		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$1,134,066		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$248 ,2 87		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$15,159		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$9,889,996	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,441,000	5,367,000	
13	Environmental Base (\$/kw)	\$1.17	\$0.01	
14	Company Surplus Weighting	85.00%	15.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.99	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	376,300	376,300	
17	Fixed O&M Environmental Cost to Kentucky Power	\$372,537	\$D	\$372,537

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 39 of 609

ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE		
NO.	COST	AMOUNTS
-		ACO4 000 005
1.	Utility Plant at Original Cost	\$601,233,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$8,236,896
4	Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
	Operations :	
6	Disposal (5010000)	\$0
7	Urea (5020002)	\$495,959
8	Trona (5020003)	\$145,452
9	Lime Stone (5020004)	\$277,641
10	Air Emission Fee	<u>\$10,178</u>
11	Total Operations (Lines 6 thru 10)	\$929,230
	Maintenance :	
12	SCR Maintenance (5120000)	\$0
13	Scrubber (FGD) Maintenance (5120000)	<u>\$0</u>
14	Total Maintnenance (12) + (13)	<u>\$0</u>
15	1/2 of Maintenance (14) * 50%	<u>\$0</u>
16	Fixed O&M (11) + (15)	\$929,230
17	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
18	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$619,518</u>
	Total Revenue Requirement,	
19	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,856,414
20	Ohio Power Company Steam Capacity (kw)	8,441,000
21	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.05
22	Ohio Power Surplus Weighing	85.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.89
	Amos Unit No. 3 Costs to Kentucky Power :	
24	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.89
25	Kentucky Power Capacity Deficit (kw)	376,300
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 1)	\$334,907
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ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$398,290,892
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$5,456,585
Ŭ	Operations :	+-,,
4	Disposal (5010000)	\$240,715
5	Urea (5020002)	\$224,805
6	Trona (5020003)	\$122,727
7	Lime Stone (5020004)	\$650,852
8	Air Emission Fee	\$10,606
9	Total Operations (Line 4 thru 8)	\$1,249,705
	Maintenance :	
10	SCR Maintenance (5120000)	\$23,958
11	Scrubber (FGD) Maintenance (5120000)	\$3,403,966
12	Total Maintnenance (11) + (12)	\$3,427,924
13	1/2 Maintnenance (12) * 50%	<u>\$1,713,962</u>
14	Fixed O&M (9) + (11)	<u>\$2,963,667</u>
	Total Revenue Requirement,	
15	Cost Associated with Cardinal Unit No. 3 (3) + (12)	<u>\$8,420,252</u>
16	Ohio Power Company's Percentage Ownership	100.00%
17	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)	\$8,420,252
18	Ohio Power Company Steam Capacity (kw)	8,441,000
19	Cardinal Unit No. 1 (\$/kw)	\$1.00
20	Ohio Power Surplus Weighing	85.00%
21	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)	\$0.85
	Cardinal Unit No. 1 Costs to Kentucky Power :	
22	Cardinal Unit No. 1 Portion (\$/kw) (21)	\$0.85
23	Kentucky Power Capacity Deficit (kw)	<u>376,300</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	AA4A 5
24	(ES FORM 3.14, Page 1 of 10, Line 2)	\$319,855

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
	Lifet Dent at Original Cost	\$957,056,293
1	Utility Plant at Original Cost	\$957,050,295 1.37%
2 3	Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$13,111,671
3	Operations :	φ13,11,071
4	Sludge Disposal (5010000)	\$696,769
5	Lime (5020001)	\$2,662,442
6	Urea (5020002)	\$779,747
7	Trona (5020003)	\$359,791
8	Lime Stone (5020004)	\$000,791
9	Air Emission Fee	\$36,017
9 10	Lease (5070005)	\$0
10	Total Operations (Lines 4 thru 10)	\$4,534,766
	Maintenance :	φ+,00+,700
12	SCR Maintenance (5120000)	\$20,705
13	Scrubber Maintenance (5120000)	\$691,262
14	Total Maintenance (12) + (13)	\$711,967
15	1/2 of Maintenance (12) * 50%	\$355,984
16	Fixed $O&M(11) + (15)$	\$4,890,750
	Total Revenue Requirement,	<u>+ . -++ . ++</u>
17	Cost Associated with Gavin Plant (3) + (16)	\$18,002,421
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$18,002,421
20	Ohio Power Company Steam Capacity (kw)	8,441,000
21	Gavin Plant (\$/kw)	\$2.13
22	Ohio Power Surplus Weighing	85.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.81
	Gavin Plant Costs to Kentucky Power :	
24	Gavin Plant Portion (\$/kw) (23)	\$1.81
25	Kentucky Power Capacity Deficit (kw)	<u>376,300</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 3)	\$681,103

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ES FORM 3.14 Page 6 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

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LINE NO.	COST	AMOUNTS
		\$7,173,774
1	Utility Plant at Original Cost	1.37%
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$98,281
3	Total Rate Base	φυσ,201
	Operations :	\$0
4	Urea (5020002)	\$0 \$0
5 6	Trona (5020003) Air Emission Fee	\$18,549
0 7	Total Operations (4) + (5) + (6)	\$18,549
	Maintenance :	<i>Q</i> 10,010
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed $O&M(7) + (9)$	\$18,549
	Total Revenue Requirement,	<u></u>
11	Cost Associated with Kammer Plant (3) + (10)	\$116,830
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$116,830
14	Ohio Power Company Steam Capacity (kw)	8,441,000
15	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	85.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>376,300</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,763
		· · · · · · · · · · · ·

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ES FORM 3.14 Page 7 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$1,139,062,655
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$15,605,158
ľ	Operations :	
4	Disposal (5010000)	\$10,855
5	Lime Stone (5020004)	\$579,119
6	Urea (5020002)	\$412,380
7	Trona (5020003)	\$80,606
8	Air Emission Fee	<u>\$15,502</u>
9	Total Operations (Lines 4 thru 8)	\$1,098,462
	Maintenance :	
10	FDG (5120000)	\$44,800
11	SCR Maintenance (5120000)	<u>\$26,407</u>
12	1/2 of Maintenance (10 + 11) * 50%	<u>\$35,604</u>
13	Fixed O&M (9) + (12)	<u>\$1,134,066</u>
	Total Revenue Requirement,	
14	Cost Associated with Mitchell Plant (3) + (13)	<u>\$16,739,224</u>
15	Ohio Power Company's Percentage Ownership	100.00%
16	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$16,739,224
17	Ohio Power Company Steam Capacity (kw)	8,441,000
18	Mitchell Plant (\$/kw)	\$1.98
19	Ohio Power Surplus Weighing	85.00%
20	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.68
	Mitchell Plant Costs to Kentucky Power :	
21	Mitchell Plant Portion (\$/kw) (20)	\$1.68
22	Kentucky Power Capacity Deficit (kw)	<u>376,300</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	_
23	(ES FORM 3.14, Page 1 of 10, Line 5)	\$632,184

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ES FORM 3.14 Page 8 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3 , 4 & 5)

ÈINE NO.	COST	AMOUNTS
	Litility Diant at Original Cost	\$107,185,185
1 2	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
23	Total Rate Base	\$1,468,437
³	Operations :	φ1,400,407
4	Urea (502002)	\$213,869
5	Trona (5020003)	\$2 10,000 \$0
6	Air Emission Fee	\$32,912
7	Total Operations $(4) + (5) + (6)$	\$246,781
'	Maintenance :	¢2.10,101
8	SCR Maintenance (5120000)	\$3,011
9	1/2 of Maintenance (8) * 50%	<u>\$1,506</u>
10	Fixed O&M (7) + (9)	<u>\$248,287</u>
	Total Revenue Requirement,	<u>*************************************</u>
11	Cost Associated with Muskingum Plant (3) + (10)	\$1,716,724
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,716,724
14	Ohio Power Company Steam Capacity (kw)	8,441,000
15	Muskingum Plant (\$/kw)	\$0.20
16	Ohio Power Surplus Weighing	85.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.17
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.17
19	Kentucky Power Capacity Deficit (kw)	<u>376,300</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$63,971

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$20,298,007
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$278,083
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,159</u>
7	Total Operations (4) + (5) + (6)	\$15,159
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,159</u>
	Total Revenue Requirement,	A 0000 0 (0
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$293,242</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$293,242
14	Ohio Power Company Steam Capacity (kw)	8,441,000
15 16	Sporn Plant (\$/kw)	\$0.03 85.00%
10	Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	00.00%
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	ψ0.00
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>376,300</u>
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,289

ES FORM 3.14 Page 10 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of February 2010

	COST	Plant	UNIT 1 AMOUNTS	UNIT 2 AMOUNTS	Plant Common	Total
	(2)	(3)	(4)	(5)	(9)	(1)
	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	\$1,777,228 1.37%	\$10,544,676 1.37%	\$16,709,416 1.37%	\$2,202,020 1.37%	
	Total Rate Base	\$24,348	\$144,462	\$228,919	\$30,168	
	Operations : Urea (5020002)	\$0	\$0	\$0	\$0	
	Trona (5020003)	\$0 81 F C D F	0,6	05	80	
	Total Operations (4) + (5) + (6)	<u>\$15,625</u>	<u>8</u> 8	<u>8</u>	잃양	
	Maintenance :	ç	ç	Ç	Ç	
-	SUK Maintenance (S I 20000) 1/2 of Maintenance (8) * 50%		2 2 2 2 3	0,00	O\$	
	Fixed O&M (7) + (9)	\$15,625	i S	\$0	8	
	Total Revenue Requirement, Cost Associated with Broknort Plant (3) + (10)	\$30 973	\$144 462	\$278.919	\$30.168	
_	Indiana Michigan Power Company's Percentage Ownership	20%	85.00%	65.08%	50.00%	
_	l&M's Share of Cost Associated with Rockport Plant (11) X (12)	\$19,987	\$122,793	\$148,980	\$15,084	
	Total Rockport Plant Common and Units 1 & 2					\$306,844
	Indiana Michigan Power Company Steam Capacity (kw)					5,367,000
	Rockport Plant (\$/kw) (14) / (15) Kentucky Power Portion of Rockport Plant /	-				\$0.06
_	Indiana Michigan Power Surplus Weighing					15.00%
	Portion of Weighted Average Capacity Rate					
_	Attributed to Rockport Plant (\$/kw) (17) X (18) Rockport Plant Costs to Kentucky Power :					\$0.01
-	Rockport Plant Portion (\$/kw) (18)					\$0.01
	Kentucky Power Capacity Deficit (kw)					376,300
_	Kuckpurt Units 1 & 2 EIMIUIIITETIAI to KETIUUKY PUWEI (13) (20) (ES FORM 3.14. Page 1 of 10. Line 8)					\$3,763

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,439,622
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
$\frac{2}{3}$	Total Rate Base	\$1,348,623
Ŭ	Operations :	
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,625</u>
7	Total Operations (4) + (5) + (6)	\$15,625
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,248</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
14	Indiana Michigan Power Company Steam Capacity (kw)	5,367,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	15.00%
17	Portion of Weighted Average Capacity Rate	\$0.04
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	60.04
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>376,300</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	¢15 052
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,052

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of February 2010

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 04/30/2009							
1 2 3 4	L/T DEBT S/T DEBT ACCTS REC FINANCING C EQUITY	\$420,000,000 \$156,177,865 \$44,758,222 \$404,345,136	40.964% 15.233% 4.365% 39.437% 100.000%	6.05% 2.43% 3.17% 10.50%	1/	2.48% 0.37% 0.14% 4.14% 7.13%	1.5760	2/	2.48% 0.37% 0.14% 6.53% 9.52%
5	TOTAL	\$1,025,281,223	100.000%			1.13%			5.52 /0
1/	Rate of Return	nted Average Cost o on Common Equity	per Case No. 20		<u> </u>				
2/		Conversion Factor - 00316 dated - Jan		tion:					
1 2 3	OPERATING R UNCOLLECTIB Kentucky Public	EVENUE LE ACCOUNTS EX Service Commission	PENSE (0.47%) on Assessment ((0.15%)			100.0000 0.2600 0.1500		
4 5		LE PRODUCTION II E TAX EXPENSE, №				OW)	99.5900 5.6372		
6 7	FEDERAL TAX	ABLE PRODUCTIO N PHASE-IN	N INCOME BEF	ORE 199 DEDL	ICTIC	NC	93.9528 5.6372		
8 9		ABLE PRODUCTIO		EDUCTION (35%	6)		88.3156 30.9105		
10	AFTER-TAX PR		1E				57.4051		
11 12 13 14 15	AFTER-TAX 199 DEDU(UNCOLLEC	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS Jublic Service Comm	COME S EXPENSE				57.4051 5.6372 0.2600 0.1500		
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION	INCOME (ROUI	1DEI)	63.4523		
17 18 19 20	BLENDED FED FEDERAL (STATE (LIN BLENDED TAX	NE 4)	TAX RATE:				30.9105 5.6372 36.5477		
21	GROSS REVEN	IUE CONVERSION	FACTOR (100.0	0000 / Line 14)			1.5760		
1 2 3	STATE INCOME TAX CALCULATION: PRE-TAX PRODUCTION INCOME COLLECTIBLE ACCOUNTS EXPENSE (0.32%) Kentucky Public Service Commission Assessment (0.15%)								
4 5	LESS: ST	ABLE PRODUCTION ATE 199 DEDUCTION	N				99.5900 5.6372		
6 7		ABLE PRODUCTIO	ON INCOME BEI	FORE 199 DED	UCT	ION	93.9528 6.0000		
8	STATE INC	OME TAX EXPENS	E (LINE 5 X LIN	IE 6)			5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9.

Weighted Average Cost of Captial Balances As of 04/30/2009 based on Case No. 2009-00316, dated January 20, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of February 2010

			\$46,675
Total	(6)		Ф
Rockport Plant Common	(8)	\$2,185,292 (\$58,790) (\$17,308) \$2,109,194 \$17,949 \$6,410 \$6,410 \$6,410 \$5,410 \$5,410 \$5,410 \$5,410 \$5,410 \$5,410	
Total Units 1 & 2 (C5 + C6)	(J)	\$9,086,496 0.8510% \$77,326 \$39,968 \$39,968 \$39,968 \$35,968 \$35,188	
Unit No. 2	(9)	\$8,353,084 (\$1,713,432) (\$1,019,756) \$5,619,896 \$24,502 \$24,502	
Unit No. 1	(2)	\$5,272,657 (\$1,157,243) (\$648,814) \$3,466,600 \$15,466 \$15,466	
Rockport Plant Common	(4)	\$1,777,206 (\$798,173) (\$154,012) \$825,021 \$7,021 \$7,021 \$5,212 \$15,625 \$20,837 \$20,837 \$4,179	
	(3)	10.2114%	
COST COMPONENT	(2)	Return on Rate Base : Reckport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOx Burners (LNB) Installed Cost Flyash Landfill Installed Cost Less Accumulated Depreciation Less Accumulated Depreciation Less Accumulated Depreciation Less Accumulated Depreciation Less Accumulated Depreciation Less Accum Def. Income Taxes Total Rate Base Weighted Average Cost of Capital (LINE 7 / 12) Monthly Weighted Avg. Cost of Capital (LINE 7 / 12) Monthly Return of Rate Base (Line 6 * Line 8) Monthly Depreciation Expense Monthly Depreciation Expense Monthly Indiana Air Emissions Fee Total Operating Expenses (Line 10 + Line 11)) Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport Plants' Total Revenue Requirement, Co 4 In 14 + C 7 In 15 + C 8 I 150	Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2
LINE. NO.	H	- 0 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	16

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 02/28/2010							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	78,093,124 46,209,277	37.2280% 22.0286%	4.9443% 0.1838%		1.8407% 0.0405%			1.8407% 0.0405%
3 4	OFFSETS DEBT	0	0.0000%	3.1746%		0.0000%			0.0000%
5		85,467,461	40.7434%	12.1600%	1/	4.9544%	1.681379	2/	8.3302%
6	TOTAL	209,769,862	100.0000%			6.8356%			10.2114%
1/	WACC = Weighted Cost Rates per the			ower Agreeme	nt				
2/	Gross Revenue Co	nversion Factor	(GRCF) Calculat	ion:					
1	OPERATING REVE						100.00		
2 3 4 5	LESS: INDIANA ADJUSTED GROSS INCOME (LINE 1 X .085) INCOME BEFORE FED INC TAX LESS: FEDERAL INCOME TAX								
6 7 8	(LINE 4 X .35) OPERATING INCOME PERCENTAGE GROSS REVENUE CONVERSION								
9	FACTOR (100						<u>1.681379</u>		

For the Expense Month of February 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of February 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Description Monthly Revenues	
2	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$52,396,461 \$546,046 \$4,652,630 \$6,891,684	81.3% 0.8% 7.2% 10.7%
5	Total Revenues for Surcharges Purposes	\$64,486,821	
6	Non-Physical Revenues for Month	\$173,026	
7	Total Revenues for Month	\$64,659,847	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for December 2009	6.3035%
2	Kentucky Retail Revenues for Current Expense Month	\$45,285,207
3	Surcharge Collected (1) * (2)	\$2,854,553
4	Surcharge Amount To Be Collected	\$2,491,341
5	Over/(Under) Recovery (3) - (4) = (5)	\$363,212

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



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Kentucky Power 101 A Enterprise Drive P O Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

April 19, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

Attention: Aaron D. Greenwell

RE: Monthly Environmental Surcharge Report

Dear Mr. Derouren,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and three copies of its Environmental Surcharge Reports for the month of March 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after April 29, 2010.

ES FORM 3.12 B reflects the reversal of the December 2009 accrual of 51 annual NOx allowances consumed and \$21,017 consumption cost. This accrual was for the estimated number of annual NOx allowances for year 2009 expected to be surrendered to the EPA resulting from the New Source Review (NSR) consent review. The actual number of annual NOx allowances consumed is 17 and consumption cost is \$56.

If there are any questions please contact me at 502-696-7010.

Woyner

Errol K. Wagner Director Regulatory Services Enclosures



APR 19 2010 PUBLIC SERVICE COMMISSION

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of March 2010

	CALCULATION OF E(m)						
	E(m) = CRR - BRR						
LINE 1	CRR from ES FORM 3.00	\$4,250,672					
LINE 2	Brr from ES FORM 1.10	\$2,845,066					
LINE 3	E(m) (LINE 1 - LINE 2)	\$1,405,606					
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	85.4%					
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,200,388					
LINE 6	(Over)/Under Recovery Adjustment from ES FORM 3.30	(\$140,375)					
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,060,013					
	SURCHARGE FACTOR						
LINE 8	Net KY Retail E(m) (Line 7)	\$1,060,013					
LINE 9	KY Retail R(m) from ES FORM 3.30	\$45,622,014					
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	2.3235%					

Effective Date for Billing:

May 2010

Director Regulatory Services

Submitted By :

Title :

Date Submitted :

April 19, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of March 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$2,531,784 3,003,995 2,845,066 2,095,535 1,514,859 1,913,578 2,818,212 2,342,883 2,852,305 2,181,975 2,598,522 1,407,969

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of March 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE			
NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,222,726
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$48,118
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$20,172	
	Total Net Proceeds from SO2 Allowances	\$20,172	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$20,172
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,250,672

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE NO.	COST COMPONENT		
	COST COMPONENT Return on Rate Base : Utility Plant at Original Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes Net Utility Plant SO2 Emission Allowance Inventory from ES FORM 3.11 ECR & NOx Emission Allowance Inventory from ES FORM 3.12 Cash Working Capital Allowance from ES FORM 3.13, Line 12 Total Rate Base Weighted Average Cost of Capital - ES FORM 3.15 Monthly Weighted Avg. Cost of Capital (9) / 12 Monthly Depreciation Expense Monthly Depreciation Expense Monthly Catalyst Amortization Expense Monthly Property Taxes	\$191,327,552 (\$55,395,892) (\$42,531,523) 9.52%	\$93,400,137 \$12,208,202 \$17,611 \$120,071 \$105,746,021 0.79% \$835,394 \$577,252 \$46,030 \$14,298
15 16 17 18 19 20	Monthly Kentucky Air Emissions Fee Monthly Environmental AEP Pool Capacity Costs from ES FORM 3.14, Page 1 of 11, Column 5, Line 10 Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13 Monthly SO2 Emission Allowance Consumption Total Operating Expenses [Line 12 thru Line 18] Total Revenue Requirement - Big Sandy Record on ES FORM 3.00, Line 1		\$30,551 \$2,167,072 \$402,832 \$149,297 <u>\$3,387,332</u> \$4,222,726

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of March 2010

·····	T	(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions - EPA Allowances		0	403,260	\$0	\$0	\$0.000
Gavin Reallocation		Ő	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	33,930	\$0	\$9,455,560	\$278.678
Other (List) SO2 Emissions Allowance		0	433,206	\$0	\$67,152,857	\$155.014
Adjustment		0	4	\$0	\$0	\$0.000
Withdrawals -						
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	52,690	\$0	\$4,758,135	\$90.304
Off - System Sales		0	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)	189					
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)	7,140	7,329	578,800	\$149,297	\$38,567,122	\$66.633
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,101,031		\$12,208,202	\$11.088
Expense Month Member Load Ratio	for AEP/K	entucky Power				0.06979

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	36,954	\$0	\$0	
P&E Transfers In	0	0	# 0	\$0 \$0	¢0,000
Intercompany Purchases	0	0	\$0 \$0	\$0 \$0	\$0.000 \$0.000
Other (List)		Ŭ	ψυ	ψυ	φ0.000
Withdrawals -	0	0	\$0	\$0	\$0.000
P & E Transfers Out	0	0	ψ0 \$0	\$0 \$0	\$0.000
Intercompany Sales Off - System Sales	Ö	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	ŏ	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	Ő	16,218	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		17,381		\$0	\$0.000

For the Expense Month of March 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,622	\$0	\$0	\$0.000
P&E Transfers in	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	440	\$0	\$528,874	\$1,201.986
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	۶ 0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	294	10,040	(\$19,880)	\$511,263	\$50.923
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		35,022		\$17,611	\$0.503

For the Expense Month of March 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of March 2010

LINE NO.	O&M Expenses		
1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$377,888 <u>\$149,297</u>	\$557,736
5 6 7 8 9 10 11 12 13	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses Total Monthly O&M Expenses	\$0 \$401,333 \$0 (\$19,880) \$732 <u>\$20,647</u>	<u>\$402,832</u> <u>\$960,568</u> \$120,071

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

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Kentucky Power Company Environmental Equipment Operation and Maintenance Costs March 2010

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$11,142.69	\$3,907.23	\$0.00	\$15,049.92
Boiler Acoustic Horns	(\$7,441.00)	\$0.00	\$0.00	(\$7,441.00)
SCR Acoustic Horns	\$2,856.96	\$1,800.00	\$0.00	\$4,656.96
Total SCR March 2010 O & M Expense	\$6,558.65	\$5,707.23	\$0.00	\$12,265.88
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$731.76	\$731.76
Emission Testing Required Under Permit -				
Operation	\$0.00	\$0.00	\$0.00	\$0.00
Maintenance	\$8,381.39	\$0.00	\$0.00	\$8,381.39
March 2010 O & M Expenses Filed				¢21 270

O & M Expenses Filed

\$21,379

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 62 of 609

> ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

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For the Expense Month of March 2010

Line		Ohio Power Company's Environmental	Indiana Michigan Power Company's Environmental	
No. (1)	Cost Component (2)	Cost to KPCo (3)	Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$347,040		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$269,920		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$767,344		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,856		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$682,512		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$69,408		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,568		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,856	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$11,568	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,151,648	\$15,424	\$2,167,072

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Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of March 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$364,592		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$1,322,512		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$5,993,371		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$18,549		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$1,416,052		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$266,519		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$15,159		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$9,396,754	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.11	\$0.01	
14	Company Surplus Weighting	88.00%	12.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.98	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	385,600	385,600	
17	Fixed O&M Environmental Cost to Kentucky Power	\$377,888	\$0	\$377,888

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$601,233,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$8,236,896
4	Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
	Operations :	
6	Disposal (5010000)	\$0
7	Urea (5020002)	\$465,701
8	Trona (5020003)	(\$263,220)
9	Lime Stone (5020004)	\$334,201
10	Air Emission Fee	<u>\$10,178</u>
11	Total Operations (Lines 6 thru 10)	\$546,860
	Maintenance :	
12	SCR Maintenance (5120000)	\$0
13	Scrubber (FGD) Maintenance (5120000)	<u>\$0</u>
14	Total Maintnenance (12) + (13)	<u>\$0</u>
15	1/2 of Maintenance (14) * 50%	<u>\$0</u>
16	Fixed O&M (11) + (15)	\$546,860
17	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
18	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$364,592</u>
	Total Revenue Requirement,	
19	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,601,488
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.02
22	Ohio Power Surplus Weighing	88.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.90
	Amos Unit No. 3 Costs to Kentucky Power :	
24	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.90
25	Kentucky Power Capacity Deficit (kw)	<u>385,600</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 1)	\$347,040

ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE		
NO.	COST	AMOUNTS
		#200.000.000
1	Utility Plant at Original Cost	\$398,290,892
2 3	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,456,585
	Operations :	¢129.005
4	Disposal (5010000)	\$138,905 \$200,542
5	Urea (5020002)	\$290,513
6	Trona (5020003)	\$99,717 \$472,026
7	Lime Stone (5020004)	\$472,926
8	Air Emission Fee	<u>\$10,606</u>
9	Total Operations (Line 4 thru 8)	\$1,012,667
10	Maintenance :	¢00.000
10 11	SCR Maintenance (5120000)	\$26,086
12	Scrubber (FGD) Maintenance (5120000) Total Maintnenance (11) + (12)	<u>\$593,604</u> \$619,690
12	1/2 Maintnenance (12) * 50%	
13	Fixed $O&M$ (9) + (11)	<u>\$309,845</u> \$1,322,512
14	Total Revenue Requirement,	<u>\$1,322,312</u>
15	Cost Associated with Cardinal Unit No. 3 (3) + (12)	<u>\$6,779,097</u>
16	Ohio Power Company's Percentage Ownership	<u>30,779,097</u> 100.00%
17	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)	\$6,779,097
18	Ohio Power Company Steam Capacity (kw)	8,458,000
19	Cardinal Unit No. 1 (\$/kw)	\$0.80
20	Ohio Power Surplus Weighing	88.00%
21	Portion of Weighted Average Capacity Rate	00.0070
~ '	Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)	\$0.70
:	Cardinal Unit No. 1 Costs to Kentucky Power :	ψ0.70
22	Cardinal Unit No. 1 Portion (\$/kw) (21)	\$0.70
23	Kentucky Power Capacity Deficit (kw)	<u>385,600</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	<u></u>
24	(ES FORM 3.14, Page 1 of 10, Line 2)	\$269,920
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
	Lifeth - Direct at Original Cost	\$957,056,293
1	Utility Plant at Original Cost	<u>4937,030,293</u> <u>1.37%</u>
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$13,111,671
3	Total Rate Base	\$13,111,071
	Operations :	\$688,903
4	Sludge Disposal (5010000)	\$3,602,314
5	Lime (5020001)	
6	Urea (5020002)	\$1,059,308
7	Trona (5020003)	\$411,234
8	Lime Stone (5020004)	\$0 #20.047
9		\$36,017
10	Lease (5070005)	<u>\$0</u>
11	Total Operations (Lines 4 thru 10)	\$5,797,776
	Maintenance :	¢00.740
12	SCR Maintenance (5120000)	\$32,710
13	Scrubber Maintenance (5120000)	<u>\$358,480</u>
14	Total Maintenance (12) + (13)	\$391,190
15	1/2 of Maintenance (13) * 50%	<u>\$195,595</u>
16	Fixed O&M (11) + (15)	<u>\$5,993,371</u>
	Total Revenue Requirement,	
17	Cost Associated with Gavin Plant (3) + (16)	\$19,105,042
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$19,105,042
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Gavin Plant (\$/kw)	\$2.26
22	Ohio Power Surplus Weighing	88.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.99
	Gavin Plant Costs to Kentucky Power :	
24	Gavin Plant Portion (\$/kw) (23)	\$1.99
25	Kentucky Power Capacity Deficit (kw)	<u>385,600</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 3)	\$767,344
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
		\$7,173,774
1	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	<u>47,173,774</u> <u>1.37%</u>
2	Total Rate Base	\$98,281
	Operations :	φ00,201
4	Urea (5020002)	\$0
4 5	Trona (5020003)	\$0 \$0
6	Air Emission Fee	<u>\$18,549</u>
7	Total Operations (4) + (5) + (6)	\$18,549
l ' 1	Maintenance :	φ10,010
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	\$ <u>0</u>
10	Fixed $O&M(7) + (9)$	<u>\$18,549</u>
	Total Revenue Requirement,	<u> </u>
11	Cost Associated with Kammer Plant (3) + (10)	\$116,830
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$116,830
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	88.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>385,600</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,856

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

For the Expense Month of March 2010

LINE NO.	COST	AMOUNTS
		¢1 120 062 655
1	Utility Plant at Original Cost	\$1,139,062,655 1.37%
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$15,605,158
3	Total Rate Base	φ10,000,100
	Operations :	\$71,385
4 5	Disposal (5010000)	\$587,337
	Lime Stone (5020004)	\$608,496
6 7	Urea (5020002) Trona (5020003)	\$77,424
8	Air Emission Fee	\$15,502
0 9	Total Operations (Lines 4 thru 8)	\$1,360,144
9	Maintenance :	φ1,000,144
10	FDG (5120000)	\$96,532
10	SCR Maintenance (5120000)	\$15,284
12	1/2 of Maintenance (10 + 11) * 50%	<u>\$55,908</u>
13	Fixed $O&M(9) + (12)$	<u>\$1,416,052</u>
13	Total Revenue Requirement,	<u>\\\</u>
14	Cost Associated with Mitchell Plant (3) + (13)	<u>\$17,021,210</u>
15	Ohio Power Company's Percentage Ownership	<u>100.00%</u>
16	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$17,021,210
17	Ohio Power Company Steam Capacity (kw)	8,458,000
18	Mitchell Plant (\$/kw)	\$2.01
19	Ohio Power Surplus Weighing	88.00%
20	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.77
	Mitchell Plant Costs to Kentucky Power :	
21	Mitchell Plant Portion (\$/kw) (20)	\$1.77
22	Kentucky Power Capacity Deficit (kw)	385,600
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
23	(ES FORM 3.14, Page 1 of 10, Line 5)	\$682,512

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ES FORM 3.14 Page 8 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3 , 4 & 5)

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LINE NO,	COST	AMOUNTS
		\$107,185,185
1	Utility Plant at Original Cost	<u>1.37%</u>
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$1,468,437
3	Total Rate Base	φ1,400,407
	Operations :	\$229,470
4	Urea (5020002)	φ229,470 \$0
5	Trona (5020003)	\$32,912
6	Air Emission Fee	\$262,382
7	Total Operations $(4) + (5) + (6)$	φ202,302
	Maintenance :	\$8,274
8	SCR Maintenance (5120000)	
9	1/2 of Maintenance (8) * 50%	<u>\$4,137</u>
10	Fixed O&M (7) + (9)	<u>\$266,519</u>
	Total Revenue Requirement,	\$1,734,956
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,734,950</u> 100.00%
12	Ohio Power Company's Percentage Ownership	\$1,734,956
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	8,458,000
14	Ohio Power Company Steam Capacity (kw)	\$0.21
15	Muskingum Plant (\$/kw)	88.00%
16	Ohio Power Surplus Weighing	00.00%
17	Portion of Weighted Average Capacity Rate	<u> </u>
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.18
4.0	Muskingum Plant Costs to Kentucky Power :	\$0.18
18	Muskingum Plant Portion (\$/kw) (17)	
19	Kentucky Power Capacity Deficit (kw)	<u>385,600</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	¢60.409
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$69,408

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
	Litility Direct at Oviginal Cost	\$20,298,007
	Utility Plant at Original Cost	\$20,298,007 <u>1.37%</u>
2 3	Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$278,083
3		φ270,003
	Operations :	\$0
4	Urea (5020002)	\$0 \$0
5 6	Trona (5020003) Air Emission Fee	پو <u>\$15,159</u>
0 7		\$15,159 \$15,159
· ·	Total Operations (4) + (5) + (6) Maintenance :	φ10,109
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	\$0 \$0
10		<u>\$0</u> \$15,159
	Fixed O&M (7) + (9) Total Revenue Requirement,	<u>\$10,108</u>
11	Cost Associated with Sporn Plant (3) + (10)	\$293,242
12	Ohio Power Company's Percentage Ownership	<u>\$293,242</u> 100.00%
12	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$293,242
14		8,458,000
14	Ohio Power Company Steam Capacity (kw) Sporn Plant (\$/kw)	8,458,000 \$0.03
16	Ohio Power Surplus Weighing	\$0.03 88.00%
17	Portion of Weighted Average Capacity Rate	00.00 /0
11	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	φ0.03
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
10	Kentucky Power Capacity Deficit (kw)	385,600
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	<u>000,000</u>
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,568
20		φ11,000

ES FORM 3.14 Page 10 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of March 2010

	Rockport	UNIT 1	UNIT 2	Kockport Plant	
COST	Common	AMOUNTS	AMOUNTS	Common	Total
(2)	(3)	(4)	(5)	(9)	(1)
Utility Plant at Original Cost Member Primary Canacity Investment Rate /16 44% / 12\	\$1,777,228 4 3702	\$10,544,676	\$16,709,416	\$2,202,020	
Total Rate Base	\$24,348	\$144,462	\$228,919	\$3(
Operations : Liss / 60200020	Ç	ę	é	ć	
Jied (502003) [rona (502003)	0\$	0 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	03 03 03	08 08	
	<u>\$15,625</u>	S	୍ଷ କ୍ଷ		
l otal Operations (4) + (5) + (6) Maintenance :	\$15,625	0	\$0 \$	0\$	
SCR Maintenance (5120000)	\$0	\$0	\$0	\$0	
1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9)	\$0 816 876	କ୍ଷ ଚ	ន្លទ	ମ ୍ଭ	
Total Revenue Requirement,	070'21 A	а С	잙	À	
Cost Associated with Rockport Plant (3) + (10)	\$39,973	\$144,462	\$228,919	07	
indiana kiicingan Power Company's Percentage Ownership I&M's Share of Cost Associated with Rockport Plant (11) X (12)	<u>50%</u> \$19,987	<u>85.00%</u> \$122,793	<u>65.08%</u> \$148,980	<u>50.00%</u> \$15,084	
Total Rockport Plant Common and Units 1 & 2					\$306,844
Indiana Michigan Power Company Steam Capacity (kw) Rocknort Plant (\$/kw) /14) / (15)	· · · · ·				5,416,000 #0.06
Kentucky Power Portion of Rockport Plant /					00.0¢
Indiana Michigan Power Surplus Weighing					12.00%
Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (S/kw) (17) X (18)					\$0 U1
Rockport Plant Costs to Kentucky Power :					10.00
Rockport Plant Portion (\$/kw) (18) Kentucky Davior Connectin Dofinit (100)		E			\$0.01
Rockport Units 1 & 2 Environmental to Kentucky Power (19) * (20)					<u>385,6UU</u>
ES FORM 3.14, Page 1 of 10, Line 8)					\$3,856

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ES FORM 3.14 Page 11 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,439,622
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,348,623
ľ	Operations :	+ 1,0 10,020
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	\$15,625
7	Total Operations $(4) + (5) + (6)$	\$15,625
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,248</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	12.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.03
	Tanners Creek Plant Costs to Kentucky Power:	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>385,600</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$11,568

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of March 2010

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 04/30/2009							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$420,000,000 \$156,177,865	40.964% 15.233%	6.05% 2.43%		2.48% 0.37%			2.48% 0.37%
3 4	FINANCING C EQUITY	\$44,758,222 \$404,345,13 6	4.365% 39.437%		1/	0.14% 4.14%	1.5760	2/	0.14% 6.53%
5	TOTAL	\$1,025,281,223	100.000%			7.13%			9.52%
1/		nted Average Cost o on Common Equity		09 - 00316					
2/	Gross Revenue Case No. 2009	Conversion Factor - 00316 dated - Jan	(GRCF) Calcula uary 20, 2010	tion:					
1 2 3		EVENUE LE ACCOUNTS EX Service Commissio					100.0000 0.2600 0.1500		
4 5		LE PRODUCTION I E TAX EXPENSE, N				OW)	99.5900 5.6372		
6 7	FEDERAL TAX	ABLE PRODUCTIO N PHASE-IN	N INCOME BEF	ORE 199 DEDU	стю	N	93.9528 5.6372		
8 9		ABLE PRODUCTION DME TAX EXPENSE		EDUCTION (35%	6)		88.3156 30.9105		
10	AFTER-TAX PR	ODUCTION INCOM	IE				57.4051		
11 12 13 14 15	GROSS-UP FACTOR FOR PRODUCTION INCOME: AFTER-TAX PRODUCTION INCOME 199 DEDUCTION PHASE-IN UNCOLLECTIBLE ACCOUNTS EXPENSE Kentucky Public Service Commission Assessment (0.15%)								
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION I	INCOME (ROUN	IDEC))	63.4523		
17 18 19 20	BLENDED FEDERAL AND STATE TAX RATE: FEDERAL (LINE 8) STATE (LINE 4) BLENDED TAX RATE						30.9105 5.6372 36.5477		
21	GROSS REVEN	-	1.5760						
1. 2 3	STATE INCOME TAX CALCULATION: PRE-TAX PRODUCTION INCOME COLLECTIBLE ACCOUNTS EXPENSE (0.32%) Kentucky Public Service Commission Assessment (0.15%)						100.0000 0.2600 0.1500		
4 5	STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION LESS: STATE 199 DEDUCTION								
6 7	STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION STATE INCOME TAX RATE								
8	STATE INC	OME TAX EXPENS	E (LINE 5 X LIN	E 6)		=	5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Capital Balances As of 04/30/2009 based on Case No. 2009-00316, dated January 20, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of March 2010

			18	K
Total	(6)		\$48,118	
Rockport Plant Common	(8)	\$2,185,292 (\$65,200) (\$65,200) (\$15,064) \$2,105,028 \$2,105,028 \$2,15,064} \$2,105,028 \$2,105,028 \$6,410 \$6,410 \$6,410 \$6,410 \$5,510 \$5,410 \$5,510 \$5,610\$\$5,610\$\$5,710\$\$5,610\$\$5,610\$\$5,710\$\$\$5,710\$\$\$5,710\$\$\$5,710\$\$\$5,710\$\$\$5,710\$\$\$5,710\$\$\$5,710\$\$\$5,710\$\$\$\$5,710\$\$\$\$5,710\$\$\$\$5,710\$\$\$\$5,710\$\$\$\$\$5,710\$\$\$\$\$\$\$\$5,710\$		
Total Units 1 & 2 (C5 + C6)	(/)	\$9,060,518 0.8949% \$81,083 \$39,968 \$39,968 \$39,968 \$39,968 \$39,968 \$39,968		
Unit No. 2	(9)	\$8,353,084 (\$1,737,934) (\$1,011,179) \$5,603,971 \$5,603,971 \$24,502		
Unit No. 1	(2)	\$5,272,657 (\$1,172,709) (\$643,401) \$3,456,547 \$15,466 \$15,466		
Rockport Plant Common	(4)	\$1,777,206 (\$803,385) (\$152,188) \$821,633 \$7,353 \$7,253 \$7		
	(3)	10.7391%		
COST COMPONENT	(2)	Return on Rate Base : Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOx Burners (LNB) Installed Cost Flyash Landfill Installed Cost Less Accumulated Depreciation Less Accumulated Depreciation Less Accum. Def. Income Taxes Total Rate Base Weighted Average Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12) Monthly Return of Rate Base (Line 6 * Line 8) Operating Expenses : Monthly Indiana Air Emissions Fee Total Operating Expenses : Monthly Indiana Air Emissions Fee Total Operating Expenses (Line 10 + Line 11)) Total Revenue Requirement, Cost Associated with Rockport Plant CeMS and LNB (Line 9 + Line 11)) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 14 * Line 15 * 15) Morton Comming Commong Commond	ES FORM 3.00 Line 2	
NO.		-00400000 616 646 7777755 557 FOXXXF7	16 16	-

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 03/31/2010				· · ·			
1 2	L/T DEBT S/T DEBT CAPITALIZATION	78,095,911 35,456,264	39.2682% 17.8281%	4.9442% 0.1443%		1.9415% 0.0257%			1.9415% 0.0257%
3 4	OFFSETS DEBT	0	0.0000%	3.4455%		0.0000%	!		0.0000%
5	C EQUITY	85,326,169	42.9037%	12.1600%	1/	5.2171%	1.681379	2/	8.7719%
6	TOTAL	198,878,344	100.0000%			7.1843%			10.7391%
1/									
1 2 3 4 5 6 7	Gross Revenue Conversion Factor (GRCF) Calculation: OPERATING REVENUE LESS: INDIANA ADJUSTED GROSS INCOME (LINE 1 X .085) INCOME BEFORE FED INC TAX LESS: FEDERAL INCOME TAX (LINE 4 X .35) OPERATING INCOME PERCENTAGE GROSS REVENUE CONVERSION FACTOR (100% / LINE 7)						100.00 <u>8.500</u> 91.500 <u>32.025</u> 59.475 <u>1.681379</u>		

For the Expense Month of March 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of March 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
1 2 3 4	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$45,622,014 \$491,394 \$1,768,423 \$5,535,238	85.4% 0.9% 3.3% 10.4%
5	Total Revenues for Surcharges Purposes	\$53,417,069	100.0%
6	Non-Physical Revenues for Month	\$504,530	
7	Total Revenues for Month	\$53,921,599	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for January 2010	2.2816%
2	Kentucky Retail Revenues for Current Expense Month	\$56,487,377
3	Surcharge Collected (1) * (2)	\$1,288,816
4	Surcharge Amount To Be Collected	\$1,148,441
5	Over/(Under) Recovery (3) - (4) = (5)	\$140,375

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 77 of 609

101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

May 19, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

RECEIVED MAY 19 2010

PUBLIC SERVICE COMMISSION

Attention: Aaron D. Greenwell

RE: Monthly Environmental Surcharge Report

Dear Mr. Derouren,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and three copies of its Environmental Surcharge Reports for the month of April 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after May 28, 2010.

If there are any questions please contact me at 502-696-7010.

Magne C MOT OS

Errol K. Wagner ^U Director Regulatory Services Enclosures

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of April 2010

CALCULATION OF E(m)							
	E(m) = CRR - BRR						
LINE 1	CRR from ES FORM 3.00	\$4,038,044					
LINE 2	Brr from ES FORM 1.10	\$2,095,535					
LINE 3	E(m) (LINE 1 - LINE 2)	\$1,942,509					
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	80.7%					
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,567,605					
LINE 6	(Over)/Under Recovery Adjustment from ES FORM 3.30	\$221,483					
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,789,088					
	SURCHARGE FACTOR						
LINE 8	Net KY Retail E(m) (Line 7)	\$1,789,088					
LINE 9	KY Retail R(m) from ES FORM 3.30	\$36,160,423					
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	4.9476%					

Effective Date for Billing:

June 2010

Submitted By :

Director Regulatory Services

Title :

Date Submitted :

May 19, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of April 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY	\$2,531,784
FEBRUARY	3,003,995
MARCH	2,845,066
APRIL	2,095,535
MAY	1,514,859
JUNE	1,913,578
JULY	2,818,212
AUGUST	2,342,883
SEPTEMBER	2,852,305
OCTOBER	2,181,975
NOVEMBER	2,598,522
DECEMBER	1,407,969
TOTAL	\$28,106,683

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of April 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE			
NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$3,989,872
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$48,172
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,038,044

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE NO.	COST COMPONENT		
—			
	Return on Rate Base :		
1	Utility Plant at Original Cost	\$191,327,552	
	Less Accumulated Depreciation	(\$56,019,174)	
3	Less Accum. Def. Income Taxes	(\$43,286,793)	
8 0	Net Utility Plant	(\$10,200,700)	\$92,021,585
	SO2 Emission Allowance Inventory from ES FORM 3.11		\$12,086,231
	ECR & NOx Emission Allowance Inventory from ES FORM 3.12		\$16,613
	Cash Working Capital Allowance from ES FORM 3.13, Line 12		\$89,106
s 8	Total Rate Base		\$104,213,535
	Weighted Average Cost of Capital - ES FORM 3.15	10.50%	Ψ10 4 ,210,000
	Monthly Weighted Avg. Cost of Capital (9) / 12	0,001	0.88%
	Monthly Return of Rate Base (8) * (10)		\$917,079
	Operating Expenses :		ψυτι,υτυ
12			\$577,252
	Monthly Depreciation Expense Monthly Catalyst Amortization Expense		\$46,030
	Monthly Property Taxes		\$14,298
			\$30,551
	Monthly Kentucky Air Emissions Fee Monthly Environmental AEP Pool Capacity Costs		\$00,001
	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10		\$1,926,528
	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13		
			\$356,163 \$121,971
8 1	Monthly SO2 Emission Allowance Consumption		
19	Total Operating Expenses [Line 12 thru Line 18]		<u>\$3,072,793</u>
20	Total Revenue Requirement - Big Sandy		¢0,000,070
	Record on ES FORM 3.00, Line 1		\$3,989,872

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY	12 martinesestation		754,608		\$4,685,726	\$6.209
Additions -			100.000	ф О	¢0.	¢0.000
EPA Allowances		0	403,260 94,744	\$0 \$0	\$0 \$0	\$0.000 \$0.000
Gavin Reallocation P & E Transfers In		0	327,201	۵۵ ۵۵	پو \$4,855,695	\$0.000 \$14.840
Intercompany Purchases		0	33,930	\$0	\$9,455,560	\$278.678
Other (List)		Ő	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance						
Adjustment		0	4	\$0	\$0	\$0.000
Withdrawals - P & E Transfers Out Intercompany Sales Off - System Sales		0 0 0	11,382 52,690 303,050	\$0 \$0 \$0	\$836,106 \$4,758,135 \$29,780,273	\$73.459 \$90.304 \$98.269
SO2 Emissions Allowance Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)						
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)	7,070	7,070	585,870	\$121,971	\$38,689,093	\$66.037
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,093,961		\$12,086,231	\$11.048
Expense Month Member Load Ratio	for AEP/h	Kentucky Power				0.06925

For the Expense Month of April 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	36,954	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	0	16,218	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		17,381		\$0	\$0.000

For the Expense Month of April 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930	
Consumed: June 2004 July 2004	420 510	
Total Consumed	930	
Remaining Early Reduction Credits (ERC)		

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,622	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	440	\$0	\$528,874	\$1,201.986
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	303	10,343	\$998	\$512,261	\$49.527
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		34,719		\$16,613	\$0.478

For the Expense Month of April 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of April 2010

LINE NO.	O&M Expenses		
1 2 3 4	1 997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$204,160 <u>\$121,971</u>	\$356,682
5 6 7 8 9 10 11	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	\$0 \$308,089 \$0 \$998 \$178 <u>\$46,898</u>	\$356,163
12 13	Total Monthly O&M Expenses Cash Working Capital Allowance (Line 12 X 1/8)		<u>\$712,845</u> \$89,106

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs April 2010

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$4,213.46	\$0.00	\$0.00	\$4,213.46
SCR Boiler Outlet Ductwork	\$34,661.66	\$0.00	\$0.00	\$34,661.66
SCR Instrument & Control	\$1,558.20	\$0.00	\$0.00	\$1,558.20
SCR NOx Monitoring	\$3,312.72	\$0.00	\$0.00	\$3,312.72
SCR Reactor	\$343.94	\$0.00	\$0.00	\$343.94
Total SCR April 2010 O & M Expense	\$44,089.98	\$0.00	\$0.00	\$44,089.98
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$177.60	\$177.60
Emission Testing Required Under Permit - Operation Maintenance	\$0.00 \$2,808.13	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$2,808.13

April 2010 O & M Expenses Filed

\$47,076

ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of April 2010

		Ohio Power Company's	Indiana Michigan Power Company's	
Line No. (1)	Cost Component (2)	Environmental Cost to KPCo (3)	Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$337,792		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$215,296		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$634,752		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,712		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$649,600		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$59,392		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,136		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,712	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$11,136	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$1,911,680	\$14,848	\$1,926,528

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of April 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$487,910	•	2
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$158,616		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$3,305,566		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$18,549		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$1,250,053		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$64,357		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$15,159		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$5,300,210	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$0.63	\$0.01	
14	Company Surplus Weighting	88.00%	12.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.55	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	371,200	371,200	
17	Fixed O&M Environmental Cost to Kentucky Power	\$204,160	\$0	\$204,160

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE		
NO.	COST	AMOUNTS
	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	\$601,233,295 <u>1.37%</u>
3	Total Rate Base	\$8,236,896
4	Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
	Operations :	¢۵
6 7	Disposal (5010000) Urea (5020002)	\$0 \$460,304
	Trona (5020002)	\$400,304 \$135,041
	Lime Stone (5020004)	\$126,306
	Air Emission Fee	\$10,178
	Total Operations (Lines 6 thru 10)	\$731,829
	Maintenance :	¢101,020
97	SCR Maintenance (5120000)	\$0
	Scrubber (FGD) Maintenance (5120000)	<u>\$0</u>
	Total Maintnenance (12) + (13)	<u>\$0</u>
	1/2 of Maintenance (14) * 50%	<u>\$0</u>
16	Fixed O&M (11) + (15)	\$731,829
17	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
18	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$487,910</u>
	Total Revenue Requirement,	
8	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,724,806
8	Ohio Power Company Steam Capacity (kw)	8,458,000
	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.03
	Ohio Power Surplus Weighing	88.00%
	Portion of Weighted Average Capacity Rate	#0.04
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.91
	Amos Unit No. 3 Costs to Kentucky Power : Amos Unit No. 3 Portion (\$/kw) (23)	\$0.91
	Kentucky Power Capacity Deficit (kw)	پری 371,200
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	<u>371,200</u>
26	(ES FORM 3.14, Page 1 of 10, Line 1)	\$337,792
~~		\$001,70Z

ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$398,290,892
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,456,585
	Operations :	
4	Disposal (5010000)	(\$36,324)
5	Urea (5020002)	\$2,760
6	Trona (5020003)	\$1,022
7	Lime Stone (5020004)	\$3,605
8	Air Emission Fee	<u>\$10,606</u>
9	Total Operations (Line 4 thru 8)	(\$18,331)
	Maintenance :	
10	SCR Maintenance (5120000)	\$27,392
11	Scrubber (FGD) Maintenance (5120000)	<u>\$326,501</u>
12	Total Maintnenance (11) + (12)	\$353,893
13	1/2 Maintnenance (12) * 50%	<u>\$176,947</u>
14	Fixed O&M (9) + (11)	<u>\$158,616</u>
	Total Revenue Requirement,	
15	Cost Associated with Cardinal Unit No. 3 (3) + (12)	<u>\$5,615,201</u>
16	Ohio Power Company's Percentage Ownership	100.00%
17	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)	\$5,615,201
18	Ohio Power Company Steam Capacity (kw)	8,458,000
19	Cardinal Unit No. 1 (\$/kw)	\$0.66
20	Ohio Power Surplus Weighing	88.00%
21	Portion of Weighted Average Capacity Rate	
110000000000000000000000000000000000000	Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)	\$0.58
	Cardinal Unit No. 1 Costs to Kentucky Power :	
22	Cardinal Unit No. 1 Portion (\$/kw) (21)	\$0.58
23	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	
24	(ES FORM 3.14, Page 1 of 10, Line 2)	\$215,296

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$957,056,293
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$13,111,671
	Operations :	
4	Sludge Disposal (5010000)	\$582,228
5	Lime (5020001)	\$1,552,066
6	Urea (5020002)	\$512,851
7	Trona (5020003)	\$241,100
8	Lime Stone (5020004)	\$0
9	Air Emission Fee	\$36,017
10	Lease (5070005)	<u>\$0</u>
11	Total Operations (Lines 4 thru 10)	\$2,924,262
	Maintenance :	
12	SCR Maintenance (5120000)	\$62,294
13	Scrubber Maintenance (5120000)	<u>\$700,314</u>
14	Total Maintenance (12) + (13)	\$762,608
15	1/2 of Maintenance (13) * 50%	<u>\$381,304</u>
16	Fixed O&M (11) + (15)	<u>\$3,305,566</u>
	Total Revenue Requirement,	
17	Cost Associated with Gavin Plant (3) + (16)	\$16,417,237
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$16,417,237
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Gavin Plant (\$/kw)	\$1.94
22	Ohio Power Surplus Weighing	88.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.71
	Gavin Plant Costs to Kentucky Power :	
24	Gavin Plant Portion (\$/kw) (23)	\$1.71
25	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 3)	\$634,752

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$7,173,774
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$98,281
, v	Operations :	φ00,201
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$18,549</u>
7	Total Operations (4) + (5) + (6)	\$18,549
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$18,549</u>
	Total Revenue Requirement,	
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$116,830</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$116,830
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	88.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
~	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	MO 740
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,712

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$1,139,062,655
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$15,605,158
	Operations :	
4	Disposal (5010000)	\$18,659
5	Lime Stone (5020004)	\$706,418
6	Urea (5020002)	\$412,654
7	Trona (5020003)	\$44,619
8	Air Emission Fee	<u>\$15,502</u>
9	Total Operations (Lines 4 thru 8)	\$1,197,852
	Maintenance :	
10	FDG (5120000)	\$101,618
11	SCR Maintenance (5120000)	<u>\$2,783</u>
12	1/2 of Maintenance (10 + 11) * 50%	<u>\$52,201</u>
13	Fixed O&M (9) + (12)	<u>\$1,250,053</u>
2010	Total Revenue Requirement,	
14	Cost Associated with Mitchell Plant (3) + (13)	<u>\$16,855,211</u>
15	Ohio Power Company's Percentage Ownership	100.00%
16	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$16,855,211
17	Ohio Power Company Steam Capacity (kw)	8,458,000
18	Mitchell Plant (\$/kw)	\$1.99
19	Ohio Power Surplus Weighing	88.00%
20	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.75
	Mitchell Plant Costs to Kentucky Power :	
21	Mitchell Plant Portion (\$/kw) (20)	\$1.75
22	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
23	(ES FORM 3.14, Page 1 of 10, Line 5)	\$649,600

ES FORM 3.14 Page 8 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE		
NO.	COST	AMOUNTS
4	Litility Diant at Ovining Coat	\$407 405 405
1	Utility Plant at Original Cost	\$107,185,185
2 3	Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	<u>1.37%</u>
JJ	Operations :	\$1,468,437
4	Urea (5020002)	¢00.951
5 5	Trona (5020003)	\$29,851
6	Air Emission Fee	\$0 \$32,912
7	Total Operations (4) + (5) + (6)	<u>\$62,763</u>
1	Maintenance :	φυ2,703
8	SCR Maintenance (5120000)	\$3,188
9	1/2 of Maintenance (8) * 50%	\$1,594
10	Fixed O&M (7) + (9)	<u>\$64,357</u>
10	Total Revenue Requirement,	<u>404,001</u>
11	Cost Associated with Muskingum Plant (3) + (10)	\$1,532,794
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,532,794
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.18
16	Ohio Power Surplus Weighing	88.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.16
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.16
19	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$59,392

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$20,298,007
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$278,083
Ŭ	Operations :	·····,···
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	\$15,159
7	Total Operations (4) + (5) + (6)	\$15,159
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,159</u>
	Total Revenue Requirement,	
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$293,242</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$293,242
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Sporn Plant (\$/kw)	\$0.03
16	Ohio Power Surplus Weighing	88.00%
17	Portion of Weighted Average Capacity Rate	* •••••
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	#0.00
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	¢11 100
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,136
Į		

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of April 2010

Ļ		Rockport			Rockport	
	COST	Common	AMOUNTS	AMOUNTS	Common	Total
Ē	(2)	(3)	(4)	(2)	(9)	(7)
~	Utility Plant at Original Cost	\$1.777.228	\$10.544.676	\$16.709.416	\$2.202.020	
N	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%	1.37%	1.37%	1.37%	
ო	Total Rate Base	\$24,348	\$144,462	\$228,919	\$30,168	
	Operations :	21	49-10-10 7 4			
4	Urea (5020002)	\$	80	\$0	\$0	
ഗ	Trona (5020003)	00 1	9 9 9	0\$	\$0	
0 1	Air Emission r-ee Total Onerations (4) + (5) + (6)	<u> </u>	09	J ₩) 9 9	
	Maintenance :)) }	}	}	
00	SCR Maintenance (5120000)	0\$	\$0	\$0	\$0	
თ	1/2 of Maintenance (8) * 50%	8	8	80	80	
0	Fixed $O&M(7) + (9)$	\$15,625	80	<u>0</u>	୍ଷ	
	Total Revenue Requirement,			4		
= (Cost Associated With Rockport Plant (3) + (10)	\$39,973	\$144,462	\$228,919	\$30,168 50,55%	
ž δ	indicate microgen Fower Company's Fercentage Contensition 18M's Share of Cost Associated with Rockport Plant (11) X (12)	\$19,987	\$122,793	\$148,980	<u>\$15,084</u>	
	-	-				
4	Total Rockport Plant Common and Units 1 & 2					\$306,844
1 5	Indiana Michigan Power Company Steam Capacity (kw)					5,416,000
G	Rockport Plant (\$/kw) (14) / (15)	h da				\$0.06
17	Neitucky Fower Futuri of Nockport Flatity					12.00%
~	Portion of Weighted Average Capacity Rate					
	Attributed to Rockport Plant (\$/kw) (17) X (18) Rocknort Plant Costs to Kantucky Downsr 1					\$0.01
9						\$0.01
20	Kentucky Power Capacity Deficit (kw)					371,200
21	(ES FORM 3.14, Page 1 of 10, Line 8)					\$3,712

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

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LINE NO.	COST	AMOUNTS
		7.0000000
1	Utility Diant at Original Cost	¢00,400,000
1	Utility Plant at Original Cost	\$98,439,622
2 3	Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	<u>1.37%</u>
ാ		\$1,348,623
	Operations :	#0
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,625</u>
7	Total Operations (4) + (5) + (6)	\$15,625
	Maintenance :	A A
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,248</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	12.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.03
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>371,200</u> .
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$11,136

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of April 2010

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 10/31/200 9							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	53.561% 0.000%	6.48% 1.77%		3.47% 0.00%			3.47% 0.00%
3 4	FINANCING C EQUITY	\$46,535,672 \$430,332,408	4.532% 41.907%	2.08% 10.50 %	1/	0.09% 4.40%	1.5760	2/	0.09% 6.94%
5	TOTAL	\$1,026,868,080	100.000%			7.96%			10.50%
1/	WACC = Weigh Rate of Return	nted Average Cost o on Common Equity (f Capital per Case No. 200	09 - 00316					
2/	Gross Revenue Case No. 2009								
1 2 3		EVENUE LE ACCOUNTS EXI Service Commissic		0.15%)			100.0000 0.2600 0.1500		
4 5		LE PRODUCTION IN E TAX EXPENSE, N				OW)	99.5900 5.6372		
6 7	FEDERAL TAX/ 199 DEDUCTIO	ABLE PRODUCTION	INCOME BEF	DRE 199 DEDU	CTIC	ИС	93.9528 5.6372		
8 9		ABLE PRODUCTION ME TAX EXPENSE		DUCTION (35%	6)		88.3156 30.9105		
10	AFTER-TAX PR	ODUCTION INCOM	E				57.4051		
11 12 13 14 15	AFTER-TAX 199 DEDUC UNCOLLEC	CTOR FOR PRODU K PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS ublic Service Comm	COME				57.4051 5.6372 0.2600 0.1500		
16	TOTAL GROSS	-UP FACTOR FOR I	PRODUCTION I	NCOME (ROUN	IDEE))	63.4523		
17 18 19 20	BLENDED FEDI FEDERAL (STATE (LIN BLENDED TAX	IE 4)	AX RATE:				30.9105 5.6372 36.5477		
21	GROSS REVEN	UE CONVERSION	FACTOR (100.00	000 / Line 14)			1.5760		
1 2 3	STATE INCOME TAX CALCULATION: PRE-TAX PRODUCTION INCOME COLLECTIBLE ACCOUNTS EXPENSE (0.26%) Kentucky Public Service Commission Assessment (0.15%)								
4 5		ABLE PRODUCTIO ATE 199 DEDUCTIC		ORE 199 DEDU	JCTI	ON	99.5900 5.6372		
6 7		ABLE PRODUCTIO OME TAX RATE	N INCOME BEF	ORE 199 DEDU	JCTI	ON	93.9528 6.0000		
8	STATE INC	OME TAX EXPENSI	E (LINE 5 X LINE	E 6)			5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010.

ES FORM 3.20

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of April 2010

Total	(6)											\$48,172	K
Rockport Plant Common	(8)	CC CC CC CC CC CC CC CC CC CC CC CC CC	\$21,600,532 (\$71,610) (\$22,023)	\$2,091,659	0.9019%	\$18,865	\$6,410 \$0	\$6,410	\$25,275	\$7,583			
Total Units 1 & 2 (C5 + C6)	(/)	nallah-arturken Hivelenah Härlenah Härlenah	utomanto constituto co	\$9,008,011	0.9019%	\$81,243	\$39,968 \$0	\$39,968	\$121,211	\$36,363			
Unit No. 2	(9)	\$8,353,084	(\$1,762,436) (\$1,019,111)	\$5,571,537			\$24,502 \$0		<u>_</u>				
Unit No. 1	(5)	\$5,272,657	(\$1,188,175) (\$648,008)	\$3,436,474			\$15,466 \$0	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	<u></u>				
Rockport Plant Common	(4)	\$1,777,206	(\$808,597) (\$155,051)	\$813,558	0.9019%	\$7,337	\$5,212 \$15,625	\$20,837	\$28,174	\$4',ZZ0			
	(3)				%czz8.01								
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOX Burners (LNB) Installed Cost	Less Accumulated Depreciation Less Accum. Def. Income Taxes		weigned Average Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthly Return of Rate Base (Line 6 * Line 8) Operating Expenses :	Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Renrucky Power's Portion of Rockports CEMS (Line 13 * 10%) Kentucky Power's Portion of AEGC0's LNB and Landfill (Line 13 * 30%) Kentucky Dower's Dordton of Bookboort Plonts'	Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8, Line 16 is to be Recorded on	ES FORM 3.00 Line 2	
NO.		- 0 0	0410		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	<u> </u>	55 1	·		4 Ω = = = =		10	

KPSC Case No. 2011-00401 JC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 99 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE			Cap.	Cost		WACC	0505		WACC
NO.	Component	Balances	Structures	Rates		(NET OF TAX)	GRCF		(PRE - TAX)
		As of 04/30/2010							
1 2 3 4 5	L/T DEBT S/T DEBT CAPITALIZATION OFFSETS DEBT C EQUITY	77,685,475 34,656,666 0	39.2164% 17.4950% 0.0000%	4.9366% 0.2053% 3.4770%	11	1.9360% 0.0359% 0.0000%	4 694270	2	1.9360% 0.0359% 0.0000%
5	C EQUITY	85,752,115	43.2886%	12.1600%	17	5.2639%	1.681379	2/	8.8506%
6	TOTAL	198,094,256 =======	100.0000% =======			7.2358% ========			10.8225% =========
1/ 2/ 1 2 3 4	WACC = Weighted Cost Rates per the Gross Revenue Cor OPERATING REVE LESS: INDIANA A (LINE 1 X .085) INCOME BEFORE	Provisions of the nversion Factor (NUE DJUSTED GRO	GRCF) Calculat	Ū	ht		100.00 <u>8.500</u> 91.500		
5 6 7	LESS: FEDERAL I (LINE 4 X .35) OPERATING INCO GROSS REVENUE FACTOR (100	NCOME TAX WE PERCENTA CONVERSION	GE				<u>32.025</u> 59.475 <u>1.681379</u>		

For the Expense Month of April 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of April 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$36,160,423 \$416,643 \$3,364,642 \$4,869,479	80.7% 0.9% 7.5% 10.9%
5	Total Revenues for Surcharges Purposes	 \$44,811,187	100.0%
6	Non-Physical Revenues for Month	(\$160,958)	
7	Total Revenues for Month	\$44,650,229	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for February 2010	1.3354%
2	Kentucky Retail Revenues for Current Expense Month	\$35,810,394
3	Surcharge Collected (1) * (2)	\$478,212
4	Surcharge Amount To Be Collected	\$699,695
5	Over/(Under) Recovery (3) - (4) = (5)	(\$221,483)

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 102 of 609

101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

June 18, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602 RECEIVED

JUN 18 2010

PUBLIC SERVICE COMMISSION

Attention: Aaron D. Greenwell

RE: Monthly Environmental Surcharge Report

Dear Mr. Derouren,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and three copies of its Environmental Surcharge Reports for the month of May 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after June 29, 2010.

If there are any questions please contact me at 502-696-7010.

Ma all A

Errol K. Wagner Director Regulatory Services Enclosures

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of May 2010

	CALCULATION OF E(m)	
	E(m) = CRR - BRR	
LINE 1	CRR from ES FORM 3.00	\$4,184,795
LINE 2	Brr from ES FORM 1.10	\$1,514,859
LINE 3	E(m) (LINE 1 - LINE 2)	\$2,669,936
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	83.9%
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$2,240,076
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	\$406,155
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$2,646,231
	SURCHARGE FACTOR	
LINE 8	Net KY Retail E(m) (Line 7)	\$2,646,231
LINE 9	KY Retail R(m) from ES FORM 3.30	\$33,662,428
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	7.8611%

Effective Date for Billing:

July 2010

The

Directof Regulatory Services

Date Submitted :

Title :

Submitted By :

June 18, 2010

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 104 of 609

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of May 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net
	Environmental
	Costs
Billing Month	
	0 0504704
JANUARY	\$2,531,784
FEBRUARY	3,003,995
MARCH	2,845,066
APRIL	2,095,535
MAY	1,514,859
JUNE	1,913,578
JULY	2,818,212
AUGUST	2,342,883
SEPTEMBER	2,852,305
OCTOBER	2,181,975
NOVEMBER	2,598,522
	1,407,969
DECEMBER	., 101,000
	\$28,106,683
TOTAL	

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of May 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,135,885
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$48,910
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.	· · ·	\$4,184,795

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

For the Expense Month of May 2010

LINE			
NO.	COST COMPONENT		una si 1964 in statution su
	Return on Rate Base :		an a charachta an an an an an
1	Utility Plant at Original Cost	\$191,327,552	
2	Less Accumulated Depreciation	(\$56,642,456)	
3	Less Accum. Def. Income Taxes	(\$43,555,356)	
4	Net Utility Plant		\$91,129,740
5	SO2 Emission Allowance Inventory from ES FORM 3.11		\$12,020,639
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12		\$15,743
7	Cash Working Capital Allowance from ES FORM 3.13, Line 12		\$108,390
8	Total Rate Base		\$103,274,512
9	Weighted Average Cost of Capital - ES FORM 3.15	10.50%	
10	Monthly Weighted Avg. Cost of Capital (9) / 12		0.88%
11	Monthly Return of Rate Base (8) * (10)		\$908,816
	Operating Expenses :		
12	Monthly Depreciation Expense		\$577,252
13	Monthly Catalyst Amortization Expense		\$46,030
14	Monthly Property Taxes		\$14,298
15	Monthly Kentucky Air Emissions Fee		\$30,551
	Monthly Environmental AEP Pool Capacity Costs		
16	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10		\$2,052,736
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13		\$440,610
18	Monthly SO2 Emission Allowance Consumption		\$65,592
19	Total Operating Expenses [Line 12 thru Line 18]		<u>\$3,227,069</u>
20	Total Revenue Requirement - Big Sandy		
	Record on ES FORM 3.00, Line 1		\$4,135,885

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of May 2010

		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions - EPA Allowances	***	0	403,260	\$0	\$0	\$0.000
Gavin Reallocation	1.00	Ő	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	33,930	\$0	\$9,455,560	\$278.678
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance	TA COLOR OF T					
Adjustment		0	4	\$0	\$0	\$0.000
Withdrawals - P & E Transfers Out Intercompany Sales Off - System Sales SO2 Emissions Allowance		0 0 0	11,382 52,690 303,050	\$0 \$0 \$0	\$836,106 \$4,758,135 \$29,780,273	\$73.459 \$90.304 \$98.269
Adjustment	Contract of Contra	0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)						
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)	3,802	3,802	589,672	\$65,592	\$38,754,685	\$65.722
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,090,159		\$12,020,639	\$11.027
Expense Month Member Load Ratio	for AEP/h	Kentucky Power				0.06925

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	36,954	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -			\$ 0	^	* 0.000
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0		\$0 \$0	\$0 \$0	\$0.000
Off - System Sales	0	2,425	\$D	\$0 \$0	\$0.000 \$0.000
ERC Consumed By Kentucky Power	0	930	\$0 \$0	\$0 \$0	\$0.000 \$0.000
NOx Consumed By Kentucky Power	263	16,481	\$0	Ųφ	ຈຸບ.ບບບ
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		17,118		\$0	\$0.000

For the Expense Month of May 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	. \$0.000
EPA Allowances	0	44,622	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	440	\$0	\$528,874	\$1,201.986
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	264	10,607	\$870	\$513,131	\$48.377
ENDING INVENTORY - Record Balance in		34,455		\$15,743	\$0.457
Column (4) on ES FORM 3.10, Line 5		J4,400		। । । । । । । । । । । । । । । । । । ।	φ0,407

For the Expense Month of May 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 3.13 Item No. 41 Attachment 1 Page 110 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of May 2010

LINE NO.	O&M Expenses		
1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$330,368 <u>\$65,592</u>	\$426,511
5 6 7 9 10 11	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	\$0 \$153,066 \$0 \$870 \$490 <u>\$286,184</u>	<u>\$440,610</u>
12 13	Total Monthly O&M Expenses Cash Working Capital Allowance (Line 12 X 1/8)		<u>\$867,121</u> \$108,390

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs May 2010

Work Description	Material Cost s	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$33,663.17	\$5,838.32	\$0.00	\$39,501.49
SCR Acoustic Horns	\$2,544.00	\$0.00	\$0.00	\$2,544.00
SCR Boiler Outlet Ductwork	\$112,493.39	\$83,723.75	\$0.00	\$196,217.14
SCR Booster Fan	\$32,843.85	\$0.00	\$0.00	\$32,843.85
SCR Instrument & Control	\$7,444.05	\$0.00	\$0.00	\$7,444.05
SCR Nox Monitoring	\$1,833.16	\$0.00	\$0.00	\$1,833.16
SCR Reactor	\$152.89	\$2,548.27	\$0.00	\$2,701.16
Total SCR May 2010 O & M Expense	\$190,974.51	\$92,110.34	\$0.00	\$283,084.85
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$0.00
Emission Testing Required Under Permit -				
Operation Maintenance	\$490.00 \$3,099.00	\$0.00 \$0.00	\$0.00 \$0.00	\$490.00 \$3,099.00
			-	

May 2010 O & M Expenses Filed

\$286,674

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ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of May 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$352,640		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$259,840		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$694,144		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,712		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$657,024		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$59,392		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,136		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,712	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$11,136	
-	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,037,888	\$14,848	\$2,052,736

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of May 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$931,935		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$1,273,454		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$4,807,068		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$18,549		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$1,419,761		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$59,639		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$15,159		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15, 6 25	
11	Subtotal	\$8,525,565	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.01	\$0.01	
14	Company Surplus Weighting	88.00%	12.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.89	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	371,200	371,200	
17	Fixed O&M Environmental Cost to Kentucky Power	\$330,368	\$0	\$330,368

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO. COST 1 Utility Plant at Original Cost 2 Member Primary Capacity Investment Rate (16.44% / 12) 3 Total Rate Base 4 Ohio Power Company's Percentage Ownership - Environmental Investment 5 OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4) Operations : 0 6 Disposal (5010000) 7 Urea (5020002) 8 Trona (5020003) 9 Lime Stone (5020004) 10 Air Emission Fee 11 Total Operations (Lines 6 thru 10) Maintenance : 12 2 SCR Maintenance (5120000) 13 Scrubber (FGD) Maintenance (5120000) 14 Total Maintnenance (12) + (13)	AMOUNTS \$601,233,295 <u>1.37%</u> \$8,236,896 <u>100.00%</u> \$8,236,896 \$0 \$380,415 \$656,574 \$350,666
 Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Ohio Power Company's Percentage Ownership - Environmental Investment OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4) Operations : Disposal (501000) Urea (5020002) Trona (5020003) Lime Stone (5020004) Air Emission Fee Total Operations (Lines 6 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber (FGD) Maintenance (5120000) 	<u>1.37%</u> \$8,236,896 <u>100.00%</u> \$8,236,896 \$0 \$380,415 \$656,574
 Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Ohio Power Company's Percentage Ownership - Environmental Investment OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4) Operations : Disposal (501000) Urea (5020002) Trona (5020003) Lime Stone (5020004) Air Emission Fee Total Operations (Lines 6 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber (FGD) Maintenance (5120000) 	<u>1.37%</u> \$8,236,896 <u>100.00%</u> \$8,236,896 \$0 \$380,415 \$656,574
 Total Rate Base Ohio Power Company's Percentage Ownership - Environmental Investment OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4) Operations : Disposal (5010000) Urea (5020002) Trona (5020003) Lime Stone (5020004) Air Emission Fee Total Operations (Lines 6 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber (FGD) Maintenance (5120000) 	\$8,236,896 <u>100.00%</u> \$8,236,896 \$0 \$380,415 \$656,574
 4 Ohio Power Company's Percentage Ownership - Environmental Investment 5 OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4) Operations : 6 Disposal (5010000) 7 Urea (5020002) 8 Trona (5020003) 9 Lime Stone (5020004) 10 Air Emission Fee 11 Total Operations (Lines 6 thru 10) Maintenance : 12 SCR Maintenance (5120000) 13 Scrubber (FGD) Maintenance (5120000) 	<u>100.00%</u> \$8,236,896 \$0 \$380,415 \$656,574
 5 OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4) Operations : Disposal (5010000) Urea (5020002) Trona (5020003) Lime Stone (5020004) Air Emission Fee Total Operations (Lines 6 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber (FGD) Maintenance (5120000) 	\$8,236,896 \$0 \$380,415 \$656,574
Operations :6Disposal (501000)7Urea (5020002)8Trona (5020003)9Lime Stone (5020004)10Air Emission Fee11Total Operations (Lines 6 thru 10) Maintenance :12SCR Maintenance (5120000)13Scrubber (FGD) Maintenance (5120000)	\$0 \$380,415 \$656,574
 6 Disposal (5010000) 7 Urea (5020002) 8 Trona (5020003) 9 Lime Stone (5020004) 10 Air Emission Fee 11 Total Operations (Lines 6 thru 10) Maintenance : 12 SCR Maintenance (5120000) 13 Scrubber (FGD) Maintenance (5120000) 	\$380,415 \$656,574
 7 Urea (5020002) 8 Trona (5020003) 9 Lime Stone (5020004) 10 Air Emission Fee 11 Total Operations (Lines 6 thru 10) Maintenance : 12 SCR Maintenance (5120000) 13 Scrubber (FGD) Maintenance (5120000) 	\$380,415 \$656,574
 8 Trona (5020003) 9 Lime Stone (5020004) 10 Air Emission Fee 11 Total Operations (Lines 6 thru 10) Maintenance : 12 SCR Maintenance (5120000) 13 Scrubber (FGD) Maintenance (5120000) 	\$656,574
 9 Lime Stone (5020004) 10 Air Emission Fee 11 Total Operations (Lines 6 thru 10) Maintenance : 12 SCR Maintenance (5120000) 13 Scrubber (FGD) Maintenance (5120000) 	64
 10 Air Emission Fee 11 Total Operations (Lines 6 thru 10) Maintenance : 12 SCR Maintenance (5120000) 13 Scrubber (FGD) Maintenance (5120000) 	a 4000.000
 11 Total Operations (Lines 6 thru 10) Maintenance : 12 SCR Maintenance (5120000) 13 Scrubber (FGD) Maintenance (5120000) 	\$10,178
Maintenance : 12 SCR Maintenance (5120000) 13 Scrubber (FGD) Maintenance (5120000)	\$1,397,833
12 SCR Maintenance (5120000) 13 Scrubber (FGD) Maintenance (5120000)	ψ1,007,000
13 Scrubber (FGD) Maintenance (5120000)	\$0
	\$0 <u>\$0</u>
	<u>\$0</u>
14 1/2 of Maintenance (12) * (13)	<u>\$0</u> \$0
16 Fixed $O&M$ (11) + (15)	\$1,397,833
17 Ohio Power Company's Percentage Ownership - O&M Cost	66.67%
17 Sond Power Company's Percentage Contership - Odim Cost 18 OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	\$931,935
Total Revenue Requirement,	<u>4901,900</u>
19 Cost Associated with Amos Unit No. 3 (5) + (18)	\$9,168,831
20 Ohio Power Company Steam Capacity (kw)	8,458,000
21 Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.08
22 Ohio Power Surplus Weighing	88.00%
23 Portion of Weighted Average Capacity Rate	00.0070
Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.95
Amos Unit No. 3 Costs to Kentucky Power :	φ0.00
24 Amos Unit No. 3 Portion (\$/kw) (23)	\$0.95
25 Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	071,200
26 (ES FORM 3.14, Page 1 of 10, Line 1)	\$352,640
	φυυ2,040

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE		6
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$398,290,892
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,456,585
	Operations :	
4	Disposal (5010000)	\$133,268
5	Urea (5020002)	\$204,982
6	Trona (5020003)	\$345,246
7	Lime Stone (5020004)	\$460,826
8	Air Emission Fee	<u>\$10,606</u>
9	Total Operations (Line 4 thru 8)	\$1,154,928
	Maintenance :	
10	SCR Maintenance (5120000)	\$21,261
11	Scrubber (FGD) Maintenance (5120000)	<u>\$215,791</u>
12 -	Total Maintnenance (11) + (12)	\$237,052
13	1/2 Maintnenance (12) * 50%	<u>\$118,526</u>
14	Fixed O&M (9) + (11)	\$1,273,454
	Total Revenue Requirement,	
15	Cost Associated with Cardinal Unit No. 3 (3) + (12)	\$6,730,039
16	Ohio Power Company's Percentage Ownership	100.00%
17	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)	\$6,730,039
18	Ohio Power Company Steam Capacity (kw)	8,458,000
19	Cardinal Unit No. 1 (\$/kw)	. \$0.80
20	Ohio Power Surplus Weighing	88.00%
21	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)	\$0.70
	Cardinal Unit No. 1 Costs to Kentucky Power :	
22	Cardinal Unit No. 1 Portion (\$/kw) (21)	\$0.70
23	Kentucky Power Capacity Deficit (kw)	371,200
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	
24	(ES FORM 3.14, Page 1 of 10, Line 2)	\$259,840

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
1	Little Dest et Original Cost	\$957,056,293
1	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2 3	Total Rate Base	\$13,111,671
ঁ		φ10,111,071
	Operations :	\$581,487
4	Sludge Disposal (5010000)	\$1,974,611
5	Lime (5020001)	\$485,453
6	Urea (502002)	\$1,351,078
7	Trona (5020003)	ψ1,001,010 \$0
8	Lime Stone (5020004)	\$36,017
9	Air Emission Fee	ψ00,017 \$0
N 6	Lease (5070005)	\$4,428,646
11	Total Operations (Lines 4 thru 10)	ψ-1,-120,0-10
40	Maintenance:	\$84,370
12	SCR Maintenance (5120000)	\$672,473
13	Scrubber Maintenance (5120000)	\$756,843
14	Total Maintenance $(12) + (13)$	\$378,422
15	1/2 of Maintenance (13) * 50%	<u>\$4,807,068</u>
16	Fixed O&M (11) + (15)	<u></u>
	Total Revenue Requirement,	\$17,918,739
17	Cost Associated with Gavin Plant (3) + (16)	100.00%
18	Ohio Power Company's Percentage Ownership	5
19	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$17,918,739
20	Ohio Power Company Steam Capacity (kw)	8,458,000 \$2.12
21	Gavin Plant (\$/kw)	م 88.00%
22	Ohio Power Surplus Weighing	00.00%
23	Portion of Weighted Average Capacity Rate	¢4.07
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.87
	Gavin Plant Costs to Kentucky Power :	¢4 07
24	Gavin Plant Portion (\$/kw) (23)	\$1.87
25	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	0004444
26	(ES FORM 3.14, Page 1 of 10, Line 3)	\$694,144

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
		\$7,173,774
1	Utility Plant at Original Cost	1.37%
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$98,281
3	Total Rate Base	₩ <u>₩</u> ₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩
	Operations :	\$0
4	Urea (5020002)	\$0 \$0
5	Trona (5020003)	\$18,549
6	Air Emission Fee	\$18,549
7	Total Operations (4) + (5) + (6) Maintenance :	φ10,010
8	SCR Maintenance (5120000)	\$0
0 9	1/2 of Maintenance (8) * 50%	\$ <u>0</u>
9 10	Fixed $O&M(7) + (9)$	<u>\$18,549</u>
IU IU	Total Revenue Requirement,	<u> </u>
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$116,830</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$116,830
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	88.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,712
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$1,139,062,655
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$15,605,158
	Operations :	
4	Disposal (5010000)	\$13,765
5	Lime Stone (5020004)	\$369,388
6	Urea (5020002)	\$403,814
7	Trona (5020003)	\$349,194
8	Air Emission Fee	<u>\$15,502</u>
9	Total Operations (Lines 4 thru 8)	\$1,151,663
	Maintenance :	
10	FDG (5120000)	\$523,148
11	SCR Maintenance (5120000)	<u>\$13,047</u>
12	1/2 of Maintenance (10 + 11) * 50%	<u>\$268,098</u>
13	Fixed O&M (9) + (12)	<u>\$1,419,761</u>
	Total Revenue Requirement,	
14	Cost Associated with Mitchell Plant (3) + (13)	<u>\$17,024,919</u>
15	Ohio Power Company's Percentage Ownership	100.00%
16	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$17,024,919
17	Ohio Power Company Steam Capacity (kw)	8,458,000
18	Mitchell Plant (\$/kw)	\$2.01
19	Ohio Power Surplus Weighing	88.00%
20	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.77
	Mitchell Plant Costs to Kentucky Power :	
21	Mitchell Plant Portion (\$/kw) (20)	\$1.77
22	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
23	(ES FORM 3.14, Page 1 of 10, Line 5)	\$657,024

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3 , 4 & 5)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$107,185,185
1 2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2 3	Total Rate Base	\$1,468,437
J	Operations :	ψι, ιου, ιοι
4	Urea (502002)	\$9,143
5	Trona (5020003)	\$0
6	Air Emission Fee	\$32,912
7	Total Operations $(4) + (5) + (6)$	\$42,055
	Maintenance :	÷]
8	SCR Maintenance (5120000)	\$35,168
9	1/2 of Maintenance (8) * 50%	\$17,584
10	Fixed O&M $(7) + (9)$	\$59,639
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,528,076</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,528,076
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.18
16	Ohio Power Surplus Weighing	88.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.16
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.16
19	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$59,392

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$20,298,007 <u>1.37%</u> \$278,083
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$15,159</u> \$15,159
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,159</u>
11 12 13	Cost Associated with Sporn Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	<u>\$293,242</u> 100.00% \$293,242
14 15 16 17	Ohio Power Company Steam Capacity (kw) Sporn Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	8,458,000 \$0.03 88.00%
17	Attributed to Sporn Plant (\$/kw) (15) X (16) Sporn Plant Costs to Kentucky Power : SpornGavin Plant Portion (\$/kw) (17)	\$0.03 \$0.03
19 20	Kentucky Power Capacity Deficit (kw) Sporn Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 7)	<u>371,200</u> \$11,136

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of May 2010

Total (7)						-				\$306,844	5,416,000 *0.06	00.00	12.00%	\$0.01	\$0.01	371.200	\$3,712
Rockport Plant Common (6)	\$2,202,020	\$30,168	0 C	9 9 9 9 9 9 9 9	> }	09 CS	 	\$30,168 <u>50.00%</u>	\$15,084							1	
UNIT 2 AMOUNTS (5)	\$16,7	\$22	0.6))	OŞ G	S		\$148 ₅ 980								
UNIT 1 AMOUNTS (4)	\$10,544,676	\$14	000	<u> </u>	2	04 C4	<u>।</u> स्र	\$144,462 <u>85.00%</u>	\$122,793								
Rockport Plant Common (3)	\$1,777,228	\$24,348	¢,	\$15.625 \$15.625		08	\$15,625	\$39,973 50%	\$19,987								
COST (2)	Utility Plant at Original Cost	Merrider Frinnary Capacity investment trate (10.44.707.12) Total Rate Base Oberations :		Irona (suzuuus) Air Emission Fee	I dual Operations (+) + (-) + (-) Maintenance :	SCR Maintenance (5120000) 112 of Maintenance (8) * 50%	Fixed $O\&M(7) + (9)$	Total Revenue Requirement, Cost Associated with Rockport Plant (3) + (10) Indiana Michigan Power Company's Percentage Ownership	I&M's Share of Cost Associated with Rockport Plant (11) X (12)	Total Rockport Plant Common and Units 1 & 2	Indiana Michigan Power Company Steam Capacity (kw)	אסכאססת רומת (אַיאַאַי) (14) / (15) Kentucky Power Portion of Rockport Plant /	Indiana Michigan Power Surplus Weighing		Rockport Plant Costs to Kentucky Power : Rockport Plant Portion (\$/kw) (18)	Kentucky Power Capacity Deficit (kw)	rockport Units 1 & ∠ Environmental to Kentucky Fower (וש) " (בט) (ES FORM 3.14, Page 1 of 10, Line 8)
	A							AND ALL									

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
	Utility Plant of Original Cost	\$98,439,622
1	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	490,439,022 <u>1.37%</u>
2	Total Rate Base	\$1,348,623
ാ		ψ1,040,020
	Operations :	\$0
4 5	Urea (5020002) Trans (5020003)	\$0 \$0
5 6	Trona (5020003) Air Emission Fee	\$15,625
0 7	Total Operations (4) + (5) + (6)	\$15,625
(Maintenance :	ψ10,020
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	\$0 \$0
10	Fixed $O&M(7) + (9)$	<u>\$15,625</u>
10	Total Revenue Requirement,	<u>\u0101020</u>
11	Cost Associated with Tanners Creek Plant (3) + (10)	\$1,364,248
12	Indiana Michigan Power Company's Percentage Ownership	<u>47,004,240</u> 100,00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
13	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
14	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	12.00%
17	Portion of Weighted Average Capacity Rate	12.0070
[4	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.03
	Tanners Creek Plant Costs to Kentucky Power :	φ0.00
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	371,200
10	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	<u> <u>,200</u></u>
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$11,136
20		÷,ioo

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the	Expense	Month	of May	2010

LINE NO.		Balances	Cap. Structure	Cost Rates	-	WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 10/31/2009					1-14 -18 100 1 1 1 7 1 - 19 10		
1 2	L/T DEBT S/T DEBT	\$550,000,000 \$0	53.561% 0.000%	6.48% 1.77%		3.47% 0.00%			3.47% 0.00%
3 4	ACCTS REC FINANCING C EQUITY	\$46,535,672 \$430,332,408	4.532% 41.907%	2.08% 10.50 %	1/	0.09% 4.40%	1.5760	2/	0.09% 6.94%
5	TOTAL	\$1,026,868,080	100.000%			7.96%			10.50%
1/	WACC = Weigh Rate of Return	nted Average Cost o on Common Equity	f Capital per Case No. 20	009 - 00316		<u></u>			
2/	Gross Revenue Case No. 2009	Conversion Factor - 00316 dated - Jan	(GRCF) Calcula uary 20, 2010	tion:					
1 2 3	OPERATING R UNCOLLECTIB Kentucky Public	EVENUE LE ACCOUNTS EX c Service Commissi	PENSE (0.26%) on Assessment	(0.15%)			100.0000 0.2600 0.1500		
4 5	STATE TAXAB STATE INCOM		99.5900 5.6372						
6 7	FEDERAL TAX 199 DEDUCTIO	ON	93.9528 5.6372						
8 9	FEDERAL TAX FEDERAL INCO		88.3156 30.9105						
10	AFTER-TAX PF	RODUCTION INCOM	ИE				57.4051		
11 12 13 14 15	AFTER-TA 199 DEDU UNCOLLE	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNT Public Service Comm	ICOME S EXPENSE				57.4051 5.6372 0.2600 0.1500		
16	TOTAL GROSS	S-UP FACTOR FOR	PRODUCTION	INCOME (ROU	NDE	D)	63.4523		
17 18 19 20	BLENDED FED FEDERAL STATE (LII BLENDED TAX	NE 4)	TAX RATE:				30.9105 5.6372 36.5477		
21	GROSS REVE	NUE CONVERSION	I FACTOR (100.	0000 / Line 14)			<u>1.5760</u>		
1 2 3	STATE INCOME TAX CALCULATION: PRE-TAX PRODUCTION INCOME COLLECTIBLE ACCOUNTS EXPENSE (0.26%) Kentucky Public Service Commission Assessment (0.15%)								
4 5	STATE TA LESS: ST	FION	99.5900 5.6372	and the state					
6 7	STATE TA STATE INC	FION	93.9528 6.0000	Non-American Street and					
8	STATE INC	COME TAX EXPEN	SE (LINE 5 X LII	NE 6)			5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of May 2010

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Total	(6)														\$48,910	K
Rockport Plant Common	(8)			\$2,185,292 (\$78.020)	(\$24,381)	\$2,082,891	0.9274%	\$19,317	\$6,410	\$6,410	505 707 707		\$7,718	AND ACCORDING TO A		
Total Units 1 & 2 (C5 + C6)	(/)					\$8,968,766	0.9274%	\$83,176	\$30°90 \$30°90 \$	\$39,968	8123 144		\$36,943			
Unit No. 2	(6)		\$8,353,084	(\$1,786,938)	(\$1,018,791)	\$5,547,355	N W T CIE / AUX	<u>In</u>	\$24,502	,	Grup (M. H. L. G. M.					
Unit No. 1	(5)		\$5,272,657	(\$1 203 641)	(\$647,605)	\$3,421,411	00120-301 - 33		\$15,466	À	<u></u>		<u>17</u>			
Rockport Plant Common	(4)		\$1,777,206	(\$813 809)	(\$155,567)	\$807,830	0.9274%	\$7,492	\$5,212 #47.007	\$20,837	478 370	\$4,249				
	(3)						11.1291%									
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS)	Utility Plant at Original Cost AEGCo Low NOx Burners (LNB) Installed Cost	Flyash Landfili Installed Cost Less Accrimulatied Denreciation	Less Accum. Def. Income Taxes	Total Rate Base	Weighted Average Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthly Return of Rate Base (Line 6 * Line 8)	Operating Expenses : Monthly Depreciation Expense	Mortniy molana Air ⊨missions Fee Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB // ine 0 ± 1 ine 101	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%)	Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%) Kentricky Dower's Dortion of Booknot Plante'	Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15)	Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2	
NO.			<u>~~</u> ~	<u>ш</u>		6				<u>- 12</u>	9 <u>– C</u>		15 75	- [16 T	

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 05/31/2010							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	77,688,262 29,841,884	40.0308% 15.3768%	4.9364% 0.2334%		1.9761% 0.0359%			1.9761% 0.0359%
3 4	OFFSETS DEBT	0	-0.0001%	3.6313%		0.0000%			0.0000%
5	C EQUITY	86,541,188	44.5925%	12.1600%	1/	5.4224%	1.681379	2/	9.1171%
6	TOTAL	194,071,334	100.0000%			7.4344%			11.1291%
				and the management of the state					
1/	WACC = Weighted Cost Rates per the			ower Agreemer	nt				·
2/	Gross Revenue Co	nversion Factor (GRCF) Calculat	ion:					
1	OPERATING REVE						100.00		
2 3 4 5	LESS: INDIANA ADJUSTED GROSS INCOME (LINE 1 X .085) INCOME BEFORE FED INC TAX LESS: FEDERAL INCOME TAX								
6 7 8	(LINE 4 X .35) OPERATING INCO GROSS REVENUE		<u>32.025</u> 59.475						
9	FACTOR (100						<u>1.681379</u>		

For the Expense Month of May 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of May 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
8	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$33,662,428 \$395,892 \$1,347,909 \$4,712,450	83.9% 1.0% 3.4% 11.7%
5	Total Revenues for Surcharges Purposes	\$40,118,679	100.0%
6	Non-Physical Revenues for Month	\$30,559	
7	Total Revenues for Month	\$40,149,238	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line		
No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for March 2010	2.3235%
2	Kentucky Retail Revenues for Current Expense Month	\$28,141,080
3	Surcharge Collected (1) * (2)	\$653,858
4	Surcharge Amount To Be Collected	\$1,060,013
5	Over / (Under) Recovery (3) - (4) = (5)	(\$406,155)

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



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Kentucky Power 101A Enterprise Drive P O Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

July 19, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602 RECEIVED

JUL 19 2010 PUBLIC SERVICE COMMISSION

Attention: Aaron D. Greenwell

RE: Monthly Environmental Surcharge Report

Dear Mr. Derouren,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and three copies of its Environmental Surcharge Reports for the month of June 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after July 29, 2010.

If there are any questions please contact me at 502-696-7010.

Errol K. Wagner Director Regulatory Services Enclosures

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of June 2010

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	CALCULATION OF E(m)							
	E(m) = CRR - BRR							
LINE 1	CRR from ES FORM 3.00	\$4,572,677						
LINE 2	Brr from ES FORM 1.10	\$1,913,578						
LINE 3	E(m) (LINE 1 - LINE 2)	\$2,659,099						
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	73.5%						
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,954,437						
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$124,579)						
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,829,858						
~	SURCHARGE FACTOR							
LINE 8	Net KY Retail E(m) (Line 7)	\$1,829,858						
LINE 9	KY Retail R(m) from ES FORM 3.30	\$38,129,249						
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	4.7991%						

Effective Date for Billing:

August 2010

Director Regulatory Services

Title :

Submitted By :

Date Submitted :

July 19, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of June 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net Environmental
Billing Month	Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$2,531,784 3,003,995 2,845,066 2,095,535 1,514,859 1,913,578 2,818,212 2,342,883 2,852,305 2,181,975 2,598,522 1,407,969 \$28,106,683

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of June 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS	namunya mini karing karing ang pangang mang mang mang mang mang mang man	
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20 Second Component: Associated with Rockport Plant		_\$4,524,315
2	[((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$48,362
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 2) SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,572,677

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE NO.	COST COMPONENT		
	Return on Rate Base :		
1	Utility Plant at Original Cost	\$191,327,552	
2	Less Accumulated Depreciation	(\$57,265,738)	
3	Less Accum. Def. Income Taxes	(\$43,823,917)	
4	Net Utility Plant		\$90,237,897
5	SO2 Emission Allowance Inventory from ES FORM 3.11		\$11,719,431
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12		\$13,862
7	Cash Working Capital Allowance from ES FORM 3.13, Line 12		\$158,203
8	Total Rate Base		\$102,129,393
9	Weighted Average Cost of Capital - ES FORM 3.15	10.50%	
10	Monthly Weighted Avg. Cost of Capital (9) / 12	승규는 이상 관광 같다.	0.88%
11	Monthly Return of Rate Base (8) * (10)	3	\$898,739
	Operating Expenses :		
12	Monthly Depreciation Expense		\$577,252
13	Monthly Catalyst Amortization Expense		\$46,030
14	Monthly Property Taxes	한 한 동안은 한 것이다.	\$14,298
15	Monthly Kentucky Air Emissions Fee		\$30,551
	Monthly Environmental AEP Pool Capacity Costs		
16	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10		\$2,078,720
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13		\$577,517
18	Monthly SO2 Emission Allowance Consumption		\$301,208
19	Total Operating Expenses [Line 12 thru Line 18]		<u>\$3,625,576</u>
20	Total Revenue Requirement - Big Sandy		
	Record on ES FORM 3.00, Line 1		\$4,524,315

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of June 2010

n hann an	1	(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions - EPA Allowances		0	403,260	\$0	\$0	\$0.000
Gavin Reallocation		0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	33,930	\$0	\$9,455,560	\$278.678
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance		0	4	\$0	\$0	\$0.000
Adjustment		U U	4	ΨΟ	ΨΟ	φ0.000
Withdrawals -						
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	52,690	\$0	\$4,758,135	\$90.304
Off - System Sales	ž	0	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance				¢0.	¢0.	\$0.000
Adjustment		0	0	\$0	\$O	\$U.UUU
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)	1,332					
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)	6,790	8,122	597,794	\$301,208	\$39,055,893	\$65.333
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,082, <u>03</u> 7		\$11,719,431	\$10.831
Expense Month Member Load Ratio	for AEP/k	Kentucky Power				0.06925

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	36,954	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -				.	* 0.000
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0 #0	\$0.000
Off - System Sales	0	2,425	\$0 \$0	\$0 \$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0 \$0	\$0 \$0	\$0.000
NOx Consumed By Kentucky Power	571	17,052	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		16,547		\$0	\$0.000

For the Expense Month of June 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions - EPA Allowances P&E Transfers In Intercompany Purchases External Purchases Other (List)	0 0 0 0 0	0 44,622 0 0 440 0	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$528,874 \$0	\$0.000 \$0.000 \$0.000 \$0.000 \$1,201.986 \$0.000
Withdrawals - P & E Transfers Out Intercompany Sales Off - System Sales NOx Consumed By Kentucky Power ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5	0 0 0 571	0 0 11,178 33,884	\$0 \$0 \$1,881	\$0 \$0 \$515,012 \$13,862	\$0.000 \$0.000 \$0.000 \$46.074 \$0.409

For the Expense Month of June 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of June 2010

LINE NO.	O&M Expenses		
1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$356,352 <u>\$301,208</u>	\$688,111
5 6 7 8 9 10 11	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	\$0 \$399,858 \$0 \$1,881 \$1,866 <u>\$173,911</u>	<u>\$577,517</u>
12 13	Total Monthly O&M Expenses Cash Working Capital Allowance (Line 12 X 1/8)		<u>\$1,265,628</u> \$158,203

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs June 2010

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Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	(\$24,468.81)	\$30,595.90	\$0.00	\$6,127.09
SCR Boiler Outlet Ductwork	\$95,029.07	\$54,057.00	\$0.00	\$149,086.07
SCR Booster Fan	(\$17,809.61)	\$7,510.16	\$0.00	(\$10,299.45)
SCR Instrument & Control	\$425.91	\$8,552.72	\$0.00	\$8,978.63
SCR Reactor	\$0.00	\$7,871.38	\$0.00	\$7,871.38
Total SCR June 2010 O & M Expense	\$53,176.56	\$108,587.16	\$0.00	\$161,763.72
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$1,586.10	\$1,586.10
Emission Testing Required Under Permit - Operation Maintenance	\$0.00 \$7,437.29	\$280.24 \$4,710.20	\$0.00 \$0.00	\$280.24 \$12,147.49

June 2010 O & M Expenses Filed

\$175,778

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> ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of June 2010

Line No.	Cost Component	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	Total (5)
(1)	(2)	(0)		(-7
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$334,080		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$259,840		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$716,416		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,712	•	
. 5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$671,872		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$66,816		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,136		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,712	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$11,136	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,063,872	\$14,848	\$2,078,720

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of June 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$365,636		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$1,279,794		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$5,434,760		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$18,549		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$1,791,023		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$299,590		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$15,159		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$9,204,511	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.09	\$0.01	
14	Company Surplus Weighting	88.00%	12.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.96	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	371,200	371,200	
17	Fixed O&M Environmental Cost to Kentucky Power	\$356,352	\$0	\$356,352

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
	LUCE - Dest	\$601,233,295
1	Utility Plant at Original Cost	1.37%
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$8,236,896
3	Total Rate Base Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
4	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
5		<i>40,200,000</i>
	Operations :	\$0
6	Disposal (5010000)	\$210,225
7	Urea (5020002)	\$121,191
8	Trona (5020003)	\$206,832
9	Lime Stone (5020004)	\$10,178
10	Air Emission Fee	\$548,426
11	Total Operations (Lines 6 thru 10)	ψυτυ ₁ υμου
	Maintenance :	\$0
12	SCR Maintenance (5120000)	\$0 <u>\$0</u>
13	Scrubber (FGD) Maintenance (5120000)	<u>\$0</u>
14	Total Maintnenance (12) + (13)	<u>↓0</u> \$0
15	1/2 of Maintenance (14) * 50%	<u>40</u> \$548,426
16	Fixed O&M (11) + (15)	<u>46,420</u>
17	Ohio Power Company's Percentage Ownership - O&M Cost	\$365,636
18	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u></u>
	Total Revenue Requirement,	\$8,602,532
19	Cost Associated with Amos Unit No. 3 (5) + (18)	8,458,000
20	Ohio Power Company Steam Capacity (kw)	\$1.02
21	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.02 88.00%
22	Ohio Power Surplus Weighing	00.00%
23	Portion of Weighted Average Capacity Rate	#0.00
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.90
	Amos Unit No. 3 Costs to Kentucky Power :	¢0.00
24	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.90
25	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 1)	\$334,080

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$398,290,892
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,456,585
	Operations :	\$404.000
4	Disposal (5010000)	\$104,820 \$205,540
5	Urea (5020002)	\$305,548
6	Trona (5020003)	\$181,316
7	Lime Stone (5020004)	\$568,197
8	Air Emission Fee	<u>\$10,606</u>
9	Total Operations (Line 4 thru 8)	\$1,170,487
1.5	Maintenance :	¢40.000
10	SCR Maintenance (5120000)	\$13,902
11	Scrubber (FGD) Maintenance (5120000)	<u>\$204.712</u>
12	Total Maintnenance (11) + (12)	\$218,614 \$400,207
13	1/2 Maintnenance (12) * 50%	<u>\$109,307</u>
14	Fixed O&M (9) + (11)	<u>\$1,279,794</u>
	Total Revenue Requirement,	#0.700.070
15	Cost Associated with Cardinal Unit No. 3 (3) + (12)	<u>\$6,736,379</u>
16	Ohio Power Company's Percentage Ownership	100.00%
17	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)	\$6,736,379
18	Ohio Power Company Steam Capacity (kw)	8,458,000
19	Cardinal Unit No. 1 (\$/kw)	\$0.80
20	Ohio Power Surplus Weighing	88.00%
21	Portion of Weighted Average Capacity Rate	<u> </u>
	Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)	\$0.70
	Cardinal Unit No. 1 Costs to Kentucky Power :	<u> </u>
22	Cardinal Unit No. 1 Portion (\$/kw) (21)	\$0.70 271 200
23	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	\$259,840
24	(ES FORM 3.14, Page 1 of 10, Line 2)	¢∠ວ9,040

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
4	Utility Plant at Original Cost	\$957,056,293
1 2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
23	Total Rate Base	\$13,111,671
3	Operations :	<i>Q</i> 10,111,011
4	Sludge Disposal (5010000)	\$681,581
5	Lime (5020001)	\$2,981,419
6	Urea (5020002)	\$834,659
7	Trona (5020003)	\$649,003
8	Lime Stone (5020004)	\$0
9	Air Emission Fee	\$36,017
10	Lease (5070005)	\$0
11	Total Operations (Lines 4 thru 10)	\$5,182,679
	Maintenance :	<i>v</i> -,,
12	SCR Maintenance (5120000)	\$50,105
12	Scrubber Maintenance (5120000)	\$454,057
14	Total Maintenance (12) + (13)	\$504,162
15	1/2 of Maintenance (12) * 50%	\$252,081
16	Fixed $O&M(11) + (15)$	\$5,434,760
10	Total Revenue Requirement,	<u> </u>
17	Cost Associated with Gavin Plant (3) + (16)	\$18,546,431
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$18,546,431
20	Ohio Power Company Steam Capacity (kw)	8,458,000
20	Gavin Plant (\$/kw)	\$2.19
22	Ohio Power Surplus Weighing	88.00%
23	Portion of Weighted Average Capacity Rate	
20	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.93
	Gavin Plant Costs to Kentucky Power :	
24	Gavin Plant Portion (\$/kw) (23)	\$1.93
25	Kentucky Power Capacity Deficit (kw)	371,200
-0	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 3)	\$716,416

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$7,173,774
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$98,281
Ū	Operations :	
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$18,549</u>
7	Total Operations (4) + (5) + (6)	\$18,549
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$18,549</u>
	Total Revenue Requirement,	
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$116,830</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$116,830
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	88.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,712

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

For the Expense Month of June 2010

LINE NO.	COST	AMOUNTS
		\$1,139,062,655
1	Utility Plant at Original Cost	\$1,139,002,035 <u>1.37%</u>
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37 %</u> \$15,605,158
3	Total Rate Base	φ10,000,100
	Operations :	\$49,978
4	Disposal (5010000)	\$623,844
5	Lime Stone (5020004)	\$588,320
6	Urea (5020002)	\$133,189
7	Trona (5020003) Air Emission Fee	\$15,502
8		\$1,410,833
9	Total Operations (Lines 4 thru 8) Maintenance :	φ1,410,000
10		\$747,097
11	FDG (5120000) SCR Maintenance (5120000)	\$13,283
11	1/2 of Maintenance (10 + 11) * 50%	\$ <u>380,190</u>
12	Fixed $O&M$ (9) + (12)	<u>\$1,791,023</u>
13	Total Revenue Requirement,	<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>
14	Cost Associated with Mitchell Plant (3) + (13)	\$17,396,181
14	Ohio Power Company's Percentage Ownership	<u>\$17,000,101</u> 100.00%
15	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$17,396,181
17	Ohio Power Company Steam Capacity (kw)	8,458,000
18	Mitchell Plant (\$/kw)	\$2.06
19	Ohio Power Surplus Weighing	88.00%
20	Portion of Weighted Average Capacity Rate	00.0070
20	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.81
	Mitchell Plant Costs to Kentucky Power :	φ1.01
21	Mitchell Plant Portion (\$/kw) (20)	\$1.81
22	Kentucky Power Capacity Deficit (kw)	371,200
~~	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	<u></u>
23	(ES FORM 3.14, Page 1 of 10, Line 5)	\$671,872
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
nen nen erstadsing 1990		an general en
1	Utility Plant at Original Cost	\$107,185,185
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,468,437
	Operations :	
4	Urea (5020002)	\$261,148
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$32,912</u>
7	Total Operations (4) + (5) + (6)	\$294,060
	Maintenance :	
8	SCR Maintenance (5120000)	\$11,060
9	1/2 of Maintenance (8) * 50%	<u>\$5,530</u>
10	Fixed O&M (7) + (9)	<u>\$299,590</u>
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,768,027</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,768,027
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.21
16	Ohio Power Surplus Weighing	88.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.18
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.18
19	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$66,816

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

For the Expense Month of June 2010

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$20,298,007
2	Member Primary Capacity Investment Rate (16.44% / 12)	پ20,298,007 1.37%
3	Total Rate Base	\$278,083
5	Operations :	ψ210,000
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,159</u>
7	Total Operations $(4) + (5) + (6)$	\$15,159
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,159</u>
	Total Revenue Requirement,	
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$293,242</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$293,242
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Sporn Plant (\$/kw)	\$0.03
16	Ohio Power Surplus Weighing	88.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,136
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of June 2010

Totaì	(2)													\$306,844	5,416,000	\$0.06	12.00%		\$0.U1	\$0.01	371,200	\$3,712
Rockport Plant Common	(9)	\$2,202,020	\$30,168	C H	ç Ş Ş	\$ \$)	\$0	S 2	3	\$30,168	50.00%	\$10,064				in the second					
UNIT 2 AMOUNTS	(5)	ŝ	\$228,919	Ğ	2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	000)	\$0		3	\$		4 140, 40U			1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.						
UNIT 1 AMOUNTS	(4)	\$10,5~	\$144,462	9	0 6 7 7 7 7	0\$	>	0\$		3	\$144,462		\$122,133									
Rockport Plant Common	(3)	\$1,777,228	\$24,348	C#	20 20 20	\$15,625 \$15,625		\$0	815 82		\$39,973	50%	416,907									
COST	(2)	Utility Plant at Original Cost	Total Rate Base	Operations : I Irea (5020002)	Trona (5020003)	Air Emission Fee Total Operations (4) + (5) + (6)	Maintenance :	SCR Maintenance (5120000)	1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9)	Total Revenue Requirement,	Cost Associated with Rockport Plant (3) + (10)	Indiana Michigan Power Company's Percentage Ownership	IAM S SHALE OF COST ASSOCIATED WITH ROCKPOIL FLATIC (11) A (12)	Total Rockport Plant Common and Units 1 & 2	Indiana Michigan Power Company Steam Capacity (kw)	Rockport Plant (\$/kw) (14) / (15) Kentucky Dower Dortion of Rocknort Plant /	Indiana Michigan Power Surplus Weighing	Portion of Weighted Average Capacity Rate	Aunoured to Kockport Plant (\$KW) (17) A (18) Rockport Plant Costs to Kentucky Power :	Rockport Plant Portion (\$/kw) (18)	Kentucky Power Capacity Deficit (kw) Rocknort Hnits 1 & 2 Environmental to Kantucky Dower (19) * (20)	(ES FORM 3.14, Page 1 of 10, Line 8)
LINE NO.	$\widehat{-}$	ر ب	10	4	t LO	<u>م</u>		ω (ກ ⊂	>	<u> </u>	<u>6</u> 6	っ	4	<u>5</u>	ω	7	60		6	20	51

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

For the Expense Month of June 2010

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,439,622
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$1,348,623
Ŭ	Operations :	\$1,010,020
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	\$15,625
7	Total Operations $(4) + (5) + (6)$	\$15,625
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	\$0
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,248</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	12.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.03
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>371,200</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$11,136

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

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For the Expense Month of June 2010

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 10/31/2009	-						
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	53.561% 0.000%	6.48% 1.77%		3.47% 0.00%			3.47% 0.00%
3 4	FINANCING C EQUITY	\$46,535,672 \$430,332,408	4.532% 41.907%	2.08% 10.50%	1/	0.09% 4.40%	1.5760	2/	0.09% 6.94%
5	TOTAL	\$1,026,868,080	100.000%			7.96%			10.50%
1/		nted Average Cost o on Common Equity		09 - 00316					
2/		Conversion Factor - 00316 dated - Jan		tion:					
1 2 3	OPERATING R UNCOLLECTIB Kentucky Public		100.0000 0.2600 0.1500						
4 5	STATE TAXABI STATE INCOM	OW)	99.5900 5.6372						
6 7	FEDERAL TAX	ON	93.9528 5.6372						
8 9		ABLE PRODUCTIO DME TAX EXPENSI		EDUCTION (35%	6)		88.3156 30.9105		
10	AFTER-TAX PF	RODUCTION INCOM	1E				57.4051		
11 12 13 14 15	AFTER-TA 199 DEDU UNCOLLEC	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS Vublic Service Comm	COME SEXPENSE				57.4051 5.6372 0.2600 0.1500		
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION	INCOME (ROUI	NDEI	D)	63.4523		
17 18 19 20	BLENDED FED FEDERAL STATE (LII BLENDED TAX	NE 4)	TAX RATE:				30.9105 5.6372 36.5477		
21	GROSS REVEN	NUE CONVERSION	FACTOR (100.0)000 / Line 14)			1.5760		
1 2 3	STATE INCOMI PRE-TAX F COLLECTII Kentucky P		100.0000 0.2600 0.1500						
4 5		KABLE PRODUCTIC ATE 199 DEDUCTIC		FORE 199 DED	UCT	ION	99.5900 5.6372		
6 7		KABLE PRODUCTIO	ION	93.9528 6.0000					
8	STATE INC	OME TAX EXPENS	E (LINE 5 X LIN	IE 6)			5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Capital Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of June 2010

Total	(6)													•			\$48,362	
Rockport Plant Common	(8)				\$2,185,292 (\$84,430)	(\$26.739)	\$2,074,123	0.9155%	\$18,989	077	09 09	\$6,410	\$25 399	000 444	070 ¹ /¢			
Total Units 1 & 2 (C5 + C6)	(7)						\$8,929,523	0.9155%	\$81,750	000 000 000	00 0	\$39,968	\$121_718		\$20°310			
Unit No. 2	(9)	<u></u>		\$8,353,084	(\$1 811 AAD)	(\$1,018,469)	\$5,523,175		- I	50 2 2 2 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3	200°t							
Unit No. 1	(2)			\$5,272,657	141 210 1071	(\$647,202)	\$3,406,348			00 7 9 7 8			A COCHO					
Rockport Plant Common	(4)	<u>1997-999-999-999-999-999-999-999-999-999</u>	\$1,777,206		(\$810,021)	(\$156.088)	\$802,097	0.9155%	\$7,343	ел 0, 0 Ф	\$15,625	\$20,837	\$28.180	\$4,227				
	(3)						1	10.9859%				F		1				
	11																	
COST COMPONENT	(2)	Return on Rate Base : Doctrond Diont Continuous Environmental Monthenine Scritter (CEMIS)	rockport Frant Contribute Environmental monitoring System (CEIMS) Utility Plant at Original Cost	AEGCo Low NOX Burners (LNB) Installed Cost	Flyash Landfill Installed Cost Less Accumulated Denreciation	Less Accum. Def. Income Taxes	Total Rate Base	Weighted Average Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthly Return of Rate Base (Line 6 * Line 8)	Operating Expenses :	Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%)	Netitucky Fower's Portion of AEGCOS LINE and Landnii (Line 13 ~ 30%) Kentucky Power's Portion of Rockport Plants'	Total Revenue Requirement.(C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8.1 ine 16 is to be Recorded on	ES FORM 3.00 Line 2	

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 06/30/2010							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	77,691,049 32,090,615	39.7797% 16.4312%	4.9363% 0.4218%		1.9636% 0.0693%			1.9636% 0.0693%
3	OFFSETS	0	0.0000%	3.6166%		0.0000%			0.0000%
5	C EQUITY	85,521,498	43.7891%	12.1600%	1/	5.3248%	1.681379	2/	8.9530%
6	TOTAL	195,303,162	100.0000%			7.3577%			10.9859%
1/	WACC = Weighted Cost Rates per the			ower Agreemer	nt				
2/	Gross Revenue Cor	oversion Factor (GRCF) Calculati	ion:					
1	OPERATING REVE						100.00		
2 3 4 5	LESS: INDIANA A (LINE 1 X .085) INCOME BEFORE LESS: FEDERAL I		<u>8.500</u> 91.500						
6 7 8	(LINE 4 X .35) OPERATING INCO GROSS REVENUE			<u>32.025</u> 59.475					
9	FACTOR (100						<u>1.681379</u>		

.

For the Expense Month of June 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of June 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$38,129,249 \$569,576 \$4,852,506 \$8,271,404	73.5% 1.1% 9.4% 16.0%
5	Total Revenues for Surcharges Purposes	\$51,822,735	100.0%
6	Non-Physical Revenues for Month	\$1,068,757	
7	Total Revenues for Month	\$52,891,492	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for April 2010	4.9476%
2	Kentucky Retail Revenues for Current Expense Month	\$38,678,693
3	Surcharge Collected (1) * (2)	\$1,913,667
4	Surcharge Amount To Be Collected	\$1,789,088
5	Over / (Under) Recovery (3) - (4) = (5)	\$124,579

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 152 of 609

Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

August 18, 2010

Jeff R. Derouen, Executive Director Public Service Commission of Kentucky P. O. Box 615 211 Sower Boulevard Frankfort, KY 40602-0615

Attention: John Rogness

Re: Monthly Environmental Surcharge Report

Dear Mr. Derouen,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and three copies of its Environmental Surcharge Reports for the expense month of July 2010. As the attached pages demonstrate, two different environmental surcharge factors will be used to calculate the customers' bill on a pro-rata basis, as described below:

- The Commission's June 28, 2010 Order in Case No. 2009-00459 established new base rates for Kentucky Power to become effective for service rendered on and after June 29, 2010
- The Commission's June 28, 2010 Order approved environmental compliance costs in the base rates in the amount of \$44,185,979 effective for service rendered on and after June 29, 2010 (Environmental Surcharge Tariff, Sheet Nos. 29-1 thru 29-5)
- The base rates billed to the customers in July 2010 reflect a portion of both the old and the new monthly environmental surcharge base amount (due to pro-ration)
- For July 2010 expense month, KPCo was required to calculate the environmental surcharge twice due to the fact that base rates billed in July 2010 reflected two different environmental base amounts (old \$2,818,212 and the new \$3,805,325)
- The calculation using the old environmental base amount resulted in a surcharge of 1.6074% and the calculation using the new environmental base amount resulted in a surcharge of 0.2245%

RECEIVED AUG 18 2010

PUBLIC SERVICE COMMISSION Jeff R. Derouen Page 2 August 18, 2010

- The two different environmental surcharges will be used to calculate the customers' bill on a pro-rata basis. For example, Billing Cycle 1 has a 29 day billing period. Therefore, Cycle 1 bills will reflect 28 days of usage at the environmental surcharge calculated using the old environmental base and 1 day of usage at the environmental surcharge calculated using the new environmental base
- Effective with Company's next monthly environmental surcharge filing (expense month August) and every month thereafter, the environmental surcharge will be calculated using the new monthly environmental surcharge base reflected on the Environmental Surcharge Tariff as approved by the Commission in its June 28, 2010 Order in Case No. 2009-00459
- In accordance with the Commission's Orders in the Company's prior environmental surcharge cases, Kentucky Power has included the calculations and supporting documentation of the Environmental Surcharge factors that will be billed for service on and after August 27, 2010

After you or your staff has had a chance to review the enclosed information and should there be additional information required, please feel free to give me a call. I can be reached at 502-696-7010.

Sincerely, Kallogne

Errol K Wagner⁴ Director of Regulatory Services

Attachments

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 1.00 Item No. 41 Attachment 1 Page 154 of 609

1/

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of July 2010

	CALCULATION OF E(m)									
	E(m) = CRR - BRR									
LINE 1	CRR from ES FORM 3.00	\$4,700,817								
LINE 2	Brr from ES FORM 1.10	\$2,818,212								
LINE 3	E(m) (LINE 1 - LINE 2)	\$1,882,605								
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	67.3%								
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,266,993								
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$494,794)								
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$772,199								
	SURCHARGE FACTOR									
LINE 8	Net KY Retail E(m) (Line 7)	\$772,199								
LINE 9	KY Retail R(m) from ES FORM 3.30	\$48,039,569								
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	1.6074%								

Effective Date for Billing:

September 2010

C

Submitted By :

Title :

Director Regulatory Services

Date Submitted :

August 18, 2010

1/ Case No. 2005-00341, dated March 14, 2006

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of July 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net Environmental
Billing Month	Costs
	\$2,531,784
JANUARY FEBRUARY	3,003,995
MARCH	2,845,066
APRIL	2,095,535
MAY	1,514,859
JUNE	1,913,578
JULY	2,818,212
AUGUST	2,342,883
SEPTEMBER	2,852,305
OCTOBER	2,181,975
NOVEMBER	2,598,522
DECEMBER	1,407,969
TOTAL	\$28,106,683

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of July 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE			
NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,657,005
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$43,812
	Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,700,817

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

For the Expense Month of July 2010

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions - EPA Allowances		34,945	438,205	\$0	\$0	\$0.000
Gavin Reallocation		0-0-0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	33,930	\$0	\$9,455,560	\$278.678
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance				\$ 0	\$0	#0.000
Adjustment	1000	0	4	\$0	\$0	\$0.000
i Withdrawals -						
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	52,690	\$0	\$4,758,135	\$90.304
Off - System Sales		0	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance						1
Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)	5,343					
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)	0	5,343	603,137	\$738,341	\$39,794,234	\$65.979
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,111,639		\$10,981,090	\$9.878
Expense Month Member Load Ratio	for AEP/k	Kentucky Power				0.06994

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	3	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	36,954	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$O	\$O	\$0.000
Withdrawals - P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	1,014	18,066	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		15,533		\$0	\$0.000

For the Expense Month of July 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,622	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	· \$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	440	\$0	\$528,874	\$1,201.986
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	1,012	12,190	\$3,334	\$518,346	\$42.522
ENDING INVENTORY - Record Balance in		20.072		\$10,528	\$0.320
Column (4) on ES FORM 3.10, Line 5		32,872		φ10, 528	<u></u>

For the Expense Month of July 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of July 2010

LINE			
NO.	O&M Expenses	and the second	25-27-09-0-2 ⁻¹ 16-2-16-0-20-0-20-0-20-0-20-0-20-0-20-20-20-20-
1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$338,865 <u>\$738,341</u>	\$1,107,757
5 6 7 8 9 10	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses	\$0 \$350,519 \$0 \$3,334 \$1,866 <u>(\$69,997)</u>	
11	Total 2003 Plan O&M Expenses		<u>\$285,722</u>
12	Total Monthly O&M Expenses		<u>\$1,393,479</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$174,185

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs July 2010

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$3,479.00	\$3,641.94	\$0.00	\$7,120.94
SCR Boiler Outlet Ductwork	\$0.00	(\$114,866.05)	\$0.00	(\$114,866.05)
SCR Booster Fan	(\$816.57)	\$27,263.95	\$0.00	\$26,447.38
SCR NOx Monitoring	\$1,059.10	\$0.00	\$0.00	\$1,059.10
SCR Reactor	\$0.00	\$2,144.67	\$0.00	\$2,144.67
Total SCR July 2010 O & M Expense	\$3,721.53	(\$81,815.49)	\$0.00	(\$78,093.96)
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$1,866.00	\$1,866.00
Emission Testing Required Under Permit - Operation Maintenance	\$0.00 \$6,876.05	\$0.00 \$1,221.00	\$0.00 \$0.00	\$0.00 \$8,097.05

July 2010 O & M Expenses Filed

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(\$68,131)

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> ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of July 2010

		Ohio Power Company's	Indiana Michigan Power Company's	
Line No. (1)	Cost Component (2)	Environmental Cost to KPCo (3)	Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	, \$342,760		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$257,070		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$720,575		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,895		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$650,465		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$70,110		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,056,560	\$19,475	\$2,076,035

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of July 2010

Line No. (1)	. Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$626,806		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$1,113,169		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$5,460,925		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$1,267,840		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$281,440		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$8,779,077	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.04	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.87	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$338,865	\$0	\$338,865

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 165 of 609

ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

For the Expense Month of July 2010

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$601,233,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$8,236,896
4	Ohio Power Company's Percentage Ownership - Environmental Investment	100.00%
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
J	Operations :	+0,00,000
6	Disposal (5010000)	\$53,964
7	Urea (5020002)	\$433,592
8	Trona (5020002)	\$27,089
9	Lime Stone (5020004)	\$319,072
9 10	Air Emission Fee	\$8,973
10	Total Operations (Lines 6 thru 10)	\$842,690
	Maintenance :	\$0 1A,000
12	SCR Maintenance (5120000)	\$4,162
12	Scrubber (FGD) Maintenance (5120000)	\$190,781
13	Total Maintnenance (12) + (13)	\$194,943
14	1/2 of Maintenance (12) * (13)	\$97,472
15 16	Fixed O_{M} (11) + (15)	\$940,162
10 17	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
17	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	\$626,806
10	Total Revenue Requirement,	<u>4020,000</u>
40	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,863,702
19	Ohio Power Company Steam Capacity (kw)	8,458,000
20	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.05
21 22	Ohio Power Surplus Weighing	84.00%
22	Portion of Weighted Average Capacity Rate	
23	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.88
	Amos Unit No. 3 Costs to Kentucky Power :	φ0,00
	Amos Unit No. 3 Costs to Kentucky Power . Amos Unit No. 3 Portion (\$/kw) (23)	\$0.88
24	Kentucky Power Capacity Deficit (kw)	389,500
25	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	000,000
	(ES FORM 3.14, Page 1 of 10, Line 1) (23)	\$342,760
26	(EO FUNIN 3.14, Faye FULTO, LINE 1)	ψ0-τ ₂₁ 100

ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

For the Expense Month of July 2010

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LINE		
NO.	COST	AMOUNTS
		\$200 000 000
1	Utility Plant at Original Cost	\$398,290,892
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,456,585
	Operations :	
4	Disposal (5010000)	\$165,132
5	Urea (5020002)	\$294,846
6	Trona (5020003)	\$97,977
7	Lime Stone (5020004)	\$508,620
8	Air Emission Fee	<u>\$8,622</u>
9	Total Operations (Line 4 thru 8)	\$1,075,197
	Maintenance :	
10	SCR Maintenance (5120000)	\$29,370
11	Scrubber (FGD) Maintenance (5120000)	<u>\$46,574</u>
12	Total Maintnenance (11) + (12)	\$75,944
13	1/2 Maintnenance (12) * 50%	<u>\$37,972</u>
14	Fixed O&M (9) + (11)	<u>\$1,113,169</u>
	Total Revenue Requirement,	
15	Cost Associated with Cardinal Unit No. 3 (3) + (12)	<u>\$6,569,754</u>
16	Ohio Power Company's Percentage Ownership	100.00%
17	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)	\$6,569,754
18	Ohio Power Company Steam Capacity (kw)	8,458,000
19	Cardinal Unit No. 1 (\$/kw)	\$0.78
20	Ohio Power Surplus Weighing	84.00%
21	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)	\$0.66
	Cardinal Unit No. 1 Costs to Kentucky Power :	
22	Cardinal Unit No. 1 Portion (\$/kw) (21)	\$0.66
23	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	
24	(ES FORM 3.14, Page 1 of 10, Line 2)	\$257,070

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

For the Expense Month of July 2010

LINE		
NO.	COST	AMOUNTS
		¢057 056 202
1	Utility Plant at Original Cost	\$957,056,293
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$13,111,671
	Operations :	m004.044
4	Sludge Disposal (5010000)	\$601,341
5	Lime (5020001)	\$3,734,175
6	Urea (5020002)	\$881,231
7	Trona (5020003)	(\$38,776)
8	Lime Stone (5020004)	\$0
9	Air Emission Fee	\$36,017
10	Lease (5070005)	<u>\$0</u>
11	Total Operations (Lines 4 thru 10)	\$5,213,988
	Maintenance :	
12	SCR Maintenance (5120000)	\$51,251
13	Scrubber Maintenance (5120000)	<u>\$442,622</u>
14	Total Maintenance (12) + (13)	\$493,873
15	1/2 of Maintenance (13) * 50%	<u>\$246,937</u>
16	Fixed O&M (11) + (15)	<u>\$5,460,925</u>
	Total Revenue Requirement,	
17	Cost Associated with Gavin Plant (3) + (16)	\$18,572,596
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$18,572,596
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Gavin Plant (\$/kw)	\$2.20
22	Ohio Power Surplus Weighing	84.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.85
	Gavin Plant Costs to Kentucky Power:	
24	Gavin Plant Portion (\$/kw) (23)	\$1.85
25	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 3)	\$720,575

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

For the Expense Month of July 2010

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$7,173,774
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$98,281
J	Operations :	400 <u>1</u> 201
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,690</u>
7	Total Operations $(4) + (5) + (6)$	\$15,690
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M $(7) + (9)$	<u>\$15,690</u>
	Total Revenue Requirement,	
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$113,971</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$113,971
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	and the second
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,895
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

For the Expense Month of July 2010

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LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$1,139,062,655
1	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$15,605,158
3	Operations :	φ10,000,100
~	Disposal (5010000)	\$21,281
4 5	Lime Stone (5020004)	\$694,183
H B		\$400,116
6	Urea (5020002)	\$127,147
7	Trona (5020003) Air Emission Fee	<u>\$12,128</u>
8		\$1,254,855
9	Total Operations (Lines 4 thru 8) Maintenance :	ψ1,20%,000
10		\$632
10 11	FDG (5120000) SCR Maintenance (5120000)	\$25,337
	1/2 of Maintenance (10 + 11) * 50%	<u>\$12,985</u>
12 13	Fixed $O&M$ (9) + (12)	\$1,267,840
IS IS	Total Revenue Requirement,	<u>\$1,201,040</u>
44	Cost Associated with Mitchell Plant (3) + (13)	\$16,872,998
14 15	Ohio Power Company's Percentage Ownership	100.00%
15	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$16,872,998
10	Ohio Power Company Steam Capacity (kw)	8,458,000
17	Mitchell Plant (\$/kw)	\$1.99
10	Ohio Power Surplus Weighing	84.00%
20	Portion of Weighted Average Capacity Rate	07.0070
20	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.67
	Mitchell Plant Costs to Kentucky Power :	φ1.07
- 24	Mitchell Plant Portion (\$/kw) (20)	\$1.67
21 22	Kentucky Power Capacity Deficit (kw)	389,500
22	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	000,000
23	(ES FORM 3.14, Page 1 of 10, Line 5)	\$650,465
23	$(\Box \cup F \cup (\Box \cup \neg $	φυσιτου
23	(LOT ONWOUTS, Faye FOFTO, LINE O)	φ000

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

For the Expense Month of July 2010

LINE NO.	COST	AMOUNTS
<u>110.</u>		AMOUNTS
	Little Devet at Original Coat	\$407 495 495
1	Utility Plant at Original Cost	\$107,185,185
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,468,437
	Operations :	¢0.40.00.4
4	Urea (5020002)	\$246,801
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$34,561</u>
7	Total Operations (4) + (5) + (6)	\$281,362
~	Maintenance :	0 450
8	SCR Maintenance (5120000)	\$156
9	1/2 of Maintenance (8) * 50%	<u>\$78</u>
10	Fixed O&M (7) + (9)	<u>\$281,440</u>
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,749,877</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,749,877
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.21
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.18
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.18
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$70,110

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

For the Expense Month of July 2010

COST	AMOUNTS
Litility Plant at Original Cost	\$20,298,007
	1.37%
	\$278,083
Operations :	. ,
	\$0
Trona (5020003)	\$0
Air Emission Fee	<u>\$13,207</u>
Total Operations (4) + (5) + (6)	\$13,207
Maintenance :	
SCR Maintenance (5120000)	\$0
1/2 of Maintenance (8) * 50%	<u>\$0</u>
Fixed O&M (7) + (9)	<u>\$13,207</u>
	<u>\$291,290</u>
	100.00%
	\$291,290
	8,458,000
	\$0.03
, , ,	84.00%
	* = ==
	\$0.03
1 P	AD 00
•	\$0.03
	<u>389,500</u>
	¢44.005
(ES FUKIM 3.14, Page 1 01 10, LINE 7)	\$11,685
	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6) Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50%

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of July 2010

NO.	COST	Rockport Plant Common	UNIT 1 AMOUNTS	UNIT 2 AMOUNTS	Rockport Plant Common	Total
$\widehat{-}$	(2)	(3)	(4)	(5)	(9)	(<u>/</u>)
~	Utility Plant at Original Cost	\$1,777,228	\$10,544,676	\$16,709,416	\$2,202,020	
2	Member Primary Capacity Investment Rate (16.44% / 12)		1.37%	1.37%	1.37%	
m	Total Rate Base	\$24,348	\$144,462	\$228,919	\$30,168	
स	Uperations . Litea (5020002)	C#	C.	C#	C¥.	
· ю	Trona (5020003)	2 O S	9 6	0000	9 G9	
~	Air Emission Fee	<u>\$15,625</u>	80	\$0	80	
N.	Total Operations (4) + (5) + (6) Maintenance ·	\$15,625	0\$	8	9	
~	SCR Maintenance (5120000)	0\$	\$0	\$0	\$0	
თ	1/2 of Maintenance (8) * 50%	05	\$0	20	\$0	
0	Fixed O&M (7) + (9)	\$15,625	0\$	0\$	\$0	
	Total Revenue Requirement,					
~ .	Cost Associated with Rockport Plant (3) + (10)	\$39,973	\$144,462	\$228,919	\$30,168	
$\overline{\alpha}$	Indiana Michigan Power Company's Percentage Ownership	50%	85.00%	65.08%	<u>50.00%</u>	
0	IOWN S STRATE OF COST ASSOCIATED WITH ROCKPOIL FLATE (11) A (12)	108'81.4	\$ KK, / 83	4140,800	₽ 10,00¢	
14	Total Rockport Plant Common and Units 1 & 2	weeke on the second				\$306,844
<u>5</u>	Indiana Michigan Power Company Steam Capacity (kw)					5,416,000
œ	Rockport Plant (\$/kw) (14) / (15)			7201724104	ATTAIN AND A	\$0.06
	Indiana Michigan Power Surplus Weighing					16.00%
<u>8</u>	Portion of Weighted Average Capacity Rate				-trobAs	
	Attributed to Rockport Plant (\$/kw) (17) X (18) Rockmart Plant Costs to Kaminicky Dower					\$0.01
ო			E fill fot dae			\$0.01
20	Kentucky Power Capacity Deficit (kw)					389,500
21	rockport units 1 α ∠ Environmental to Nentucky Power (19) * (∠υ) (ES FORM 3.14, Page 1 of 10, Line 8)					\$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

For the Expense Month of July 2010

LINE NO.	COST	AMOUNTS
	Hilling Plant at Original Coat	\$98,439,622
1	Utility Plant at Original Cost	\$98,439,022 1.37%
2 3	Member Primary Capacity Investment Rate (16.44% / 12)	\$1,348,623
3	Total Rate Base	φ1,340,023
4	Operations :	\$0
4	Urea (5020002)	ას \$0
	Trona (5020003)	8
6 7	Air Emission Fee	<u>\$15,625</u>
1	Total Operations (4) + (5) + (6)	\$15,625
	Maintenance :	ćo
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	* (0 (0 (0)
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,248</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of July 2010

LINE NO.	18	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 10/31/2009							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	53.561% 0.000%	6.48% 1.77%		3.47% 0.00%			3.47% 0.00%
3 4	FINANCING C EQUITY	\$46,535,672 \$430,332,408	4.532% 41.907%	2.08% 10.50%	1/	0.09% 4.40%	1.5760	2/	0.09% 6 <i>.</i> 94%
5	TOTAL	\$1,026,868,080	100.000%			7.96%			10.50%
1/		nted Average Cost o on Common Equity		10 - 00020	<u></u>		, <u>11,, 1,, 2, 2,</u>		L
2/		Conversion Factor - 00020 dated - Apr		tion:					
1 2 3		EVENUE LE ACCOUNTS EX Service Commissio		0.15%)			100.0000 0.2600 0.1500		
4 5		LE PRODUCTION II E TAX EXPENSE, N				OW)	99.5900 5.6372		
6 7	FEDERAL TAX/ 199 DEDUCTIO	ABLE PRODUCTION N PHASE-IN	N INCOME BEF	ORE 199 DEDU	CTIC	N	93.9528 5.6372		
8 9		ABLE PRODUCTION ME TAX EXPENSE		EDUCTION (359	6)		88.3156 30.9105		
10	AFTER-TAX PR	ODUCTION INCOM	IE .				57.4051		
11 12 13 14 15	AFTER-TAX 199 DEDUC UNCOLLEC	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS ublic Service Comm	COME EXPENSE				57.4051 5.6372 0.2600 0.1500		
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION I	NCOME (ROUN	IDE	D)	63.4523		
17 18 19 20	BLENDED FED FEDERAL (STATE (LIN BLENDED TAX	IE 4)	TAX RATE:				30.9105 5.6372 36.5477		
21	GROSS REVEN	IUE CONVERSION	FACTOR (100.0	000 / Line 14)			1.5760		
1 2 3	PRE-TAX P COLLECTIE	E TAX CALCULATIC RODUCTION INCO BLE ACCOUNTS EX ublic Service Comm	ME (PENSE (0.26%)				100.0000 0.2600 0.1500		
4 5		ABLE PRODUCTIC ATE 199 DEDUCTIC		FORE 199 DED	UCTI	ION	99.5900 5.6372		
6 7		ABLE PRODUCTIC OME TAX RATE	N INCOME BEF	FORE 199 DED	JCTI	ON	93.9528 6.0000		
8	STATE INC	OME TAX EXPENS	E (LINE 5 X LIN	E 6)			5.6372	- ··	

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010.

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ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of July 2010

			<u></u>				<u></u>	<u>(</u> 94.55		an an sao		2
Total	(6)											\$43,812
Rockport Plant Common	(8)		\$2,185,292 (\$90,840) (\$24,495)	\$2,069,957	0.7847%	\$16,243	\$6,410 \$0	\$6,410	\$22,653	\$6,796		
Total Units 1 & 2 (C5 + C6)	(/)			\$8,903,544	0.7847%	\$69,866	\$39,968 \$0	\$39,968	\$109,834	\$32,950	· .	
Unit No. 2	(9)	\$8,353,084	(\$1,835,942) (\$1,009,893)	\$5,507,249			\$24,502 \$0	(1000) (100)	non - non anna			
Unit No. 1	(c)	\$5,272,657	(\$1,234,573) (\$641,789)	\$3,396,295			\$15,466 \$0					
Rockport Plant Common	(4)	\$1,777,206	(\$824,233) (\$154,263)	\$798,710	0.7847%	\$6,267	\$5,212 \$15,625	\$20,837	\$27,104	\$4,066		
	(3)				9.4164%							
COST COMPONENT	$\langle Z angle$	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGC Low NOX Burners (LNB) Installed Cost	-iyasii Latiutiii Iiiskaireu Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes	Fotal Rate Base	Weighted Average Cost of Capital - ES FORM 3.21 Wonthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Wonthiy Keturn of Kate Base (Line 6 * Line 8) Operating Expenses :	Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kentucky Power's Portion of Rockport Plants' Total Revenue Requirement.(C 4, Ln 14 + C 7, Ln 15 + C 8, L 15)	Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2
			ess ess	ota	lon (uol	Aont	otal	jo ta	ent (ent	ota	eio El Si

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 07/31/2010							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	77,693,836 67,161,479	33.6278% 29.0691%	4.9723% 0.4037%		1.6721% 0.1174%			1.6721% 0.1174%
3 4	OFFSETS DFBT	0	0.000%	2.8541%		0.0000%			0.0000%
5	C EQUITY	86,185,290	37.3031%	12.1600%	1/	4.5361%	1.681379	2/	7.6269%
6	TOTAL	231,040,605	100.0000%			6.3256%			9.4164% ========
1/ 2/ 1 2 3	WACC = Weighted Cost Rates per the Gross Revenue Cor OPERATING REVE LESS: INDIANA A (LINE 1 X .085)	Provisions of the nversion Factor (NUE DJUSTED GRO	Rockport Unit F	-	nt.		100.00 <u>8.500</u>		
4 5 6 7 8 9	INCOME BEFORE LESS: FEDERAL (LINE 4 X .35) OPERATING INCO GROSS REVENUE FACTOR (100	FED INC TAX INCOME TAX ME PERCENTA CONVERSION	GE				91.500 <u>32.025</u> 59.475 <u>1.681379</u>		

For the Expense Month of July 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of July 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$48,039,569 \$556,826 \$9,412,647 \$13,358,621	67.3% 0.8% 13.2% 18.7%
5	Total Revenues for Surcharges Purposes	 \$71,367,663	100.0%
6	Non-Physical Revenues for Month	\$867,534	
7	Total Revenues for Month	\$72,235,197	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for May 2010	7.8611%
2	Kentucky Retail Revenues for Current Expense Month	\$39,956,558
3	Surcharge Collected (1) * (2)	\$3,141,025
4	Surcharge Amount To Be Collected	\$2,646,231
5	Over / (Under) Recovery (3) - (4) = (5)	\$494,794

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of July 2010

201 1000 14 (0000 201 200 1 2	CALCULATION OF E(m)							
	E(m) = CRR - BRR							
LINE	LINE 1 CRR from ES FORM 3.00							
LINE	2	Brr from ES FORM 1.10	\$3,805,325					
LINE	3	E(m) (LINE 1 - LINE 2)	\$895,492					
LINE	4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	67.3%					
LINE	5	KY Retail E(m) (LINE 3 * LINE 4)	\$602,666					
LINE	6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$494,794)					
LINE	7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$107,872					
		SURCHARGE FACTOR						
LINE	8	Net KY Retail E(m) (Line 7)	\$107,872					
LINE	9	KY Retail R(m) from ES FORM 3.30	\$48,039,569					
LINE	10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	0.2245%					

Effective Date for Billing:

September 2010

Submitted By :

Title :

Director Regulatory Services

Date Submitted :

August 18, 2010

1/ Case No. 2009-00459, dated June 28, 2010

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 179 of 609

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of July 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net Environmental
Billing Month	Costs
	¢2,004,462
JANUARY	\$3,991,163
FEBRUARY	3,590,810
MARCH	3,651,374
APRIL	3,647,040
MAY	3,922,590
JUNE	3,627,274
JULY	3,805,325
AUGUST	4,088,830
SEPTEMBER	3,740,010
OCTOBER	3,260,302
NOVEMBER	2,786,040
DECEMBER	4,074,321
TOTAL	\$44,185,079
	=========

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of July 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

1		1	
LINE NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,657,005
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$43,812
	Third Component: Net Proceeds from Emission Allowances Sales AS		
	 SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,700,817

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE		
NO.	COST COMPONENT	
	Return on Rate Base :	
1	Utility Plant at Original Cost \$191,327,5	
2	Less Accumulated Depreciation (\$57,891,0	
3	Less Accum. Def. Income Taxes (\$43,605,0	
4	Net Utility Plant	\$89,831,479
5	SO2 Emission Allowance Inventory from ES FORM 3.11	\$10,981,090
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12	\$10,528
7	Cash Working Capital Allowance from ES FORM 3.13, Line 12	\$174,185
8	Total Rate Base	\$100,997,282
9	Weighted Average Cost of Capital - ES FORM 3.15 10.5	
10	Monthly Weighted Avg. Cost of Capital (9) / 12	0.88%
11	Monthly Return of Rate Base (8) * (10)	\$888,776
	Operating Expenses :	
12	Monthly Depreciation Expense	\$577,252
13	Monthly Catalyst Amortization Expense	\$46,030
14	Monthly Property Taxes	\$14,298
15	Monthly Kentucky Air Emissions Fee	\$30,551
	Monthly Environmental AEP Pool Capacity Costs	
16	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10	\$2,076,035
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13	\$285,722
18	Monthly SO2 Emission Allowance Consumption	\$738,341
19	Total Operating Expenses [Line 12 thru Line 18]	<u>\$3,768,229</u>
20	Total Revenue Requirement - Big Sandy	
	Record on ES FORM 3.00, Line 1	\$4,657,005

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

2		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
			754,608		\$4,685,726	\$6.209
Additions - EPA Allowances		34,945	438,205	\$0	\$0	\$0.000
Gavin Reallocation	1	0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases	100000	0	33,930	\$0 \$0	\$9,455,560	\$278.678
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance Adjustment		0	4	\$0	\$0	\$0.000
Adjustment		U U	-1	ψυ	ψυ	φ0.000
Withdrawals -						
P & E Transfers Out	and the second	0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	52,690	\$0	\$4,758,135	\$90.304
Off - System Sales		0	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance				¢0	\$0	¢0.000
Adjustment		0	0	\$0	<u></u> ቆሀ	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)	5,343					
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)	0	5,343	603,137	\$738,341	\$39,794,234	\$65.979
ENDING INVENTORY - Record						
Balance in Column (4) on ES FORM 3.10, Line 5			1,111,639		\$10,981,090	\$9.878
Expense Month Member Load Ratio	for AEP/k	Kentucky Power				0.06994

For the Expense Month of July 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of July 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	36,954	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	1,014	18,066	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in					
Column (4) on ES FORM 3.10, Line 5	 APPE - APPE - LAND 	15,533	a da da na s	\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of July 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,622	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	440	\$0	\$528,874	\$1,201.986
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	1,012	12,190	\$3,334	\$518,346	\$42.522
ENDING INVENTORY - Record Balance in				#40 F00	¢0.000
Column (4) on ES FORM 3.10, Line 5		32,872	Description of the second sec second second sec	\$10,528	\$0.320

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of July 2010

ILINE			
NO.	O&M Expenses		
1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$338,865 <u>\$738,341</u>	\$1,107,757
5 6 7 8 9 10	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses	\$0 \$350,519 \$0 \$3,334 \$1,866 <u>(\$69,997)</u>	
11	Total 2003 Plan O&M Expenses		<u>\$285,722</u>
12	Total Monthly O&M Expenses		<u>\$1,393,479</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$174,185

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs July 2010

C	Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injec	tion System	\$3,479.00	\$3,641.94	\$0.00	\$7,120.94
SCR Boiler Out	tlet Ductwork	\$0.00	(\$114,866.05)	\$0.00	(\$114,866.05)
SCR Booster F	San	(\$816.57)	\$27,263.95	\$0.00	\$26,447.38
SCR NOx Mon	itoring	\$1,059.10	\$0.00	\$0.00	\$1,059.10
SCR Reactor		\$0.00	\$2,144.67	\$0.00	\$2,144.67
	Total SCR July 2010 & M Expense	\$3,721.53	(\$81,815.49)	\$0.00	(\$78,093.96)
Additional Ope The Ozone Sea	rator Overtime During ason	\$0.00	\$0.00	\$1,866.00	\$1,866.00
Permit -	ng Required Under Operation laintenance	\$0.00 \$6,876.05	\$0.00 \$1,221.00	\$0.00 \$0.00	\$0.00 \$8,097.05

July 2010 O & M Expenses Filed

(\$68,131)

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ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

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For the Expense Month of July 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$342,760		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$257,070		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$720,575		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,895		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$650,465		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$70,110		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,056,560	\$19,475	\$2,076,035

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of July 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$626,806		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$1,113,169		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$5,460,925		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$1,267,840		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$281,440		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$8,779,077	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.04	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.87	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$338,865	\$0	\$338,865

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 189 of 609

ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE		
NO.	COST	AMOUNTS
NO. 1 2 3 4 5 6 7 8 9 10 11 12 13	COST Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Ohio Power Company's Percentage Ownership - Environmental Investment OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4) Operations : Disposal (5010000) Urea (5020002) Trona (5020003) Lime Stone (5020004) Air Emission Fee Total Operations (Lines 6 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber (FGD) Maintenance (5120000) Total Maintenance (12) + (13)	AMOUNTS \$601,233,295 <u>1.37%</u> \$8,236,896 <u>100.00%</u> \$8,236,896 \$53,964 \$433,592 \$27,089 \$319,072 <u>\$8,973</u> \$842,690 \$4,162 <u>\$190,781</u> <u>\$194,943</u>
8 8	Total Maintnenance (12) + (13) 1/2 of Maintenance (14) * 50%	<u>\$97,472</u>
16 17	Fixed O&M (11) + (15) Ohio Power Company's Percentage Ownership - O&M Cost	\$940,162 <u>66.67%</u>
18 19 20 21	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17) Total Revenue Requirement, Cost Associated with Amos Unit No. 3 (5) + (18) Ohio Power Company Steam Capacity (kw) Amos Unit No. 3 Environmental Rate (\$/kw)	<u>\$626,806</u> \$8,863,702 8,458,000 \$1.05
22 23	Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22) Amos Unit No. 3 Costs to Kentucky Power :	84.00% \$0.88
24 25	Amos Unit No. 3 Portion (\$/kw) (23) Kentucky Power Capacity Deficit (kw) Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	\$0.88 <u>389,500</u>
26	(ES FORM 3.14, Page 1 of 10, Line 1)	\$342,760

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 190 of 609

ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

NO.COSTAMOUNTS1Utility Plant at Original Cost\$398,290,832Member Primary Capacity Investment Rate (16.44% / 12)1.373Total Rate Base\$5,456,56Operations :\$165,114Disposal (5010000)\$165,115Urea (502002)\$294,866Trona (5020003)\$97,977Lime Stone (5020004)\$508,658Air Emission Fee\$8,869Total Operations (Line 4 thru 8)\$1,075,19Maintenance :\$12\$1210SCR Maintenance (5120000)\$46,5712Total Maintenance (5120000)\$46,57131/2 Maintenance (12) * 50%\$37,9714Fixed O&M (9) + (11)\$1,113,10Total Revenue Requirement,\$10\$6,569,7415Cost Associated with Cardinal Unit No. 3 (3) + (12)\$6,569,7416Ohio Power Company Steam Capacity (kw)\$4,458,0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)\$6,569,7418Chio Power Surplus Weighing\$4,00020Ohio Power Surplus Weighing\$4,00021Portion of Weighted Average Capacity Rate\$4,000Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)\$0,000Cardinal Unit No. 1 Costs to Kentucky Power :\$4,00021Portion of Weighted Average Capacity Rate\$4,00022Cardinal Unit No. 1 Costs to Kentucky Power (22) * (23)\$0,00023Kentucky Power Capacity Deficit (k	ILINE		
2Member Primary Capacity Investment Rate $(16.44\% / 12)$ 1.33Total Rate Base Operations :\$5,456,560Disposal (501000)\$1165,134Disposal (5020002)\$294,846Trona (5020003)\$97,937Lime Stone (5020004)\$508,628Air Emission Fee\$ $\frac{$8,66}{$10000}$ 9Total Operations (Line 4 thru 8) Maintenance :\$ $\frac{$10,75,19}{$100000}$ 10SCR Maintenance (5120000)\$ $\frac{$29,33}{$110000000}$ 11Scrubber (FGD) Maintenance (5120000)\$ $\frac{$46,55}{$12000000000000000000000000000000000000$		COST	AMOUNTS
2Member Primary Capacity Investment Rate $(16.44\% / 12)$ 1.33Total Rate Base Operations :\$5,456,560Disposal (501000)\$1165,134Disposal (5020002)\$294,846Trona (5020003)\$97,937Lime Stone (5020004)\$508,628Air Emission Fee\$ $\frac{$8,66}{$10000}$ 9Total Operations (Line 4 thru 8) Maintenance :\$ $\frac{$10,75,19}{$100000}$ 10SCR Maintenance (5120000)\$ $\frac{$29,33}{$110000000}$ 11Scrubber (FGD) Maintenance (5120000)\$ $\frac{$46,55}{$12000000000000000000000000000000000000$			\$200 000 000
3Total Rate Base Operations : $$5,456,56$ Gerations :4Disposal (501000) Urea (502002) $$165,11$ \$294,866Trona (502003) Lime Stone (502004) $$508,62$ \$80,628Air Emission Fee Maintenance : $$8,62$ \$81,075,199Total Operations (Line 4 thru 8) Maintenance : $$1,075,19$ \$1210SCR Maintenance (5120000) $$229,33$ \$1411Scrubber (FGD) Maintenance (5120000) $$246,55$ \$37,9912Total Maintenance (11) + (12) \$1,2000) $$346,55$ \$37,99131/2 Maintnenance (11) + (12) \$1,20000) $$347,99$ \$37,9914Fixed O&M (9) + (11) Total Revenue Requirement, Total Revenue Requirement, OPCo's Share of Cost Associated with Cardinal Unit No. 3 (3) + (12) OPco's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16) Ohio Power Company Steam Capacity (kw) Cardinal Unit No. 1 (\$/kw) $$40,000,000,000,000,000,000,000,000,000,$			
Operations : 1 <			<u>1.37%</u>
4 Disposal (501000) \$165,13 5 Urea (5020002) \$294,84 6 Trona (5020003) \$97,93 7 Lime Stone (5020004) \$508,63 8 Air Emission Fee \$8,65 9 Total Operations (Line 4 thru 8) \$1,075,13 Maintenance : \$10 SCR Maintenance (5120000) \$29,33 11 Scrubber (FGD) Maintenance (5120000) \$29,33 12 Total Maintnenance (11) + (12) \$75,94 13 1/2 Maintnenance (12) * 50% \$37,97 14 Fixed O&M (9) + (11) \$11,113,16 7 Total Revenue Requirement, \$10,000 15 Cost Associated with Cardinal Unit No. 3 (3) + (12) \$6,569,72 16 Ohio Power Company's Percentage Ownership 100,00 17 OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16) \$6,569,72 18 Ohio Power Company Steam Capacity (kw) \$0,1 20 Ohio Power Surplus Weighing 84.00 21 Portion of Weighted Average Capacity Rate \$44.00 22 Cardinal Unit No. 1 Costs to Kentucky Power : \$20,00	3		\$5,456,585
5Urea (5020002) $\$294,84$ 6Trona (5020003) $\$97,93$ 7Lime Stone (5020004) $\$508,62$ 8Air Emission Fee $\$8,62$ 9Total Operations (Line 4 thru 8) $\$1,076,13$ Maintenance : $\$29,33$ 10SCR Maintenance (5120000) $\$29,33$ 11Scrubber (FGD) Maintenance (5120000) $\$29,33$ 12Total Maintenance (11) + (12) $\$75,94$ 131/2 Maintnenance (12) * 50% $\$37,93$ 14Fixed O&M (9) + (11) $\$1,113,114$ Total Revenue Requirement, $\$6,569,74$ 15Cost Associated with Cardinal Unit No. 3 (3) + (12) $\$6,569,74$ 16Ohio Power Company Steam Capacity (kw) $\$4,458,00$ 19Cardinal Unit No. 1 ($\$/kw$) $\$0.1$ 20Ohio Power Surplus Weighing $\$40,02$ 21Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 ($\$/kw$) (19) X (20) $\$0.02$ 22Cardinal Unit No. 1 Costs to Kentucky Power : $$0.02$ 22Cardinal Unit No. 1 Portion ($\$/kw$) (21) $\$0.02$ 23Kentucky Power Capacity Deficit (kw) $389,50$ 24Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23) $$89,50$			
6Trona (5020003) $\$97,97$ 7Lime Stone (5020004) $\$508,62$ 8Air Emission Fee $\$8,62$ 9Total Operations (Line 4 thru 8) $\$1,075,19$ Maintenance : $\$1,075,19$ 10SCR Maintenance (5120000) $\$29,37$ 11Scrubber (FGD) Maintenance (5120000) $\$46,57$ 12Total Maintnenance (11) + (12) $\$75,94$ 131/2 Maintnenance (12) * 50% $\$37,97$ 14Fixed O&M (9) + (11) $\$1,113,10$ Total Revenue Requirement, $\$6,569,74$ 15Cost Associated with Cardinal Unit No. 3 (3) + (12) $\$6,569,74$ 16Ohio Power Company's Percentage Ownership100.0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16) $\$6,569,74$ 18Ohio Power Company Steam Capacity (kw) $\$44,00$ 20Ohio Power Surplus Weighing $\$40,00$ 21Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 ($\$/kw$) (19) X (20) $\$0,0.0$ 22Cardinal Unit No. 1 Costs to Kentucky Power : Cardinal Unit No. 1 Portion ($\$/kw$) (21) $\$0,0.0$ 23Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23) $389,50$	t I		8
7Lime Stone (5020004) $\$508,62$ 8Air Emission Fee $\$8.62$ 9Total Operations (Line 4 thru 8) Maintenance : $\$1,075,19$ 10SCR Maintenance (5120000) $\$29,33$ 11Scrubber (FGD) Maintenance (5120000) $\$46,53$ 12Total Maintnenance (11) + (12) $\$75,94$ 131/2 Maintnenance (12) * 50% $\$37,97$ 14Fixed O&M (9) + (11) $\$1,113,16$ Total Revenue Requirement, $\$1,113,16$ 15Cost Associated with Cardinal Unit No. 3 (3) + (12) $\$6,569,77$ 16Ohio Power Company's Percentage Ownership100.0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16) $\$6,569,77$ 18Ohio Power Company Steam Capacity (kw) $\$4,458,00$ 19Cardinal Unit No. 1 ($\$/kw$) $\$0.0$ 20Ohio Power Surplus Weighing 84.00 21Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 ($\$/kw$) (19) X (20) $\$0.0$ 22Cardinal Unit No. 1 Portion ($\$/kw$) (21) $\$0.0$ 23Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23) $389,50$	i i		\$294,846
8Air Emission Fee $\$8.6$ 9Total Operations (Line 4 thru 8) Maintenance : $\$1,075,19$ 10SCR Maintenance (5120000) $\$29,33$ 11Scrubber (FGD) Maintenance (5120000) $\$46,53$ 12Total Maintnenance (11) + (12) $\$75,94$ 131/2 Maintnenance (12) * 50% $\$37,97$ 14Fixed Q&M (9) + (11) $\$1,113,164$ Total Revenue Requirement, $\$1,113,164$ 15Cost Associated with Cardinal Unit No. 3 (3) + (12) $\$6,569,74$ 16Ohio Power Company's Percentage Ownership100.0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16) $\$6,569,74$ 18Ohio Power Company Steam Capacity (kw) $\$0,12$ 20Ohio Power Surplus Weighing $\$40,02$ 21Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 ($\$/kw$) (19) X (20) $\$0,06$ 22Cardinal Unit No. 1 Portion ($\$/kw$) (21) $\$0,06$ 23Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23) $389,56$			\$97,977
9Total Operations (Line 4 thru 8) Maintenance :\$1,075,1910SCR Maintenance (5120000)\$29,3711Scrubber (FGD) Maintenance (5120000)\$46,5712Total Maintnenance (11) + (12)\$75,94131/2 Maintnenance (12) * 50%\$37,9714Fixed O&M (9) + (11)\$1,113,10Total Revenue Requirement,\$6,569,7415Cost Associated with Cardinal Unit No. 3 (3) + (12)\$6,569,7416Ohio Power Company's Percentage Ownership100.0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)\$6,569,7418Ohio Power Company Steam Capacity (kw)\$0,1720Ohio Power Surplus Weighing\$44,0021Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20) Cardinal Unit No. 1 Costs to Kentucky Power :\$0,0022Cardinal Unit No. 1 Portion (\$/kw) (21) Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$89,50	7		\$508,620
Maintenance :Maintenance (5120000) $$29,37$ 10SCR Maintenance (5120000) $$46,57$ 11Scrubber (FGD) Maintenance (5120000) $$46,57$ 12Total Maintnenance (11) + (12) $$75,94$ 131/2 Maintnenance (12) * 50% $$37,97$ 14Fixed O&M (9) + (11) $$11,113,10$ Total Revenue Requirement, $$505$ $$505,77$ 16Ohio Power Company's Percentage Ownership100.0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16) $$6,569,75$ 18Ohio Power Company Steam Capacity (kw) $$8,458,00$ 19Cardinal Unit No. 1 (\$/kw) $$0,75$ 20Ohio Power Surplus Weighing $$84.00$ 21Portion of Weighted Average Capacity Rate $$84.00$ 22Cardinal Unit No. 1 (\$/kw) (19) X (20) $$0,00$ 23Kentucky Power Capacity Deficit (kw) $$389,50$ 24Cardinal Unit No. 1 Portion (\$/kw) (21) $$389,50$ 25Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23) $$389,50$	8	Air Emission Fee	<u>\$8,622</u>
10SCR Maintenance (5120000) $\$29,33$ 11Scrubber (FGD) Maintenance (5120000) $\$46,55$ 12Total Maintnenance (11) + (12) $\$75,94$ 131/2 Maintnenance (12) * 50% $\$37,97$ 14Fixed O&M (9) + (11) $\$1,113,16$ Total Revenue Requirement, $\$1,113,16$ 15Cost Associated with Cardinal Unit No. 3 (3) + (12) $\$6,569,78$ 16Ohio Power Company's Percentage Ownership100.0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16) $\$6,569,78$ 18Ohio Power Company Steam Capacity (kw) $\$4,458,00$ 19Cardinal Unit No. 1 (\$/kw) $\$0.3$ 20Ohio Power Surplus Weighing $\$44.00$ 21Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20) Cardinal Unit No. 1 Costs to Kentucky Power : $\$0.00$ 22Cardinal Unit No. 1 Portion (\$/kw) (21) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23) $\$0.6$	9	Total Operations (Line 4 thru 8)	\$1,075,197
11Scrubber (FGD) Maintenance (5120000) $$46,57$ 12Total Maintnenance (11) + (12)\$75,94131/2 Maintnenance (12) * 50% $$37,97$ 14Fixed O&M (9) + (11) $$1,113,16$ Total Revenue Requirement, $$50\%$ $$1,113,16$ 15Cost Associated with Cardinal Unit No. 3 (3) + (12) $$6,569,74$ 16Ohio Power Company's Percentage Ownership100.0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)\$6,569,7418Ohio Power Company Steam Capacity (kw) $$0,13$ 20Ohio Power Surplus Weighing $$44,000$ 21Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20) Cardinal Unit No. 1 Costs to Kentucky Power : $$0,000$ 22Cardinal Unit No. 1 Portion (\$/kw) (21) $$0,000$ 23Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23) $$89,500$		Maintenance :	
12Total Maintnenance (11) + (12)\$75,94131/2 Maintnenance (12) * 50%\$37,9714Fixed O&M (9) + (11)\$1,113,14Total Revenue Requirement,\$1515Cost Associated with Cardinal Unit No. 3 (3) + (12)\$6,569,7416Ohio Power Company's Percentage Ownership100,0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)\$6,569,7418Ohio Power Company Steam Capacity (kw)\$8,458,0019Cardinal Unit No. 1 (\$/kw)\$0,120Ohio Power Surplus Weighing\$4,0021Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20) Cardinal Unit No. 1 Costs to Kentucky Power :\$0,622Cardinal Unit No. 1 Portion (\$/kw) (21) Cardinal Unit No. 1 Portion (\$/kw) (21)\$0,623Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$0,6	10	SCR Maintenance (5120000)	\$29,370
131/2 Maintnenance (12) * 50%\$37,9714Fixed O&M (9) + (11)\$1,113,14Total Revenue Requirement,\$115Cost Associated with Cardinal Unit No. 3 (3) + (12)\$6,569,7416Ohio Power Company's Percentage Ownership100,0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)\$6,569,7418Ohio Power Company Steam Capacity (kw)\$0,119Cardinal Unit No. 1 (\$/kw)\$0,120Ohio Power Surplus Weighing\$4,0021Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20) Cardinal Unit No. 1 Costs to Kentucky Power :\$0,622Cardinal Unit No. 1 Portion (\$/kw) (21) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$0,6	11	Scrubber (FGD) Maintenance (5120000)	<u>\$46,574</u>
14Fixed O&M (9) + (11) Total Revenue Requirement, Cost Associated with Cardinal Unit No. 3 (3) + (12)\$1,113,1615Cost Associated with Cardinal Unit No. 3 (3) + (12)\$6,569,7516Ohio Power Company's Percentage Ownership100.0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)\$6,569,7518Ohio Power Company Steam Capacity (kw)\$8,458,0019Cardinal Unit No. 1 (\$/kw)\$0,7520Ohio Power Surplus Weighing\$4,00021Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)\$0,60022Cardinal Unit No. 1 Costs to Kentucky Power : Cardinal Unit No. 1 Portion (\$/kw) (21)\$0,60023Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)389,500	12	Total Maintnenance (11) + (12)	\$75,944
Total Revenue Requirement,15Cost Associated with Cardinal Unit No. 3 (3) + (12)16Ohio Power Company's Percentage Ownership17OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)18Ohio Power Company Steam Capacity (kw)19Cardinal Unit No. 1 (\$/kw)20Ohio Power Surplus Weighing21Portion of Weighted Average Capacity RateAttributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)Cardinal Unit No. 1 Costs to Kentucky Power :22Cardinal Unit No. 1 Portion (\$/kw) (21)23Kentucky Power Capacity Deficit (kw)Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	13	1/2 Maintnenance (12) * 50%	<u>\$37,972</u>
15Cost Associated with Cardinal Unit No. 3 (3) + (12)\$6,569,7416Ohio Power Company's Percentage Ownership100.0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)\$6,569,7418Ohio Power Company Steam Capacity (kw)\$6,569,7419Cardinal Unit No. 1 (\$/kw)\$0,1020Ohio Power Surplus Weighing\$0,1021Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)\$0,622Cardinal Unit No. 1 Costs to Kentucky Power :\$0,023Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$0,0	14	Fixed O&M (9) + (11)	<u>\$1,113,169</u>
16Ohio Power Company's Percentage Ownership100.0017OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)\$6,569,7918Ohio Power Company Steam Capacity (kw)\$8,458,0019Cardinal Unit No. 1 (\$/kw)\$0,1020Ohio Power Surplus Weighing\$84,0021Portion of Weighted Average Capacity Rate\$84,0021Portion of Weighted Average Capacity Rate\$0,0022Cardinal Unit No. 1 (\$/kw) (19) X (20)\$0,0023Kentucky Power Capacity Deficit (kw)\$389,5023Kentucky Power Capacity Deficit (kw)\$389,5024Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$0,00		Total Revenue Requirement,	
17OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)\$6,569,7518Ohio Power Company Steam Capacity (kw)8,458,0019Cardinal Unit No. 1 (\$/kw)\$0,720Ohio Power Surplus Weighing\$4.0021Portion of Weighted Average Capacity Rate\$4.0021Portion of Weighted Average Capacity Rate\$0,622Cardinal Unit No. 1 (\$/kw) (19) X (20)\$0,623Kentucky Power Capacity Deficit (kw)\$0,623Kentucky Power Capacity Deficit (kw)389,5024Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$0,6	15	Cost Associated with Cardinal Unit No. 3 (3) + (12)	<u>\$6,569,754</u>
18Ohio Power Company Steam Capacity (kw)8,458,0019Cardinal Unit No. 1 (\$/kw)\$0.120Ohio Power Surplus Weighing84.0021Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)\$0.022Cardinal Unit No. 1 Costs to Kentucky Power :\$0.023Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$0.0	16	Ohio Power Company's Percentage Ownership	100.00%
19Cardinal Unit No. 1 (\$/kw)\$0.720Ohio Power Surplus Weighing84.0021Portion of Weighted Average Capacity Rate84.0021Portion of Weighted Average Capacity Rate\$0.721Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)\$0.622Cardinal Unit No. 1 Costs to Kentucky Power :\$0.623Kentucky Power Capacity Deficit (kw)\$0.623Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$0.6	17	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)	\$6,569,754
19Cardinal Unit No. 1 (\$/kw)\$0.720Ohio Power Surplus Weighing84.0021Portion of Weighted Average Capacity Rate\$0.721Portion of Weighted Average Capacity Rate\$0.721Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)\$0.622Cardinal Unit No. 1 Costs to Kentucky Power :\$0.623Kentucky Power Capacity Deficit (kw)\$0.623Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$0.6	18	Ohio Power Company Steam Capacity (kw)	8,458,000
20Ohio Power Surplus Weighing84.0021Portion of Weighted Average Capacity Rate84.0021Portion of Weighted Average Capacity Rate\$0.0Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)\$0.0Cardinal Unit No. 1 Costs to Kentucky Power :\$0.022Cardinal Unit No. 1 Portion (\$/kw) (21)\$0.023Kentucky Power Capacity Deficit (kw)389.50Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$0.0	19		\$0.78
 Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20) Cardinal Unit No. 1 Costs to Kentucky Power : Cardinal Unit No. 1 Portion (\$/kw) (21) Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23) 	5 B		84.00%
Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)\$0.6Cardinal Unit No. 1 Costs to Kentucky Power :\$0.622Cardinal Unit No. 1 Portion (\$/kw) (21)\$0.623Kentucky Power Capacity Deficit (kw)\$389.56Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)\$0.6	5 B		
 Cardinal Unit No. 1 Costs to Kentucky Power : Cardinal Unit No. 1 Portion (\$/kw) (21) Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23) 		\$ <u>5</u>	\$0.66
22Cardinal Unit No. 1 Portion (\$/kw) (21)\$0.623Kentucky Power Capacity Deficit (kw)389.50Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)			
23Kentucky Power Capacity Deficit (kw)389,50Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)389,50	22		\$0.66
Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	f B		<u>389,500</u>
	24		\$257,070
		(,,0.0

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$957,056,293
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$13,111,671
	Operations :	
4	Sludge Disposal (5010000)	\$601,341
5	Lime (5020001)	\$3,734,175
6	Urea (5020002)	\$881,231
7	Trona (5020003)	(\$38,776)
8	Lime Stone (5020004)	\$0
9	Air Emission Fee	\$36,017
10	Lease (5070005)	<u>\$0</u>
11	Total Operations (Lines 4 thru 10)	\$5,213,988
	Maintenance :	
12	SCR Maintenance (5120000)	\$51,251
13	Scrubber Maintenance (5120000)	<u>\$442,622</u>
14	Total Maintenance (12) + (13)	\$493,873
15	1/2 of Maintenance (13) * 50%	<u>\$246,937</u>
16	Fixed O&M (11) + (15)	<u>\$5,460,925</u>
	Total Revenue Requirement,	
17	Cost Associated with Gavin Plant (3) + (16)	\$18,572,596
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$18,572,596
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Gavin Plant (\$/kw)	\$2.20
22	Ohio Power Surplus Weighing	84.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.85
	Gavin Plant Costs to Kentucky Power:	
24	Gavin Plant Portion (\$/kw) (23)	\$1.85
25	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 3)	\$720,575
		22 24 25 25 25 25 25 25 25 25 25 25 25 25 25

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations :	\$7,173,774 <u>1.37%</u> \$98,281
4	Urea (5020002)	\$0 \$0
56	Trona (5020003) Air Emission Fee	\$0 \$15,690
7	Total Operations (4) + (5) + (6)	\$15,690
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,690</u>
	Total Revenue Requirement,	
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$113,971</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$113,971
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw) Obia Dawar Swalwa Waizhing	\$0.01 84.00%
16 17	Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	04.0070
17	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
1000	Kammer Plant Costs to Kentucky Power :	φ0.01
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
		#4 400 000 0EE
1	Utility Plant at Original Cost	\$1,139,062,655
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$15,605,158
	Operations :	404004
4	Disposal (5010000)	\$21,281
5	Lime Stone (5020004)	\$694,183
6	Urea (5020002)	\$400,116
7	Trona (5020003)	\$127,147
8	Air Emission Fee	<u>\$12,128</u>
9	Total Operations (Lines 4 thru 8)	\$1,254,855
	Maintenance :	
10	FDG (5120000)	\$632
11	SCR Maintenance (5120000)	<u>\$25,337</u>
12	1/2 of Maintenance (10 + 11) * 50%	<u>\$12,985</u>
13	Fixed O&M (9) + (12)	<u>\$1,267,840</u>
	Total Revenue Requirement,	
14	Cost Associated with Mitchell Plant (3) + (13)	<u>\$16,872,998</u>
15	Ohio Power Company's Percentage Ownership	100.00%
16	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$16,872,998
17	Ohio Power Company Steam Capacity (kw)	8,458,000
18	Mitchell Plant (\$/kw)	\$1.99
19	Ohio Power Surplus Weighing	84.00%
20	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.67
	Mitchell Plant Costs to Kentucky Power :	
21	Mitchell Plant Portion (\$/kw) (20)	\$1.67
22	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
23	(ES FORM 3.14, Page 1 of 10, Line 5)	\$650,465

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE		
NO.	COST	AMOUNTS
4		¢107 405 405
1	Utility Plant at Original Cost	\$107,185,185
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,468,437
	Operations :	¢040.004
4	Urea (502002)	\$246,801
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$34,561</u>
7	Total Operations $(4) + (5) + (6)$	\$281,362
	Maintenance :	¢450
8	SCR Maintenance (5120000)	\$156
9	1/2 of Maintenance (8) * 50%	* <u>\$78</u>
10	Fixed O&M (7) + (9)	<u>\$281,440</u>
	Total Revenue Requirement,	Ø4 740 077
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,749,877</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,749,877
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.21
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	<u> </u>
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.18
	Muskingum Plant Costs to Kentucky Power :	00.40
18	Muskingum Plant Portion (\$/kw) (17)	\$0.18
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	MZO 440
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$70,110

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ES FORM 3.14 Page 9 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$20,298,007 <u>1.37%</u> \$278,083
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$13,207</u> \$13,207
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$13,207</u>
11 12 13	Cost Associated with Sporn Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	<u>\$291,290</u> 100.00% \$291,290
14 15 16 17	Ohio Power Company Steam Capacity (kw) Sporn Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	8,458,000 \$0.03 84.00%
18	Attributed to Sporn Plant (\$/kw) (15) X (16) Sporn Plant Costs to Kentucky Power : SpornGavin Plant Portion (\$/kw) (17)	\$0.03 \$0.03
19 20	Kentucky Power Capacity Deficit (kw) Sporn Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 7)	<u>389,500</u> \$11,685

ES FORM 3.14 Page 10 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of July 2010

Rockport Plant Common Total	(6) (7)	\$2,202,020	1.37% \$30.168	400, 100 400	\$0	\$0 80	ß	e e e	С	쥐	\$30,168	<u>50.00%</u>	\$10°004	\$306,844	5,416,000	\$0.06	16.00%	20 Of	- 	\$0.01 2001	000,800	\$3 895
UNIT 2 AMOUNTS C	(5)	\$16,709,416 \$2	1.37% *228 010	61 6 077¢	Q	08	 ₽	\$0	С С С С С С С С С С С С С С С С С С С		\$228,919	<u>65.08%</u>	\$									
UNIT 1 AMOUNTS	(4)	\$10,544,676	\$141 462	101 ¹ +1-4	00	09 09	\$	\$0	ទាន		\$144,462	85.00%	\$1ZZ,/83									
Rockport Plant Common	(3)	\$1,777,228	1.37% \$24 348	040,470	\$0	\$0 \$15.625	\$15,625	\$0		<u>\$15,025</u>	\$39,973	50%	418,907			do <u>sera nel com</u>						
COST	(2)	Utility Plant at Original Cost	Member Primary Capacity Investment Rate (16.44% / 12) Trial Rate Rece	Operations :	Urea (5020002)	Trona (5020003) Air Emission Fee	Total Operations (4) + (5) + (6)	SCR Maintenance (5120000)	1/2 of Maintenance (8) * 50%	$FIXEQ UCKIN (I) \neq (9)$	Lotal Revenue Requirement, Cost Associated with Rockport Plant (3) + (10)	Indiana Michigan Power Company's Percentage Ownership	ιαίνιs Share of Cost Associated With Kockport Plant (11) Λ (12)	Total Rockport Plant Common and Units 1 & 2	Indiana Michigan Power Company Steam Capacity (kw)	Rockport Plant (\$/kw) (14) / (15) Kentuckv Power Portion of Rockport Plant /	Indiana Michigan Power Surplus Weighing	Portion of Weighted Average Capacity Rate Attributed to Rocknort Plant (\$/kw) (17) X (18)	Rockport Plant Costs to Kentucky Power :	Rockport Plant Portion (\$/kw) (18)	Rentucky Power Capacity Denoit (KW) Bockport Hnits 1 & 2 Environmental to Kentricky Power (19) * (20)	(ES FORM 3.14. Page 1 of 10. Line 8)
		CARL APPENDING	en an	05000	CONTRACTORY OF	and the second second	and an and a second	1000000	uters for the second		w/weige@kdig					-caracteria	a magani 1853	- CONTRACTOR		ALC: NO.	- Contraction	and the

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,439,622
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,348,623
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,625</u>
7	Total Operations (4) + (5) + (6)	\$15,625
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,248</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

OF CAPITAL

Tor the Expense month of bury zero	For the Expense Month of July 20)10
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LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
	D	As of 10/31/2009		``					
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	53.561% 0.000%	6.48% 1.77%		3.47% 0.00%			3.47% 0.00%
3 4	FINANCING C EQUITY	\$46,535,672 \$430,332,408	4.532% 41.907%	2.08% 10.50 %		0.09% 4.40%	1.5760	2/	0.09% 6.94%
5	TOTAL	\$1,026,868,080	100.000%			7.96%			10.50%
1/		nted Average Cost o on Common Equity		10 - 00020					
2/		Conversion Factor - 00020 dated - Apr		tion:					
1 2 3		EVENUE LE ACCOUNTS EX c Service Commissio		100.0000 0.2600 0.1500					
4 5	STATE TAXAB STATE INCOM	OW)	99.5900 5.6372						
6 7	FEDERAL TAX 199 DEDUCTIO	NC	93.9528 5.6372						
8 9	FEDERAL TAX FEDERAL INCO		88.3156 30.9105						
10	AFTER-TAX PF	RODUCTION INCOM	ΛE				57.4051		
11 12 13 14 15	GROSS-UP FA AFTER-TA 199 DEDU UNCOLLEC Kentucky F		57.4051 5.6372 0.2600 0.1500						
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION	INCOME (ROUI	NDEI	C)	63.4523		
17 18 19 20	BLENDED FED FEDERAL STATE (LII BLENDED TAX		30.9105 5.6372 36.5477						
21	GROSS REVEN	NUE CONVERSION	FACTOR (100.0)000 / Line 14)			1.5760		
1 2 3	STATE INCOM PRE-TAX F COLLECTI Kentucky P		100.0000 0.2600 0.1500						
4 5		XABLE PRODUCTION ATE 199 DEDUCTION		FORE 199 DED	UCT	ION	99.5900 5.6372		
6 7	STATE TAX STATE INC	ION	93.9528 6.0000						
8	STATE INC	OME TAX EXPENS	6E (LINE 5 X LIN	IE 6)			5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010. ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of July 2010

					1.1.1.1.1					NA SUL	N K
Total	(8)										\$43,812
Rockport Plant Common	(8)	\$2 185.702	(\$90,840) (\$24,495)	\$2,069,957	0.7847%	\$16,243	\$6,410 \$0	\$6,410	\$22,653	\$6,796	
Total Units 1 & 2 (C5 + C6)	(/)			\$8,903,544	0.7847%	\$69,866	\$39,968 \$0	\$39,968	\$109,834	\$32,950	
Unit No. 2	(9)	\$8,353,084	(\$1,835,942) (\$1,009,893)	\$5,507,249	ar ensamendendet		\$24,502 \$0				
Unit No. 1	(5)	\$5,272,657	(\$1,234,573) (\$641,789)	\$3,396,295		,	\$15,466 \$0				
Rockport Plant Common	(4)	\$1,777,206	(\$824,233) (\$154,263)	\$798,710	0.7847%	\$6,267	\$5,212 \$15,625	\$20,837	\$27,104	\$4,066	
	(3)				9.4164%						
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOX Burners (LNB) Installed Cost Fivash I andfill Installed Cost	Less Accumulated Depreciation	Total Rate Base	Weighted Average Cost of Capital - ES FORM 3.21 Wonthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Wonthly Return of Rate Base (Line 6 * Line 8)	Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kentucky Power's Portion of Rockport Plants' Total Revenue Requirement.(C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2
No e		<u>۳ ۵ ۵ ۳</u>			<u>> 2</u>		10 2 2 2 2		<u>ი -</u> ი	4 C 75 X	е 6

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE			Cap.	Cost		WACC			WACC
NO.	Component	Balances	Structures	Rates		(NET OF TAX)	GRCF		(PRE - TAX)
		As of 07/31/2010							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	77,693,836 67,161,479	33.6278% 29.0691%	4.9723% 0.4037%		1.6721% 0.1174%			1.6721% 0.1174%
3 4	OFFSETS DEBT	0	0.0000%	2.8541%		0.0000%			0.0000%
5	C EQUITY	86,185,290	37.3031%	12.1600%	1/	4.5361%	1.681379	2/	7.6269%
6	TOTAL	231,040,605 ======	100.0000% ========			6.3256% ========			9.4164% ======
1/	WACC = Weighted Cost Rates per the				Account of the second				
2/	Gross Revenue Col	nversion Factor ((GRCF) Calculat	ion:					
1	OPERATING REVE LESS: INDIANA A						100.00		
3 4	(LINE 1 X .085) INCOME BEFORE		<u>8.500</u> 91.500						
5 6 7 8	LESS: FEDERAL (LINE 4 X .35) OPERATING INCO GROSS REVENUE		<u>32.025</u> 59.475						
9	FACTOR (100	+	and the second				<u>1.681379</u>		

For the Expense Month of July 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of July 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$48,039,569 \$556,826 \$9,412,647 \$13,358,621	67.3% 0.8% 13.2% 18.7%
5	Total Revenues for Surcharges Purposes	\$71,367,663	100.0%
6	Non-Physical Revenues for Month	\$867,534	
7	Total Revenues for Month	\$72,235,197	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for May 2010	7.8611%
2	Kentucky Retail Revenues for Current Expense Month	\$39,956,558
3	Surcharge Collected (1) * (2)	\$3,141,025
4	Surcharge Amount To Be Collected	\$2,646,231
5	Over / (Under) Recovery (3) - (4) = (5)	\$494,794

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



kentucky Power°

A unit of American Electric Power

Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

RECEIVED

September 17, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602 SEP 17 2010

PUBLIC SERVICE COMMISSION

Attention: Aaron D. Greenwell

RE: Monthly Environmental Surcharge Report

Dear Mr. Derouren,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and three copies of its Environmental Surcharge Reports for the month of August 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after September 28, 2010.

If there are any questions please contact me at 502-696-7010.

Lila P. Munsey

Lila P. Munsey Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 1.00 Item No. 41 Attachment 1 Page 203 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of August 2010

	CALCULATION OF E(m)	na na sana na ang ang ang ang ang ang ang ang a			
	E(m) = CRR - BRR				
LINE 1	CRR from ES FORM 3.00	\$6,337,170			
LINE 2	Brr from ES FORM 1.10	\$2,342,883	1		
LINE 3	E(m) (LINE 1 - LINE 2)	\$3,994,287			
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	73.9%			
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$2,951,778			
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$613,163)			
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$2,338,615			
	SURCHARGE FACTOR				
LINE 8	Net KY Retail E(m) (Line 7)	\$2,338,615			
LINE 9	KY Retail R(m) from ES FORM 3.30	\$49,802,297	-		
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	4.6958%			

Effective Date for Billing:

October 2010

Submitted By :

Manager Regulatory Services

Date Submitted :

Title :

September 17, 2010

1/ Case No. 2009-00459, dated June 28, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of August 2010

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MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY	\$2,531,784
FEBRUARY	3,003,995
MARCH	2,845,066
APRIL	2,095,535
MAY	1,514,859
JUNE	1,913,578
JULY	2,818,212
AUGUST	2,342,383
SEPTEMBER	2,852,305
OCTOBER	2,181,975
NOVEMBER	2,598,522
DECEMBER	1,407,969
TOTAL	\$28,106,683

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORAttachment 1 Page 205 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of August 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$6,292,620
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$44,550
	Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$6,337,170

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE NO.	COST COMPONENT		
1 2 3 4 5	COST COMPONENT Return on Rate Base : Utility Plant at Original Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes Net Utility Plant SO2 Emission Allowance Inventory from ES FORM 3.11 ECR & NOx Emission Allowance Inventory from ES FORM 3.12 Cash Working Capital Allowance from ES FORM 3.13, Line 12 Total Rate Base	\$191,327,552 (\$58,512,302) (\$43,387,622)	\$89,427,628 \$8,681,878 \$7,155 \$382,359 \$98,499,020
9	Weighted Average Cost of Capital - ES FORM 3.15	10.50%	
10 11	Monthly Weighted Avg. Cost of Capital (9) / 12 Monthly Return of Rate Base (8) * (10) Operating Expenses :		0.88% \$866,791
	Monthly Depreciation Expense		\$577,252
	Monthly Catalyst Amortization Expense		\$46,030 \$14,298
14 15	Monthly Property Taxes Monthly Kentucky Air Emissions Fee		\$30,551
	Monthly Environmental AEP Pool Capacity Costs		#0.070.000
16	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10		\$2,079,930 \$378,556
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13 Monthly SO2 Emission Allowance Consumption		\$2,299,212
18 19	Total Operating Expenses [Line 12 thru Line 18]		\$5,425,829
20	Total Revenue Requirement - Big Sandy Record on ES FORM 3.00, Line 1		\$6,292,620

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of August 2010

		(1)	(2)	(3)	(4)	(5)
		Allowance Activity in Month	Cumulative Balance	Dollar Value of Activity	Cumulative Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY Additions -			754,608		\$4,685,726	\$6.209
EPA Allowances		1,019	439,224	\$0	\$0	\$0.000
Gavin Reallocation		0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	33,930	\$0	\$9,455,560	\$278.678
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance				\$ 0	\$ 0	<u> </u>
Adjustment		0	4	\$0	\$0	\$0.000
Withdrawals - P & E Transfers Out Intercompany Sales Off - System Sales SO2 Emissions Allowance		0 0 0	11,382 52,690 303,050	\$0 \$0 \$0	\$836,106 \$4,758,135 \$29,780,273	\$73.459 \$90.304 \$98.269
Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)	21,212					
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)	(31,942)	(10,730)	592,407	\$2,299,212	\$42,093,446	\$71.055
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,123,388		\$8,681,878	\$7.728
Expense Month Member Load Ratio for AEP/Kentucky Power						0.06714

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of August 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	36,954	\$0	\$0	
P&E Transfers In	0	0	\$0	\$0 \$0	\$0.000
Intercompany Purchases	0 0	0	\$0 \$0	\$0 \$0	\$0.000
Other (List)	Ç	-			
Withdrawals -			.	# 0	\$0.000
P & E Transfers Out	0	0	\$0	\$0 \$0	\$0.000
Intercompany Sales	0	0	\$0 \$0	\$0 \$0	\$0.000
Off - System Sales	0	2,425	\$0 ¢0	\$0 \$0	\$0.000 \$0.000
ERC Consumed By Kentucky Power	0	930	\$0 \$0	\$0 \$0	\$0.000 \$0.000
NOx Consumed By Kentucky Power	1,022	19,088	\$0	<u>۵</u>	\$0.000
ENDING INVENTORY - Record Balance in		A 4 12 4 4		\$0	\$0.000
Column (4) on ES FORM 3.10, Line 5		14,511	1	1 \$ U	φυ.υθυ

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance	(2)	(3)	(4) .	(5)
· · · ·	Activity in	Cumulative	Dollar Value of	Cumulative	Weighted
	Month	Balance	Activity	Dollar Balance	Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,622	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	440	\$0	\$528,874	\$1,201.986
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	1,024	13,214	\$3,373	\$521,719	\$39.482
ENDING INVENTORY - Record Balance in					A 0.005
Column (4) on ES FORM 3.10, Line 5		31,848		\$7,155	\$0.225

For the Expense Month of August 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of August 2010

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[LINE]			
NO.	O&M Expenses		
1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$350,550 <u>\$2,299,212</u>	\$2,680,313
5 6 7 8 9 10	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses	\$0 \$363,407 \$0 \$3,373 \$560 <u>\$11,216</u>	
11	Total 2003 Plan O&M Expenses	<u>\$11,215</u>	<u>\$378,556</u>
12	Total Monthly O&M Expenses		<u>\$3,058,869</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$382,359

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs August 2010

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$1,393.90	\$0.00	\$0.00	\$1,393.90
SCR Boiler Outlet Ductwork	\$0.00	\$0.00	\$0.00	\$0.00
SCR Booster Fan	(\$2,581.57)	\$4,444.58	\$0.00	\$1,863.01
SCR NOx Monitoring	\$335.00	\$0.00	\$0.00	\$335.00
SCR Reactor	\$0.00	\$0.00	\$0.00	\$0.00
Total SCR July 2010 O & M Expense	(\$852.67)	\$4,444.58	\$0.00	\$3,591.91
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$559.80	\$559.80
Emission Testing Required Under Permit -				
Operation Maintenance	\$0.00 \$7,624.06	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$7,624.06

July 2010 O & M Expenses Filed

\$11,776

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of August 2010

Line		Ohio Power Company's Environmental	Indiana Michigan Power Company's Environmental	
No. (1)	Cost Component (2)	Cost to KPCo (3)	Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	, \$338,865		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$257,070		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$728,365		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,895		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$658,255		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$62,320		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,060,455	\$19,475	\$2,079,930

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of August 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$500,110		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$1,260,839		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$5,722,014		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$1,415,300		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$158,111		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$9,085,271	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.07	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.90	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$350,550	\$0	\$350,550

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

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LINE NO.	COST	AMOUNTS
	Utility Disect of Original Coast	\$601,233,295
1	Utility Plant at Original Cost	1.37%
2 3	Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$8,236,896
I B		100.00%
4 5	Ohio Power Company's Percentage Ownership - Environmental Investment OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
Э	Operations :	φ0,200,030
6	Disposal (5010000)	\$80,100
7	Urea (5020002)	\$254,096
8	Trona (5020003)	\$84,763
9	Lime Stone (5020004)	\$252,981
10	Air Emission Fee	\$8,973
10	Total Operations (Lines 6 thru 10)	\$680,913
	Maintenance :	+000,010
12	SCR Maintenance (5120000)	\$1,378
13	Scrubber (FGD) Maintenance (5120000)	\$137,050
14	Total Maintnenance (12) + (13)	\$138,428
	1/2 of Maintenance (14) * 50%	\$69,214
	Fixed O&M (11) + (15)	\$750,127
17	Ohio Power Company's Percentage Ownership - O&M Cost	66.67%
18	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	\$500,110
	Total Revenue Requirement,	
19	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,737,006
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.03
22	Ohio Power Surplus Weighing	84.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.87
	Amos Unit No. 3 Costs to Kentucky Power :	
24	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.87
25	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 1)	\$338,865

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$398,290,892
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37</u> %
3	Total Rate Base	\$5,456,585
	Operations :	
4	Disposal (5010000)	\$298,018
5	Urea (5020002)	\$284,562
6	Trona (5020003)	\$189,893
7	Lime Stone (5020004)	\$468,206
8	Air Emission Fee	\$8,622
9	Total Operations (Line 4 thru 8)	\$1,249,301
	Maintenance :	
10	SCR Maintenance (5120000)	\$14,887
11	Scrubber (FGD) Maintenance (5120000)	<u>\$8,188</u>
12	Total Maintenance (11) + (12)	\$23,076
13	1/2 Maintenance (12) * 50%	<u>\$11,538</u>
14	Fixed O&M (9) + (11)	<u>\$1,260,839</u>
	Total Revenue Requirement,	
15	Cost Associated with Cardinal Unit No. 3 (3) + (12)	<u>\$6,717,424</u>
16	Ohio Power Company's Percentage Ownership	100.00%
17	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)	\$6,717,424
18	Ohio Power Company Steam Capacity (kw)	8,458,000
19	Cardinal Unit No. 1 (\$/kw)	\$0.79
20	Ohio Power Surplus Weighing	84.00%
21	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)	\$0.66
	Cardinal Unit No. 1 Costs to Kentucky Power :	
22	Cardinal Unit No. 1 Portion (\$/kw) (21)	\$0.66
23	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	
24	(ES FORM 3.14, Page 1 of 10, Line 2)	\$257,070

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

TINE		
NO.	COST	AMOUNTS
		an a
1	Utility Plant at Original Cost	\$957,056,293
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$13,111,671
	Operations :	
4	Sludge Disposal (5010000)	\$643,439
5	Lime (5020001)	\$3,093,960
6	Urea (5020002)	\$926,427
7	Trona (5020003)	\$495,636
8	Lime Stone (5020004)	\$0
9	Polymer (5020005)	\$180,287
10	Air Emission Fee	\$36,017
11	Lease (5070005)	<u>\$0</u>
12	Total Operations (Lines 4 thru 10)	\$5,375,766
	Maintenance :	
13	SCR Maintenance (5120000)	\$94,028
14	Scrubber Maintenance (5120000)	<u>\$598,468</u>
15	Total Maintenance (12) + (13)	\$692,496
16	1/2 of Maintenance (13) * 50%	<u>\$346,248</u>
17	Fixed O&M (11) + (15)	<u>\$5,722,014</u>
	Total Revenue Requirement,	
18	Cost Associated with Gavin Plant (3) + (16)	\$18,833,685
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$18,833,685
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Gavin Plant (\$/kw)	\$2.23
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.87
	Gavin Plant Costs to Kentucky Power :	
25	Gavin Plant Portion (\$/kw) (23)	\$1.87
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	·
27	(ES FORM 3.14, Page 1 of 10, Line 3)	\$728,365

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$7,173,774 <u>1.37%</u> \$98,281
4 5 6	Operations : Urea (5020002) Trona (5020003) Air Emission Fee	\$0 \$0 <u>\$15,690</u>
7	Total Operations (4) + (5) + (6) Maintenance :	\$15,690
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,690</u>
4.4	Total Revenue Requirement,	¢142.074
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$113,971</u> 100.00%
12 13	Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$113,971
13 14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$1,139,062,655
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$15,605,158
	Operations :	
4	Disposal (5010000)	\$47,821
5	Lime Stone (5020004)	\$768,701
6	Urea (5020002)	\$466,418
7	Trona (5020003)	\$88,402
8	Lime Hydrate (5020007)	\$2,274
9	Polymer (5020005)	\$2,465
10	Air Emission Fee	<u>\$12,128</u>
11	Total Operations (Lines 4 thru 8)	\$1,388,210
	Maintenance :	
12	FDG (5120000)	\$40,106
13	SCR Maintenance (5120000)	<u>\$14,075</u>
14	1/2 of Maintenance (10 + 11) * 50%	<u>\$27,091</u>
15	Fixed O&M (9) + (12)	<u>\$1,415,300</u>
	Total Revenue Requirement,	
16	Cost Associated with Mitchell Plant (3) + (13)	<u>\$17,020,458</u>
17	Ohio Power Company's Percentage Ownership	100.00%
18	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$17,020,458
19	Ohio Power Company Steam Capacity (kw)	8,458,000
20	Mitchell Plant (\$/kw)	\$2.01
21	Ohio Power Surplus Weighing	84.00%
22	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.69
	Mitchell Plant Costs to Kentucky Power :	
23	Mitchell Plant Portion (\$/kw) (20)	\$1.69
24	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
25	(ES FORM 3.14, Page 1 of 10, Line 5)	\$658,255

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$107,185,185
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,468,437
	Operations :	
4	Urea (5020002)	\$118,874
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$34,561</u>
7	Total Operations (4) + (5) + (6)	\$153,435
	Maintenance :	
8	SCR Maintenance (5120000)	\$9,351
9	1/2 of Maintenance (8) * 50%	<u>\$4,676</u>
10	Fixed O&M (7) + (9)	<u>\$158,111</u>
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,626,548</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,626,548
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.19
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	AO 1O
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.16
	Muskingum Plant Costs to Kentucky Power :	60 40
18	Muskingum Plant Portion (\$/kw) (17)	\$0.16
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	¢60.000
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$62,320

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$20,298,007 <u>1.37%</u> \$278,083
4	Operations : Urea (5020002)	\$0
5 6	Trona (5020003) Air Emission Fee	\$0 <u>\$13,207</u>
7	Total Operations (4) + (5) + (6) Maintenance :	\$13,207
8 9	SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50%	\$0 \$0
10	Fixed O&M (7) + (9) Total Revenue Requirement,	<u>\$13,207</u>
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$291,290</u>
12 13	Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	100.00% \$291,290
14 15	Ohio Power Company Steam Capacity (kw) Sporn Plant (\$/kw)	8,458,000 \$0.03
16 17	Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	84.00%
	Attributed to Sporn Plant (\$/kw) (15) X (16) Sporn Plant Costs to Kentucky Power :	\$0.03
18 19	SpornGavin Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw)	\$0.03 <u>389,500</u>
20	Sporn Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of August 2010

<u>k.</u>		Plant	UNIT 1	UNIT 2	Plant	
NO.	COST	Common	AMOUNTS	AMOUNTS	Common	Total
	(2)	(3)	(4)	(5)	(6)	(7)
9-14-200 (72 ⁻⁰⁹	Utility Plant at Original Cost	\$1,777,228	\$10,544,676	\$16,709,416	\$2,202,020	
	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%	1.37%	1.37%	1.37%	
	Total Rate Base	\$24,348	\$144,462	\$228,919	\$30,168	
1457-05116 ² 2	Urea (5020002)	\$0	\$0	\$0	80	
are and the second s	Trona (5020003)	\$0	\$0	\$0	- O\$	
	Air Emission Fee	\$15,625	S	ŝ	OS S	
	Total Operations (4) + (5) + (6) Maintenance :	\$15,625	0\$	0	0\$	
	SCR Maintenance (5120000)	\$0	\$0	\$0	\$0	
n ADOLÉRICO	1/2 of Maintenance (8) * 50%	<u>\$0</u>	80	<u>\$0</u>	\$0	
	Fixed O&M (7) + (9)	\$15,625	\$	\$ 0	05	
	Total Revenue Requirement,					
	Cost Associated with Rockport Plant (3) + (10)	\$39,973	\$144,462	\$228,919	\$30,168	
- <u> </u>	Indiana Michigan Power Company's Percentage Ownership I&M's Share of Cost Associated with Rocknort Plant (11) X (12)	\$19,987	\$122 793	\$148 980	\$15 084	
			÷))) }	2	
	Total Rockport Plant Common and Units 1 & 2					\$306,844
and the second pro-	Indiana Michigan Power Company Steam Capacity (kw)					5,416,000
	Rockport Plant (\$/kw) (14) / (15)	*******				\$0.06
	Relitucky Fower Follout of Nockport Flatty Indiana Michigan Power Surplus Weighing	<u></u>				16.00%
	Portion of Weighted Average Capacity Rate					
						\$0.01
	Rockport Plant Costs to Kentucky Power : Rockport Plant Portion (\$/kw) (18)	<u>5 1</u>				\$0.01
1000000000	Kentucky Power Capacity Deficit (kw)					389,500
	Rockport Units 1 & 2 Environmental to Kentucky Power (19) * (20) (ES FORM 3.14, Page 1 of 10, Line 8)					\$3,895

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 221 of 609

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 222 of 609

ES FORM 3.14 Page 11 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,439,622
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1,37%</u>
3	Total Rate Base	\$1,348,623
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,625</u>
7	Total Operations (4) + (5) + (6)	\$15,625
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,248</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	.
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	045 500
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of August 2010

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 10/31/2009							
1 2	L/T DEBT S/T DEBT	\$550,000,000 \$0	53.561% 0.000%	6.48% 1.77%		3.47% 0.00%			3.47% 0.00%
3 4	ACCTS REC FINANCING C EQUITY	\$46,535,672 \$430,332,408	4.532% 41.907%	2.08% 10.50%	1/	0.09% 4.40%	1.5760	2/	0.09% 6.94%
5	TOTAL	\$1,026,868,080	100.000%			7.96%			10.50%
1/		nted Average Cost c on Common Equity)10 - 00020	<u> </u>				
2/		e Conversion Factor - 00020 dated - Apr		tion:					
1 2 3	OPERATING R UNCOLLECTIB Kentucky Public	EVENUE BLE ACCOUNTS EX C Service Commissi	PENSE (0.26%) on Assessment	(0.15%)			100.0000 0.2600 0.1500		
4 5		LE PRODUCTION I E TAX EXPENSE, I					99.5900 5.6372		
6 7	FEDERAL TAX 199 DEDUCTIO	ABLE PRODUCTIO)N PHASE-IN	N INCOME BEF	ORE 199 DEDU	JCTI	ON	93.9528 5.6372		
8 9		ABLE PRODUCTIO		EDUCTION (359	%)		88.3156 30.9105		
10	AFTER-TAX PF	RODUCTION INCOM	ИE				57.4051		
11 12 13 14 15	AFTER-TA 199 DEDU UNCOLLE	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNT: Public Service Comr	ICOME S EXPENSE				57.4051 5.6372 0.2600 0.1500		
16	TOTAL GROSS	S-UP FACTOR FOR	PRODUCTION	INCOME (ROU	NDE	D)	63.4523		
17 18 19 20	BLENDED FED FEDERAL STATE (LI BLENDED TAX	NE 4)	TAX RATE:				30.9105 5.6372 36.5477		
21	GROSS REVE	NUE CONVERSION	FACTOR (100.	0000 / Line 14)			1.5760		
1 2 3	STATE INCOM PRE-TAX I COLLECTI Kentucky F		100.0000 0.2600 0.1500	والمتعادية والمحادثة والمحادثة والمحادثة والمحادثة والمحادثة والمحادثة والمحادثة والمحادثة والمحادثة					
4 5		XABLE PRODUCTI ATE 199 DEDUCTI		FORE 199 DEE	DUCI	TION	99.5900 5.6372		
6 7		XABLE PRODUCTI COME TAX RATE	ON INCOME BE	Fore 199 dee	DUCI	TION	93.9528 6.0000	NC CLUB AND	
8	STATE INC	COME TAX EXPEN	SE (LINE 5 X LII	NE 6)			5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010. ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of August 2010

Total	(6)										\$44,550
Rockport Plant Common	(8)	\$2,185,292	(\$97,250) (\$22,252)	\$2,065,790	0.8086%	\$16,704	\$6,410 \$0	\$6,410	\$23,114	\$6,934	
Total Units 1 & 2 (C5 + C6)	(1)			\$8,877,564	0.8086%	\$71,784	\$39,968 \$0	\$39,968	\$111,752	\$33,526	
Unit No. 2	(6)	\$8,353,084	(\$1,860,444) (\$1,001,318)	\$5,491,322			\$24,502 \$0		legan second		
Unit No. 1	(5)	\$5,272,657	(\$1,250,039) (\$636,376)	\$3,386,242			\$15,466 \$0				
Rockport Plant Common	(4)	\$1,777,206	(\$829,445) (\$152,439)	\$795,322	0.8086%	\$6,431	\$5,212 \$15,625	\$20,837	\$27,268	\$4,090	
	(3)				9.7031%						
COST COMPONENT	(\mathcal{Z})	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOx Burners (LNB) Installed Cost Flyash Landfill Installed Cost	Less Accumulated Depreciation Less Accum. Def. Income Taxes	Fotal Rate Base	Weighted Average Cost of Capital - ES FORM 3.21 Wonthly Weighted Avg. Cost of Capital (LiNE 7 / 12)	Monthly Return of Rate Base (Line 6 * Line 8) Operating Expenses :	Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kentucky Fower's Forrion or Kookport Flants Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2
NO.				-	> 2 > 0		10 P			4 Ψ 7 Τ	<u>о</u>

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 08/31/2010							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	77,696,624 60,143,163	34.5309% 26.7296%	4.9721% 0.2457%		1.7169% 0.0657%			1.7169% 0.0657%
3 4	OFFSETS DEBT	0	0.0001%	2.9098%		0.0000%			0.0000%
5	C EQUITY	87,165,970	38.7394%	12.1600%	1/	4.7107%	1.681379	2/	7.9205%
6	TOTAL	225,005,757	100.0000%			6.4933%			9.7031%
1/	WACC = Weighted Cost Rates per the			ower Agreemer	nt				
2/	Gross Revenue Co	nversion Factor	(GRCF) Calculati	on:					
1	OPERATING REVE						100.00		
2 3 4 5	LESS: INDIANA ADJUSTED GROSS INCOME (LINE 1 X .085) INCOME BEFORE FED INC TAX								
6 7 8	LESS: FEDERAL (LINE 4 X .35) OPERATING INCO GROSS REVENUE		<u>32.025</u> 59.475						
9	FACTOR (100						<u>1.681379</u>		

For the Expense Month of August 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of August 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$49,802,297 \$554,987 \$7,167,304 \$9,834,175	73.9% 0.8% 10.7% 14.6%
5	Total Revenues for Surcharges Purposes	\$67,358,763	100.0%
6	Non-Physical Revenues for Month	\$1,077,006	
7	Total Revenues for Month	\$68,435,769	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
110.		
1	Kentucky Retail Surcharge Factor for June 2010	4.7991%
2	Kentucky Retail Revenues for Current Expense Month	\$50,905,816
3	Surcharge Collected (1) * (2)	\$2,443,021
4	Surcharge Amount To Be Collected	\$1,829,858
5	Over / (Under) Recovery (3) - (4) = (5)	\$613,163

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 227 of 609

117:

KENTUCKY POWER° A unit of American Electric Power

> Elizabeth O'Donnell, Executive Director Attn.: Isaac S. Scott Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, KY 40602

Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

RECEIVED

SEP 22 2010

PUBLIC SERVICE COMMISSION

September 22, 2010

Re: Monthly Environmental Surcharge Report - Revised

Dear Ms. O'Donnell

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power) files the original and two copies of its Environmental Surcharge Reports for the month of September 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for Service on and after September 28, 2010.

ES FORM 1.00 and ES FORM 1.10 of the Environmental Surcharge Report for the month of August 2010 have been revised and substitute pages are attached. The ES FORM 1.10 filed September 17, 2010, was not updated to show the new Base Net Environmental Costs associated with the new tariff that was approved and went into effect 6/29/2010. As a result of this oversight ES FORM 1.10 was calculated using the old base rate of \$2,342,883 rather than the recently approved base rate of \$4,088,830. Therefore a lower base amount was utilized, which resulted in the Environmental Surcharge Factor for the Expense Month of October to be overstated. Correcting this error reduces the surcharge from 4.6958% to 2.1050% and will result in a cost savings to the customer that will be billed for service on and after September 28, 2010. Please substitute the enclosed forms ES FORM 1.00 and ES FORM 1.10 in the monthly filing you received September 17, 2010.

I apologize for any inconvenience this may have caused. If there are any questions please contact me at 502-696-7010

Sincerely,

Lila P. Mursey

Lila P. Munsey Manager, Regulatory Services

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 228 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of August 2010

	CALCULATION OF E(m)	an an the second and a second and					
	E(m) = CRR - BRR						
LINE 1	CRR from ES FORM 3.00	\$6,337,170					
LINE 2	Brr from ES FORM 1.10	\$4,088,830	1/				
LINE 3	E(m) (LINE 1 - LINE 2)	\$2,248,340					
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	73.9%					
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,661,523					
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$613,163)					
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,048,360					
	SURCHARGE FACTOR						
LINE 8	Net KY Retail E(m) (Line 7)	\$1,048,360					
LINE 9	KY Retail R(m) from ES FORM 3.30	\$49,802,297					
LINE 10	Environmental Surcharge Factor for Expense Month (Line 8 / LINE 9)	2.1050%					

Effective Date for Billing:

October 2010

Submitted By :

Title :

P. Mursey ile

Manager Regulatory Services

Date Submitted :

September 17, 2010

1/ Case No. 2009-00459, dated June 28, 2010

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of August 2010

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MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net Environmental
Billing Month	Costs
JANUARY	\$3,991,163
FEBRUARY	3,590,810
MARCH	3,651,374
APRIL	3,647,040
MAY	3,922,590
JUNE	3,627,274
JULY	3,805,325
AUGUST	4,088,830
SEPTEMBER	3,740,010
OCTOBER	3,260,302
NOVEMBER	2,786,040
DECEMBER	4,074,321
TOTAL.	\$44,185,079
	==========



KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 230 of 609

Kentuchy Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

October 15, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

RECEIVED

OCT 15 2010

PUBLIC SERVICE COMMISSION

Attention: Aaron D. Greenwell

RE: Monthly Environmental Surcharge Report

Dear Mr. Derouren,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of September 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after October 27, 2010.

If there are any questions please contact me at 502-696-7010.

Lila P. Mursey Lila P. Munsey

Manager, Regulatory Services Enclosures

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of September 2010

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CALCULATION OF E(m)				
	E(m) = CRR - BRR			
LINE 1	CRR from ES FORM 3.00	\$4,543,622		
LINE 2	Brr from ES FORM 1.10	\$3,740,010		
LINE 3	E(m) (LINE 1 - LINE 2)	\$803,612		
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	77.2%		
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$620,389		
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$448,495)		
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$171,894		
	SURCHARGE FACTOR			
LINE 8	Net KY Retail E(m) (Line 7)	\$171,894		
LINE 9	KY Retail R(m) from ES FORM 3.30	\$40,903,323		
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	0.4202%		

Effective Date for Billing:

November 2010

Submitted By :

Title :

Manager Regulatory Services

Date Submitted :

October 15, 2010

1/ Case No. 2009-00459, dated June 28, 2010

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 232 of 609

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of September 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net
	Environmental
Billing Month	Costs
JANUARY	\$3,991,163
FEBRUARY	3,590,810
MARCH	3,651,374
APRIL	3,647,040
MAY	3,922,590
JUNE	3,627,274
JULY	3,805,325
AUGUST	4,088,830
SEPTEMBER	3,740,010
OCTOBER	3,260,302
NOVEMBER	2,786,040
DECEMBER	4,074,321
TOTAL	\$44,185,079
	===========

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of September 2010

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CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE		anna a suinna an an an tha ann an an tha ann an tha ann an tha ann an tha an tha an tha an tha an tha ann an t	
NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,497,988
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$45,634
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales	Factor of PPTALE (F7-4544) (F7-4544)	\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,543,622

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE NO.	COST COMPONENT		
NO. 1 2 3 4 5 6 7 8 9 10 11 12 13	Return on Rate Base : Utility Plant at Original Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes Net Utility Plant SO2 Emission Allowance Inventory from ES FORM 3.11 ECR & NOx Emission Allowance Inventory from ES FORM 3.12 Cash Working Capital Allowance from ES FORM 3.13, Line 13 Total Rate Base Weighted Average Cost of Capital - ES FORM 3.15 Monthly Weighted Avg. Cost of Capital (9) / 12 Monthly Return of Rate Base (8) * (10) Operating Expenses : Monthly Depreciation Expense Monthly Catalyst Amortization Expense	\$191,327,552 (\$59,135,584) (\$43,169,474) 10.50%	\$89,022,494 \$8,132,570 \$5,129 \$159,813 \$97,320,006 0.88% \$856,416 \$577,252 \$46,030
	Monthly Property Taxes Monthly Kentucky Air Emissions Fee		\$14,298 \$30,551
	Monthly Environmental AEP Pool Capacity Costs from ES FORM 3.14, Page 1 of 11, Column 5, Line 10 Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13 Monthly SO2 Emission Allowance Consumption Total Operating Expenses [Line 12 thru Line 18] Total Revenue Requirement - Big Sandy Record on ES FORM 3.00, Line 1		\$2,087,720 \$336,413 \$549,308 <u>\$3,641,572</u> \$4,497,988

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the Exp	pense Month	of Septemb	er 2010
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		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions - EPA Allowances		1,019	439,224	\$0	\$0	\$0.000
Gavin Reallocation		1,013	94,744	\$0 \$0	\$0 \$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	33,930	\$0	\$9,455,560	\$278.678
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance		0	4	\$0	\$0	\$0.000
Adjustment		0	4	. _Ф О	ψŪ	φυ.υυυ
Withdrawals -						
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	52,690	\$0	\$4,758,135	\$90.304
Off - System Sales		0	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance Adjustment		0	0	\$0	\$0	\$0.000
-		Ŭ	Ŭ	ψ0	Ψ.	¥0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1						
(Year 2009 & Prior)	4,088					
SO2 Emissions Allowances						
Consumed By Kentucky Power - 2:1						
(Years 2010 to 2014)	0	4,088	596,495	\$549,308	\$42,642,754	\$71.489
ENDING INVENTORY - Record						
Balance in Column (4) on						A
ES FORM 3.10, Line 5			1,119,300		\$8,132,570	\$7.266
Expense Month Member Load Ratio	or AED/Ko	ntucky Power				0.06714
Expense Monut Menuel Load Kallo	ULALI ING	IRUCKY I UWEL				U.VUI 14

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of September 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		· \$0	\$0.000
EPA Allowances	0	36,954	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	616	19,704	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		13.895		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,622	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	440	\$0	\$528,874	\$1,201.986
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	615	13,829	\$2,026	\$523,745	\$37.873
ENDING INVENTORY - Record Balance in					*- - - - - -
Column (4) on ES FORM 3.10, Line 5		31,233		\$5,129	\$0.164

For the Expense Month of September 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of September 2010

[LINE]			
NO.	O&M Expenses		
1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$362,235 <u>\$549,308</u>	\$942,094
5 6 7 8 9 10	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses	\$0 \$328,121 \$0 \$2,026 \$0 <u>\$6,266</u>	
11	Total 2003 Plan O&M Expenses		<u>\$336,413</u>
12	Total Monthly O&M Expenses		<u>\$1,278,507</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$159,813

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs September 2010

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	(\$1,028.00)	\$0.00	\$0.00	(\$1,028.00)
SCR Boiler Outlet Ductwork	\$0.00	\$0.00	\$0.00	\$0.00
SCR Booster Fan	\$3,134.67	\$176.87	\$0.00	\$3,311.54
SCR NOx Monitoring	\$0.00	\$0.00	\$0.00	\$0.00
SCR Reactor	\$0.00	\$0.00	\$0.00	\$0.00
Total SCR September 2010 O & M Expense	\$2,106.67	\$176.87	\$0.00	\$2,283.54
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$0.00
Emission Testing Required Under Permit - Operation Maintenance	\$0.00 \$3,982.56	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$3,982.56

September 2010 O & M Expenses Filed

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\$6,266

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of September 2010

Line		Ohio Power Company's Environmental	Indiana Michigan Power Company's Environmental	
No. (1)	Cost Component (2)	Cost to KPCo (3)	Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$346,655		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$225,910		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$767,315		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,895		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$646,570		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$66,215		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,068,245	\$19,475	\$2,087,720

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of September 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$763,300		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$364,873		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$6,794,024		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$1,151,183		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$255,119		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$9,357, 397	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.11	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.93	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$362,235	\$0	\$362,235

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
-		\$004 000 005
1	Utility Plant at Original Cost	\$601,233,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$8,236,896
4	Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
	Operations :	\$95,084
6	Disposal (5010000)	\$368,503
7	Urea (5020002)	\$207,982
8	Trona (5020003)	\$401,324
9	Lime Stone (5020004)	¢401,324
10	Air Emission Fee	\$8,973
10	Total Operations (Lines 6 thru 10)	\$1,081,866
11	Maintenance :	φι,001,000
12	SCR Maintenance (5120000)	\$3,443
13	Scrubber (FGD) Maintenance (5120000)	\$122,610
14	Total Maintnenance (12) + (13)	\$126,053
15	1/2 of Maintenance (14) * 50%	\$63,027
16	Fixed $O&M$ (11) + (15)	\$1,144,893
17	Ohio Power Company's Percentage Ownership - O&M Cost	66.67%
18	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	\$763,300
	Total Revenue Requirement,	<u>,,,,,,,,,,,,</u>
19	Cost Associated with Amos Unit No. 3 (5) + (18)	\$9,000,196
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.06
22	Ohio Power Surplus Weighing	84.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.89
	Amos Unit No. 3 Costs to Kentucky Power :	
24	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.89
25	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 1)	\$346,655

ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	. COST	AMOUNTS
1	Utility Plant at Original Cost	\$398,290,892
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$5,456,585
	Operations :	
4	Disposal (5010000)	(\$656,235)
5	Urea (5020002)	\$217,329
6	Trona (5020003)	\$115,503
7	Lime Stone (5020004)	\$532,597
8	Polymer (5020005)	\$20,761
9	Lime Hydrate (5020007)	\$0
10	Steam Exp (5020025)	\$50,963
11	Air Emission Fee	<u>\$8,622</u>
12	Total Operations (Line 4 thru 8)	\$289,540
	Maintenance :	
13	SCR Maintenance (5120000)	\$17,765
14	Scrubber (FGD) Maintenance (5120000)	<u>\$132,900</u>
15	Total Maintenance (11) + (12)	\$150,666
16	1/2 Maintenance (12) * 50%	<u>\$75,333</u>
17	Fixed O&M (9) + (11)	<u>\$364,873</u>
	Total Revenue Requirement,	
18	Cost Associated with Cardinal Unit No. 3 (3) + (12)	<u>\$5,821,458</u>
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (15) X (16)	\$5,821,458
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Cardinal Unit No. 1 (\$/kw)	\$0.69
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (19) X (20)	\$0.58
	Cardinal Unit No. 1 Costs to Kentucky Power :	*• • •
25	Cardinal Unit No. 1 Portion (\$/kw) (21)	\$0.58
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (22) * (23)	M005 0 10
27	(ES FORM 3.14, Page 1 of 10, Line 2)	\$225,910

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
NO.		AMOUNTS
4	Utility Diant at Original Coat	\$957,056,293
1	Utility Plant at Original Cost	4937,030,293 1.37%
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$13,111,671
3	Total Rate Base	φιο, τι τ,07 τ
	Operations :	\$644,743
4	Sludge Disposal (5010000)	
5	Lime (5020001)	\$3,505,581
6	Urea (5020002)	\$711,639
7	Trona (5020003)	\$809,073
8	Lime Stone (5020004)	\$0
9	Polymer (5020005)	\$503,264
10	Air Emission Fee	\$36,017
11	Lease (5070005)	<u>\$0</u>
12	Total Operations (Lines 4 thru 10)	\$6,210,316
	Maintenance :	\$400 T 40
13	SCR Maintenance (5120000)	\$128,749
14	Scrubber Maintenance (5120000)	<u>\$1,038,668</u>
15	Total Maintenance (12) + (13)	\$1,167,416
16	1/2 of Maintenance (13) * 50%	<u>\$583,708</u>
17	Fixed O&M (11) + (15)	<u>\$6,794,024</u>
	Total Revenue Requirement,	
18	Cost Associated with Gavin Plant (3) + (16)	\$19,905,695
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$19,905,695
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Gavin Plant (\$/kw)	\$2.35
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.97
	Gavin Plant Costs to Kentucky Power :	
25	Gavin Plant Portion (\$/kw) (23)	\$1.97
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
27	(ES FORM 3.14, Page 1 of 10, Line 3)	\$767,315

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations :	\$7,173,774 <u>1.37%</u> \$98,281
4 5 6 7	Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$15,690</u> \$15,690
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,690</u>
11 12 13	Cost Associated with Kammer Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	<u>\$113,971</u> 100.00% \$113,971
14 15 16	Ohio Power Company Steam Capacity (kw) Kammer Plant (\$/kw) Ohio Power Surplus Weighing	8,458,000 \$0.01 84.00%
17 18	Portion of Weighted Average Capacity Rate Attributed to Kammer Plant (\$/kw) (15) X (16) Kammer Plant Costs to Kentucky Power : Kammer Plant Portion (\$/kw) (17)	\$0.01 \$0.01
18 19 20	Kammer Plant Ponton (\$7,60) (17) Kentucky Power Capacity Deficit (kw) Kammer Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 4)	<u>389,500</u> \$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$1,139,062,655 <u>1.37%</u> \$15,605,158
4	Operations : Disposal (5010000) Urea (5020002)	(\$5,629) \$210,937
6 7	Trona (5020003) Lime Stone (5020004)	\$39,032 \$325,678
8 9	Polymer (5020005) Lime Hydrate (5020007)	\$2,643 \$0
10 11	Steam Exp (5020025) Air Emission Fee	\$19 <u>\$12,128</u> \$524,000
12	Total Operations (Lines 4 thru 8) Maintenance :	\$584,808
13 14	FDG (5120000) SCR Maintenance (5120000) 1/2 of Maintenance (10 + 11) * 50%	\$1,122,073 <u>\$10,678</u> \$566,376
15 16	Fixed O&M (9) + (12) Total Revenue Requirement,	<u>\$1,151,183</u>
17 18	Cost Associated with Mitchell Plant (3) + (13) Ohio Power Company's Percentage Ownership	<u>\$16,756,341</u> 100.00%
19 20 21	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15) Ohio Power Company Steam Capacity (kw) Mitchell Plant (\$/kw)	\$16,756,341 8,458,000 \$1.98
21 22 23	Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	84.00%
	Attributed to Mitchell Plant (\$/kw) (18) X (19) Mitchell Plant Costs to Kentucky Power :	\$1.66
24 25	Mitchell Plant Portion (\$/kw) (20) Kentucky Power Capacity Deficit (kw)	\$1.66 <u>389,500</u>
26	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22) (ES FORM 3.14, Page 1 of 10, Line 5)	\$646,570

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3 , 4 & 5)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$107,185,185
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,468,437
	Operations :	
4	Urea (5020002)	\$219,051
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$34,561</u>
7	Total Operations (4) + (5) + (6)	\$253,612
	Maintenance :	
8	SCR Maintenance (5120000)	\$3,013
9	1/2 of Maintenance (8) * 50%	<u>\$1,507</u>
10	Fixed O&M (7) + (9)	<u>\$255,119</u>
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,723,556</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,723,556
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.20
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.17
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.17
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$66,215

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations :	\$20,298,007 <u>1.37%</u> \$278,083
4 5 6 7	Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6) Maintenance :	\$0 \$0 <u>\$13,207</u> \$13,207
8 9 10	SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$13,207</u>
11 12 13	Cost Associated with Sporn Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	<u>\$291,290</u> 100.00% \$291,290
14 15 16 17	Ohio Power Company Steam Capacity (kw) Sporn Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	8,458,000 \$0.03 84.00%
18	Attributed to Sporn Plant (\$/kw) (15) X (16) Sporn Plant Costs to Kentucky Power : SpornGavin Plant Portion (\$/kw) (17)	\$0.03 \$0.03
19 20	Kentucky Power Capacity Deficit (kw) Sporn Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 7)	<u>389,500</u> \$11,685

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWVER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of September 2010

	Plant	UNIT 1	UNIT 2	Plant	
COST	Common	AMOUNTS	AMOUNTS	Common	Total
(2)	(3)	(4)	(5)	(9)	(2)
Utility Plant at Original Cost Member Primary Canacity Investment Rate (16 44% / 12)	\$1,777,228 1.37%	\$10,544,676 1.37%	\$16,709,416 1.37%	\$2,202,020 1.37%	
	\$24,348	\$144,462	\$23		
		1	1	(
	0 C	0\$	0\$ 9	0,4	
	\$15,625	÷	200	09	
fotal Operations $(4) + (5) + (6)$	\$15,625	0\$	0	0\$	
(Vaintenance ;	C Đ	ç	G	ç	
0005 Internation (8) * 50%) C	ç Ç	
))	<u>\$15,625</u>	S S	1 ()	N S	
Total Revenue Requirement,					
Cost Associated with Rockport Plant (3) + (10) Indiana Michinan Dowar Commanu's Dercentare Ownershin	\$39,973 50%	\$144,462 85 00%	\$228,919 65.08%	\$30,168 50,00%	
I&M's Share of Cost Associated with Rockport Plant (11) X (12)	\$19,987	\$122,793			
Total Rockport Plant Common and Units 1 & 2					\$306,844
Indiana Michigan Power Company Steam Capacity (kw)	<u></u>				5,416,000
Rockport Plant (\$/kw) (14) / (15) Kantucky Dower Borrion of Bockhort Plant /					\$0.06
Indiana Michigan Power Surplus Weighing					16.00%
Portion of Weighted Average Capacity Rate					
Attributed to Rockport Plant (\$/kw) (17) X (18) Rockport Plant Costs to Kentucky Power :					\$0.01
Rockport Plant Portion (\$/kw) (18)	24444444				\$0.01
Kentucky Power Capacity Deficit (kw)	<u></u>				389,500
Tockport Units 1 & 2 Environmental to relitudity Power (18) (20)					\$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,439,622
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$1,348,623
	Operations :	· · · · · · · · · · · · · · · · · · ·
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	\$15,625
7	Total Operations $(4) + (5) + (6)$	\$15,625
	Maintenance :	1. Common 201
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,248</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of September 2010

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 4/30/2010		ar married and some many register of		ng ng kata sa			
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	51.941% 0.000%	6.48% 1.77%		3.37% 0.00%			3.37% 0.00%
3 4	FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%	2.08% 10.50 %	1/	0.09% 4.61%	1.5762	2/	0.09% 7.27%
5	TOTAL	\$1,058,903,021	100.000%			8.07%			10.73%
1/		nted Average Cost o on Common Equity		10 - 00020					
2/	Gross Revenue Case No. 2010	Conversion Factor - 00020 dated - Apri	(GRCF) Calcula I 29, 2010	tion:					
1 2 3	OPERATING REVENUE UNCOLLECTIBLE ACCOUNTS EXPENSE (0.26%) Kentucky Public Service Commission Assessment (0.15%)								
4 5	STATE TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION STATE INCOME TAX EXPENSE, NET OF 199 DEDUCTION (SEE BELOW)								
6 7	FEDERAL TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION 199 DEDUCTION PHASE-IN								
8 9	FEDERAL TAXABLE PRODUCTION INCOME FEDERAL INCOME TAX EXPENSE AFTER 199 DEDUCTION (35%)								
10	AFTER-TAX PRODUCTION INCOME							-	
11 12 13 14 15	GROSS-UP FACTOR FOR PRODUCTION INCOME: AFTER-TAX PRODUCTION INCOME 199 DEDUCTION PHASE-IN UNCOLLECTIBLE ACCOUNTS EXPENSE Kentucky Public Service Commission Assessment (0.15%)						57.4173 5.6372 0.2400 0.1500		
16	TOTAL GROSS	UP FACTOR FOR	PRODUCTION I	INCOME (ROUI	NDEI)	63.4445		
17 18 19 20	BLENDED FED FEDERAL STATE (LII BLENDED TAX	NE 4)	TAX RATE:				30.9171 5.6384 36.5555		
21	GROSS REVENUE CONVERSION FACTOR (100.0000 / Line 14)								
1 2 3	STATE INCOME TAX CALCULATION: PRE-TAX PRODUCTION INCOME COLLECTIBLE ACCOUNTS EXPENSE (0.26%) Kentucky Public Service Commission Assessment (0.15%)								
4 5		XABLE PRODUCTIO ATE 199 DEDUCTIO		FORE 199 DED	UCT	ION	99.6100 5.6372		
6 7		XABLE PRODUCTIO	ON INCOME BEI	FORE 199 DED	UCT	ION	93.9728 6.0000		
8	STATE INC	COME TAX EXPENS	E (LINE 5 X LIN	IE 6)			5.6384		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9.

Weighted Average Cost of Captial Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of September 2010

Total	(6)											\$45,634	K
Rockport Plant Common	(8)	\$2 185 202	(\$103,660) (\$20,008)	\$2,061,624	0.8428%	\$17,375	\$6,410 \$0	\$6,410	\$23,785	\$7,136			
Total Units 1 & 2 (C5 + C6)	(/)			\$8,851,585	0.8428%	\$74,601	\$39,968 \$0	\$39,968	\$114,569	\$34,371			
Unit No. 2	(6)	\$8,353,084	(\$1,884,946) (\$992,742)	\$5,475,396		*****	\$24,502 \$0		2000-1000 W24 400 FPm				
Unit No. 1	(9)	\$5,272,657	(\$1,265,505) (\$630,963)	\$3,376,189			\$15,466 \$0			<u>y</u>			
Rockport Plant Common	(4)	\$1,777,206	(\$834,657) (\$150,614)	\$791,935	0.8428%	\$6,674	\$5,212 \$15,625	\$20,837	\$27,511	\$4,127			
	(3)				10.1134%								
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOX Burners (LNB) Installed Cost Elvash 1 andfill Installed Cost	-ses Accumulated Depreciation Less Accum. Def. Income Taxes	Total Rate Base	Weighted Average Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthly Return of Rate Base (Line 6 * Line 8) Operating Expenses :	Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Fotal Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kentucky Powers Portion of Rockport Plants Total Revenue Requirement.(C 4, Ln 14 + C 7, Ln 15 + C 8, L 15)	Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2	
NO. NO.		en anna a a an annachatacha		14672-141	N 4 N 4		10 10			4 5 25 7 7			

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KPSC Case No. 2011-00401 UC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 252 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 09/30/2010							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	77,699,411 49,779,596	36.3634% 23.2969%	4.9719% 0.2476%		1.8080% 0.0577%			1.8080% 0.0577%
3 4	OFFSETS DEBT	O	0.0000%	3.1271%		0.0000%			0.0000%
5	C EQUITY	86,195,854	40.3397%	12.1600%	1/	4.9053%	1.681379	2/	8.2477%
6	TOTAL	213,674,861	100.0000%			6.7710%			10.1134%
	enter anno anno anno anno anno anno anno ann								
1/	WACC = Weighted Cost Rates per the			'ower Agreemer	าร์				
2/	Gross Revenue Co	nversion Factor ((GRCF) Calculati	ion:					
1	OPERATING REVE						100.00		
2 3 4 5	LESS: INDIANA A (LINE 1 X .085) INCOME BEFORE LESS: FEDERAL	FED INC TAX	SS INCOME				<u>8.500</u> 91.500	-	
6 7 8	(LINE 4 X .35) OPERATING INCOME PERCENTAGE GROSS REVENUE CONVERSION					<u>32.025</u> 59.475			
9	FACTOR (100						<u>1.681379</u>		

For the Expense Month of September 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of September 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
1 2 3 4	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$40,903,323 \$495,401 \$6,337,586 \$5,270,698	77.2% 0.9% 12.0% 9.9%
5	Total Revenues for Surcharges Purposes	\$53,007,008	100.0%
6	Non-Physical Revenues for Month	\$521,456	
7	Total Revenues for Month	\$53,528,464	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for July 2010	0.2245%
2	Kentucky Retail Revenues for Current Expense Month	\$247,824,944
3	Surcharge Collected (1) * (2)	\$556,367
4	Surcharge Amount To Be Collected	\$107,872
5	Over / (Under) Recovery (3) - (4) = (5)	\$448,495

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 255 of 609

Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

RECEIVED

October 26, 2010

OCT **26** 2010

PUBLIC SERVICE COMMISSION

Jeff Shaw Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

RE: October Environmental Surcharge Report ES FORMS 1.00, 3.15 & 3.30 Revisions

Dear Mr. Shaw,

Kentucky Power Company filed the original and two copies of its Environmental Surcharge Reports for the month of September 2010 pursuant to KRS 278.183(3), on October 15, 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after October 27, 2010 were included.

As you requested by phone today, I reviewed the filing and agree a prorated factor should have been used instead of one of the two factors billed for September 2010, calculated on two different base revenue requirements from Case No. 2005-00341 dated March 14, 2006 and Case No. 2009-00459 dated June 28, 2010.

The Over (Under) Recovery Adjustment section of ES FORM 3.30, Line 1, Kentucky Retail Surcharge Factor for July 2010 has been revised to 1.5818%, which is between the two percentages previously calculated for the July 2010 filing of 0.2245% and 1.6074%. Since the Surcharge Collected on Line 3 reflects the actual amount collected of \$556,367, no changes were required to that number and therefore, the Kentucky Retail Revenues for Current Expense Month were updated to \$35,173,031.

Also, the Surcharge Amount to be collected on ES FORM 3.30, Line 4 was determined from the amounts to be recovered on ES FORM 1.00, Line 8 for the expense month of July 2010. The amount from Case No. 2005-00341 of \$772,199 and the amount from Case No. 2009-00459 of \$107,872 were averaged together, and the result of \$440,036 was to be collected in the month of September 2010 for the expense month of July 2010. As demonstrated on ES FORM 1.00, Line 6, the entire \$116,332 Over Recovery, or \$556,367 minus \$440,036 was used in calculating the September 2010 Environmental Surcharge Factor.

Jeff Shaw Page 2 October 26, 2010 KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 256 of 609

Finally, ES FORM 3.15, which was prematurely updated to an April 30, 2010 capital structure, has been revised to its previously approved levels as of 10/31/2009 based on Case No. 2010-00020 dated April 29, 2010, which provided a weighted cost of capital (pre-tax) of 10.5% and a gross revenue conversion factor of 1.5760.

If there are any questions please contact me at 502-696-7010.

Like P. Munny

Lila P. Munsey Manager, Regulatory Services Enclosures

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of September 2010

	CALCULATION OF E(m)	ing an transformer an	
	E(m) = CRR - BRR		
LINE 1	CRR from ES FORM 3.00	\$4,543,622	
LINE 2	Brr from ES FORM 1.10	\$3,740,010	1
LINE 3	E(m) (LINE 1 - LINE 2)	\$803,612	
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	77.2%	
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$620,389	
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$116,332)	
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$504,058	
	SURCHARGE FACTOR		
LINE 8	Net KY Retail E(m) (Line 7)	\$504,058	
LINE 9	KY Retail R(m) from ES FORM 3.30	\$40,903,323	
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	1.2323%	

Effective Date for Billing:

November 2010

Submitted By :

Title :

Manager Regulatory Services

Date Submitted :

October 15, 2010

1/ Case No. 2009-00459, dated June 28, 2010

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of September 2010	For the	Expense	Month	of Septemb	per 2010
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LINE NO.		Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF	· · · · · · · · · · · · · · · · · · ·	WACC (PRE-TAX)
		As of 10/31/2009							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	53.561% 0.000%	6.48% 1.77%		3.47% 0.00%			3.47% 0.00%
3 4	FINANCING C EQUITY	\$46,535,672 \$430,332,408	4.532% 41.907%	2.08% 10.50%	1/	0.09% 4.40%	1.5760	2/	0.09% 6.94%
5	TOTAL	\$1,026,868,080	100.000%			7.96%			10.50%
1/		nted Average Cost o on Common Equity		10 - 00020	. <u></u>	<u></u>			
2/		Conversion Factor - 00020 dated - Apr		lion:			- -		
1 2 3		EVENUE LE ACCOUNTS EX Service Commissio		0.15%)			100.0000 0.2600 0.1500		
4 5		LE PRODUCTION II E TAX EXPENSE, N				OW)	99.5900 · 5.6372		
6 7	FEDERAL TAX 199 DEDUCTIC	ABLE PRODUCTIO	N INCOME BEF	ORE 199 DEDU	ICTIC	N	93.9528 5.6372		
8 9		ABLE PRODUCTIO		DUCTION (35%	6)		88.3156 30.9105		
10	AFTER-TAX PR	RODUCTION INCOM	1E				57.4051		
11 12 13 14 15	AFTER-TA 199 DEDU(UNCOLLE(CTOR FOR PRODL X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS Whic Service Comm	COME S EXPENSE				57.4051 5.6372 0.2600 0.1500		
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION I	NCOME (ROUN	NDE)	63.4523		
17 18 19 20	BLENDED FED FEDERAL (STATE (LIN BLENDED TAX	NE 4)	TAX RATE:				30.9105 5.6372 36.5477		
21	GROSS REVEN	IUE CONVERSION	FACTOR (100.0	000 / Line 14)			1.5760		
1 2 3	PRE-TAX F	E TAX CALCULATIO PRODUCTION INCO BLE ACCOUNTS E) ublic Service Comm)ME (PENSE (0.26%)				100.0000 0.2600 0.1500		
4 5		ABLE PRODUCTION ATE 199 DEDUCTION		ORE 199 DED	UCT	ION	99.5900 5.6372		
6 7		ABLE PRODUCTIO	ON INCOME BEF	FORE 199 DED	UCTI	ION	93.9528 6.0000		
8	STATE INC	OME TAX EXPENS	E (LINE 5 X LIN	E 6)			5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9.

Weighted Average Cost of Capital Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of September 2010

SCHEDULE OF MONTHLY REVENUES

Line No,	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$40,903,323 \$495,401 \$6,337,586 \$5,270,698	77.2% 0.9% 12.0% 9.9%
5	Total Revenues for Surcharges Purposes	\$53,007,008	 100.0%
6	Non-Physical Revenues for Month	\$521,456	
7	Total Revenues for Month	\$53,528,464	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line		Amounts
No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for July 2010	1.5818%
2	Kentucky Retail Revenues for Current Expense Month	\$35,173,031
3	Surcharge Collected (1) * (2)	\$556,367
4	Surcharge Amount To Be Collected	\$440,036
5	Over / (Under) Recovery (3) - (4) = (5)	\$116,332

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 260 of 609

Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

November 19, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602 RECEIVED NOV 19 2010 PUBLIC SERVICE COMMISSION

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of October 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after November 29, 2010.

If there are any questions please contact me at 502-696-7010.

Zila P. Mursey Lila P. Munsey

Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 ES FORM 1.00 Attachment 1 Page 261 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of October 2010

	CALCULATION OF E(m)					
	E(m) = CRR - BRR					
LINE 1	CRR from ES FORM 3.00	\$4,683,697				
LINE 2	Brr from ES FORM 1.10	\$3,260,302	11			
LINE 3	E(m) (LINE 1 - LINE 2)	\$1,423,395				
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	77.4%				
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,101,708				
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	\$332,708				
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,434,416				
	SURCHARGE FACTOR					
LINE 8	Net KY Retail E(m) (Line 7)	\$1,434,416				
LINE 9	KY Retail R(m) from ES FORM 3.30	\$39,106,852				
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	3.6679%				

Effective Date for Billing:

December 2010

Submitted By :

Title :

ela P.) 110202

Manager Regulatory Services

Date Submitted :

November 19, 2010

1/ Case No. 2009-00459, dated June 28, 2010

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of October 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net Environmental
Billing Month	Costs
JANUARY	\$3,991,163
FEBRUARY	3,590,810
MARCH	3,651,374
APRIL	3,647,040
MAY	3,922,590
JUNE	3,627,274
JULY	3,805,325
AUGUST	4,088,830
SEPTEMBER	3,740,010
OCTOBER	3,260,302
NOVEMBER	2,786,040
DECEMBER	4,074,321
TOTAL	\$44,185,079

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of October 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE			
NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,635,671
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$48,026
	Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,683,697

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE		
NO.	COST COMPONENT	
<u>NO.</u>	COST COMPONENT	
	Return on Rate Base :	
1	Utility Plant at Original Cost \$191,327,552	
2	Less Accumulated Depreciation (\$59,135,584	I)
3	Less Accum. Def. Income Taxes (\$42,951,32)	
	Net Utility Plant	\$89,240,647
	SO2 Emission Allowance Inventory from ES FORM 3.11	\$7,576,409
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12	\$3,364
7	Cash Working Capital Allowance from ES FORM 3.13, Line 13	\$176,406
8	Total Rate Base	\$96,996,826
9	Weighted Average Cost of Capital - ES FORM 3.15 10.50	6
	Monthly Weighted Avg. Cost of Capital (9) / 12	0.88%
	Monthly Return of Rate Base (8) * (10)	\$853,572
	Operating Expenses :	
12	Monthly Depreciation Expense	\$577,252
	Monthly Catalyst Amortization Expense	\$46,030
	Monthly Property Taxes	\$14,298
	Monthly Kentucky Air Emissions Fee	\$30,551
	Monthly Environmental AEP Pool Capacity Costs	
16	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10	\$2,114,985
	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13	\$442,822
	Monthly SO2 Emission Allowance Consumption	\$556,161
19	Total Operating Expenses [Line 12 thru Line 18]	<u>\$3,782,099</u>
20	Total Revenue Requirement - Big Sandy	
	Record on ES FORM 3.00, Line 1	\$4,635,671

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY Additions -			754,608		\$4,685,726	\$6.209
EPA Allowances		1,019	439,224	\$0	\$0	\$0.000
Gavin Reallocation		0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	33,930	\$0 \$0	\$9,455,560	\$278.678
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance Adjustment		0	4	\$0	\$0	\$0.000
Withdrawals -						
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	52,690	\$0	\$4,758,135	\$90.304
Off - System Sales		0	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)	4,088					
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)	0	4,139	600,634	\$556,161	\$43,198,915	\$71.922
ENDING INVENTORY - Record Balance in Column (4) on					фъ. сто 400	to 704
ES FORM 3.10, Line 5			1,115,161	n sanga seri denga ketik	\$7,576,409	\$6.794
Expense Month Member Load Ratio	or AEP/Ke	ntucky Power		<u></u>	-1, - 1014, (1, 2 ⁻¹⁰), (2 ¹⁰),	0.06714

For the Expense Month of October 2010

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of October 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Baiance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	36,954	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power] 1	19,705	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		13,894		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of October 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,622	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	440	\$0	\$528,874	\$1,201.986
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	536	14,365	\$1,766	\$525,510	\$36.583
ENDING INVENTORY - Record Balance in				<u> </u>	\$0.440
Column (4) on ES FORM 3.10, Line 5		30,697		\$3,364	\$0.110

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of October 2010

1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$381,710 <u>\$556,161</u>	\$968,422
5 6 7 8 9	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses	\$0 \$333,019 \$0 \$1,766 \$1,804	
10 11	Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	<u>\$106,233</u>	<u>\$442,822</u>
12	Total Monthly O&M Expenses		<u>\$1,411,244</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$176,406

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs October 2010

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$10,918.11	\$18,857.28	\$0.00	\$29,775.39
SCR Boiler Outlet Ductwork	\$2,605.00	\$142.50	\$0.00	\$2,747.50
SCR Booster Fan	\$329.92	\$9,681.52	\$0.00	\$10,011.44
SCR NOx Monitoring	\$676.00	\$0.00	\$0.00	\$676.00
SCR Reactor	\$0.00	\$0.00	\$0.00	\$0.00
Total SCR October 2010 O & M Expense	\$14,529.03	\$28,681.30	\$0.00	\$43,210.33
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$1,803.80
Emission Testing Required Under Permit - Operation Maintenance	\$0.00 \$12,391.84	\$0.00 \$50,630.96	\$0.00 \$0.00	\$0.00 \$63,022.80

October 2010 O & M Expenses Filed

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\$108,037

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> ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of October 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$350,550		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$257,070		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$767,315		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,895		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$638,780		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$66,215		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,095,510	\$19,475	\$2,114,985

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of October 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 18)	\$802,886		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 14)	\$1,209,125		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 16)	\$6,662,932		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 13)	\$917,919		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$257,957		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$9,879,716	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.17	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.98	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17 ⁻	Fixed O&M Environmental Cost to Kentucky Power	\$381,710	\$0	\$381,710

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

For the Expense Month of October 2010

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$601,233,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$8,236,896
4	Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
	Operations :	+ (- - - -
6	Disposal (5010000)	\$42,955
7	Urea (5020002)	\$430,021
8	Trona (5020003)	\$246,574
9	Lime Stone (5020004)	\$378,517
10	Steam Exp (5020025)	(\$40)
11	Air Emission Fee	<u>\$8,973</u>
12	Total Operations (Lines 6 thru 10)	\$1,107,000
	Maintenance :	64 450
13	SCR Maintenance (5120000)	\$1,456
14	Scrubber (FGD) Maintenance (5120000)	<u>\$193,082</u>
15	Total Maintnenance (12) + (13)	<u>\$194,538</u>
16	1/2 of Maintenance (14) * 50%	<u>\$97,269</u>
1E E	Fixed O&M (11) + (15)	\$1,204,269
18	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
19	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$802,886</u>
	Total Revenue Requirement,	\$0,000,700
20	Cost Associated with Amos Unit No. 3 (5) + (18)	\$9,039,782
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.07
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	*0.00
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.90
	Amos Unit No. 3 Costs to Kentucky Power :	¢0.00
25	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.90
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
07	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	0050 550
27	(ES FORM 3.14, Page 1 of 10, Line 1)	\$350,550

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$398,290,892
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,456,585
	Operations :	
4	Disposal (5010000)	\$174,388
5	Urea (5020002)	\$253,996
6	Trona (5020003)	\$123,467
7	Lime Stone (5020004)	\$511,737
8	Polymer (5020005)	\$73
9	Lime Hydrate (5020007)	\$2,143
10	Steam Exp (5020025)	\$48,300
11	Air Emission Fee	\$8,622
12	Total Operations (Line 4 thru 8)	\$1,122,726
	Maintenance :	
13	SCR Maintenance (5120000)	\$20,180
14	Scrubber (FGD) Maintenance (5120000)	<u>\$152,617</u>
15	Total Maintenance (13) + (14)	\$172,797
16	1/2 Maintenance (15) * 50%	<u>\$86,399</u>
17	Fixed O&M (12) + (16)	<u>\$1,209,125</u>
	Total Revenue Requirement,	
18	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$6,665,710</u>
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$6,665,710
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Cardinal Unit No. 1 (\$/kw)	\$0.79
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.66
	Cardinal Unit No. 1 Costs to Kentucky Power :	
25	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.66
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	
27	(ES FORM 3.14, Page 1 of 10, Line 2)	\$257,070
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$957,056,293
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$13,111,671
	Operations :	
4	Sludge Disposal (5010000)	\$737,783
5	Lime (5020001)	\$3,319,758
6	Urea (5020002)	\$859,758
7	Trona (5020003)	\$658,793
8	Lime Stone (5020004)	\$0
9	Polymer (5020005)	\$633,354
10	Air Emission Fee	\$36,017
11	Lease (5070005)	<u>\$0</u>
12	Total Operations (Lines 4 thru 10)	\$6,245,463
	Maintenance :	
13	SCR Maintenance (5120000)	\$118,466
14	Scrubber Maintenance (5120000)	<u>\$716,471</u>
15	Total Maintenance (12) + (13)	\$834,937
16	1/2 of Maintenance (13) * 50%	<u>\$417,469</u>
17	Fixed O&M (11) + (15)	<u>\$6,662,932</u>
	Total Revenue Requirement,	
18	Cost Associated with Gavin Plant (3) + (17)	\$19,774,603
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$19,774,603
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Gavin Plant (\$/kw)	\$2.34
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.97
	Gavin Plant Costs to Kentucky Power :	
25	Gavin Plant Portion (\$/kw) (23)	\$1.97
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
27	(ES FORM 3.14, Page 1 of 10, Line 3)	\$767,315

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$7,173,774
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$98,281
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,690</u>
7	Total Operations (4) + (5) + (6)	\$15,690
	Maintenance :	2021
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,690</u>
	Total Revenue Requirement,	
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$113,971</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$113,971
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$1,139,062,655
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$15,605,158
	Operations :	
4	Disposal (5010000)	\$111,296
5	Urea (5020002)	\$276,091
6	Trona (5020003)	\$51,742
7	Lime Stone (5020004)	\$520,308
8	Polymer (5020005)	\$1,532
9	Lime Hydrate (5020007)	\$4,574
10	Steam Exp (5020025)	\$0
11	Air Emission Fee	<u>\$12,128</u>
12	Total Operations (Lines 4 thru 8)	\$977,671
	Maintenance :	
13	FDG (5120000)	(\$123,073)
14	SCR Maintenance (5120000)	<u>\$3,568</u>
15	1/2 of Maintenance (10 + 11) * 50%	<u>(\$59,753)</u>
16	Fixed O&M (9) + (12)	<u>\$917,919</u>
	Total Revenue Requirement,	
17	Cost Associated with Mitchell Plant (3) + (13)	<u>\$16,523,077</u>
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$16,523,077
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Mitchell Plant (\$/kw)	\$1.95
22	Ohio Power Surplus Weighing	84.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.64
	Mitchell Plant Costs to Kentucky Power:	
24	Mitchell Plant Portion (\$/kw) (20)	\$1.64
25	Kentucky Power Capacity Deficit (kw)	389,500
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
26	(ES FORM 3.14, Page 1 of 10, Line 5)	\$638,780

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

For the Expense Month of October 2010

ILINE		
NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$107,185,185 <u>1.37%</u> \$1,468,437
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Tatal Operationa (4) + (5) + (6)	\$222,529 \$0 <u>\$34,561</u> \$257,090
7 8 9 10	Total Operations (4) + (5) + (6) Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9)	\$257,090 \$1,733 <u>\$867</u> <u>\$257,957</u>
11 12 13	Total Revenue Requirement, Cost Associated with Muskingum Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	<u>\$1,726,394</u> 100.00% \$1,726,394
14 15 16	Ohio Power Company Steam Capacity (kw) Muskingum Plant (\$/kw) Ohio Power Surplus Weighing	8,458,000 \$0.20 84.00%
17	Portion of Weighted Average Capacity Rate Attributed to Muskingum Plant (\$/kw) (15) X (16) Muskingum Plant Costs to Kentucky Power :	\$0.17 \$0.17
18 19	Muskingum Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	\$0.17 <u>389,500</u>
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$66,215

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$20,298,007 <u>1.37%</u> \$278,083
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$13,207</u> \$13,207
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$13,207</u>
11 12 13	Cost Associated with Sporn Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	<u>\$291,290</u> 100.00% \$291,290 8.458.000
14 15 16 17	Ohio Power Company Steam Capacity (kw) Sporn Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	8,458,000 \$0.03 84.00%
18 19	Attributed to Sporn Plant (\$/kw) (15) X (16) Sporn Plant Costs to Kentucky Power : SpornGavin Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw)	\$0.03 \$0.03 <u>389,500</u>
20	Sporn Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685

ES FORM 3.14 Page 10 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (1&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of October 2010

LINE NO.	COST	Plant Common	UNIT 1 AMOUNTS	UNIT 2 AMOUNTS	Plant Common	Total
\mathbf{E}	(2)	(3)	(4)	(2)	(9)	(7)
~	Utility Plant at Original Cost	\$1,777,228	\$10,544,676	\$16,709,416	\$2,202,020	
2000	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%		1.37%	1.37%	
 ഗ	Total Rate Base	\$24,348	\$144,462	\$228,919	\$30,168	
	Uperations :	Ç	ç	Ç	Ç	
1 LO	Trona (5020003)	000	2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	A A A A	A A A	
с С	Air Emission Fee	\$15,625	S	08	08	
~	Total Operations (4) + (5) + (6) Maintenance:	\$15,625	\$	\$0	\$0	
00	SCR Maintenance (5120000)	C¥.	C C	C#	C 4	
, თ	1/2 of Maintenance (8) * 50%	è çê	, OS) G) 9 9 9	
0	Fixed O&M (7) + (9)	\$15,625	8	8	8	
	Total Revenue Requirement,					
	Cost Associated with Rockport Plant (3) + (10)	\$39,973	\$144,462	\$228,919		
<u>с</u> , с	Indiana Michigan Power Company's Percentage Ownership 18.0//s Share of Cost Associated with Docknort Plant (11) Y (12)	\$10 001 \$10 001	85.00%	65.08% ©140.000	<u>50.00%</u>	
))	ומומי א אוומום טו כטאר אאאטנומופע שוווו הטכגאטוו רומוון (דו) א (דב)	102'2' ¢	0122/30	\$140,400	400°CI &	
4	Total Rockport Plant Common and Units 1 & 2					\$306,844
÷ L	Indiana Michigan Power Company Steam Capacity (kw)					5,416,000
ഗ	Rockport Plant (\$/kw) (14) / (15)					\$0.06
~	remucky Power Ponton ot Kockport Plant / Indiana Michidan Power Surolus Weidhing					16.00%
<u>m</u>	Portion of Weighted Average Capacity Rate	201570				
				<u>an - 1742</u> an		\$0.01
<u>о</u> ,	rockport Flant Costs to Renucky Fower : (Rockport Plant Portion (\$/kw) (18)	the second s				\$0 U\$
20	Kentucky Power Capacity Deficit (kw)				131.004.02	389,500
	Rockport Units 1 & 2 Environmental to Kentucky Power (19) * (20)			tonemak		
	(ES FORM 3.14, Page 1 of 10, Line 8)					\$3,895

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ES FORM 3.14 Page 11 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE		
NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations :	\$98,439,622 <u>1.37%</u> \$1,348,623
4 5 6 7	Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6) Maintenance :	\$0 \$0 <u>\$15,625</u> \$15,625
8 9 10	SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,625</u>
11 12	Cost Associated with Tanners Creek Plant (3) + (10) Indiana Michigan Power Company's Percentage Ownership	<u>\$1,364,248</u> 100.00%
13 14 15	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12) Indiana Michigan Power Company Steam Capacity (kw) Tanners Creek Plant (\$/kw)	\$1,364,248 5,416,000 \$0.25
16 17	Indiana Michigan Power Surplus Weighing Portion of Weighted Average Capacity Rate	16.00%
18	Attributed to Rockport Plant (\$/kw) (15) X (16) Tanners Creek Plant Costs to Kentucky Power : Tanners Creek Plant Portion (\$/kw) (17)	\$0.04 \$0.04
10	Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	<u>389,500</u>
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

LINE NO.		Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 10/31/2009							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	53.561% 0.000%	6.48% 1.77%		3.47% 0.00%			3.47% 0.00%
3 4	FINANCING C EQUITY	\$46,535,672 \$430,332,408	4.532% 41.907%	ă	1/	0.09% 4.40%	1.5760	2/	0.09% 6.94%
5	TOTAL	\$1,026,868,080	100.000%			7.96%			10.50%
1/		nted Average Cost o on Common Equity		10 - 00020	L				
2/		Conversion Factor - 00020 dated - Apr							
1 2 3		EVENUE LE ACCOUNTS EX c Service Commissio					100.0000 0.2600 0.1500		
4 5		LE PRODUCTION II E TAX EXPENSE, N				OW)	99.5900 5.6372		
6 7	FEDERAL TAX 199 DEDUCTIC	ABLE PRODUCTIO IN PHASE-IN	N INCOME BEF	ORE 199 DEDU	CTI	ИС	93.9528 5.6372		
8 9		ABLE PRODUCTIO DME TAX EXPENSE		EDUCTION (35%	6)		88.3156 30.9105		
10	AFTER-TAX PF	RODUCTION INCOM	1E				57.4051		
11 12 13 14 15	AFTER-TA 199 DEDU UNCOLLEC	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS Jublic Service Comm	COME SEXPENSE				57.4051 5.6372 0.2600 0.1500		
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION	INCOME (ROUN	IDEI	D)	63.4523		
17 18 19 20	BLENDED FED FEDERAL STATE (LIN BLENDED TAX	VE 4)	TAX RATE:				30.9105 5.6372 36.5477		
21	GROSS REVEN	UE CONVERSION	FACTOR (100.0	0000 / Line 14)		, 8	1.5760		
1 2 3	STATE INCOMI PRE-TAX P COLLECTII Kentucky P		100.0000 0.2600 0.1500						
4 5		ABLE PRODUCTIC ATE 199 DEDUCTIC		FORE 199 DED	UCT	ON	99.5900 5.6372		
6 7		ABLE PRODUCTIC	IN INCOME BEI	FORE 199 DED	UCTI	ON	93.9528 6.0000		
8	STATE INC	OME TAX EXPENS	E (LINE 5 X LIN	IE 6)			5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010. ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

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For the Expense Month of October 2010

		1						-	-					ł
Total	(6)												\$48,026	
Rockport Plant Common	(8)			\$2,100,232 (\$110,070)	\$2.057.457	0.9159%	\$18,844	\$6,410 \$0	\$6,410	\$25,254	\$7,576			
Total Units 1 & 2 (C5 + C6)	(/)				\$8.825.605	0.9159%	\$80,834	\$39,968 \$	\$39,968	\$120,802	\$36,241			
Unit No. 2	(9)		\$8,353,084	(\$1,909,448)	\$5,459,469		<u> </u>	\$24,502 \$02) }		<u>I</u>	<u> </u>		
Unit No. 1	(5)		\$5,272,657	(\$1,280,971) (\$525,550)	\$3,366,136			\$15,466 \$0	2					
Rockport Plant Common	(4)		00,111,100	(\$839,869)	\$788,546	0.9159%	\$7,222	\$5,212 \$15,212	\$20,837	\$28,059	\$4,209			
	(3)					10.9910%								
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS)	AGGO AND NOX Burners (LNB) installed Cost	ryasır Larıdını nisadırdu Ocost Less Accumulated Depreciation Less Accum De Income Tavas	fotal Rate Base	Weighted Average Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthly Return of Rate Base (Line 6 * Line 8)	Operating Expenses : Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Piant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kentucky Power's Portion of Rockport Plants' Total Revenue Requirement.(C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Motor - Coording Cliners - Tipo 25 is to be Deconded and	NOLES. COST IN COUNTIN O, LINE TO IS 10 DE RECOREA AN ES FORM 3.00 Line 2	
LINE.		<u> </u>		ר - ד ר - ד				10 10 10			4 0 7 7	<u>x </u>	16 Т	

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

	Company	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
NO.	Component		Structures	Rales		(NET OF TAX)	GROP	-	(FRE-TAA)
		As of 10/31/2010							
		10/01/2010							
1	L/T DEBT	77,288,974	39.2945%	4.9362%		1.9397%			1.9397%
2	S/T DEBT	32,656,949	16.6032%	0.2070%		0.0344%			0.0344%
	CAPITALIZATION		0.00001/	0 504504		0.00000			0.00000
3 4	OFFSETS DEBT	0	0.0000%	3.5315%		0.0000%			0.0000%
5	C EQUITY	86,745,448	44.1023%	12.1600%	1/	5.3628%	1.681379	2/	9.0169%
-				-					
6	TOTAL	196,691,371	100.0000%			7.3369%			10.9910%
									=========
	WACC = Weighted	Average Cost of	Capital						
1/	Cost Rates per the	Provisions of the	Rockport Unit P	ower Agreeme	nt				
	• • • •								
2/	Gross Revenue Cor	nversion Factor (GRCF) Calculati	on:			:		
1	OPERATING REVE	NUE					100.00		
2	LESS: INDIANA A	DJUSTED GRO	SS INCOME						
3	(LINE 1 X .085)						<u>8.500</u>		
4	INCOME BEFORE						91.500		
5 6	LESS: FEDERAL I (LINE 4 X .35)						32.025		
	OPERATING INCO	ME PERCENTA	GE				<u>59.475</u>		
8	GROSS REVENUE	CONVERSION							
9	FACTOR (100)% / LINE 7)					<u>1.681379</u>		
1									

For the Expense Month of October 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of October 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
1 2 3 4	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$39,106,852 \$386,166 \$6,800,222 \$4,192,455	77.4% 0.8% 13.5% 8.3%
5	Total Revenues for Surcharges Purposes	\$50,485,695	100.0%
6	Non-Physical Revenues for Month	\$396,149	
7	Total Revenues for Month	\$50,881,844	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line		
No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for August 2010	2.1050%
2	Kentucky Retail Revenues for Current Expense Month	\$33,997,720
3	Surcharge Collected (1) * (2)	\$715,652
4	Surcharge Amount To Be Collected	\$1,048,360
5	Over / (Under) Recovery (3) - (4) = (5)	(\$332,708)

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



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Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

December 17, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

RECEIVED

DEC 17 2010 PUBLIC SERVICE COMMISSION

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of November 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after December 30, 2010.

If there are any questions please contact me at 502-696-7010.

Lila P. Mursey

Lila P. Munsey Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 1.00 Item No. 41 Attachment 1 Page 286 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of November 2010

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	CALCULATION OF E(m)		
	E(m) = CRR - BRR		
LINE 1	CRR from ES FORM 3.00	\$4,688,698	
LINE 2	Brr from ES FORM 1.10	\$2,786,040	1/
LINE 3	E(m) (LINE 1 - LINE 2)	\$1,902,658	
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	81.9%	
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,558,277	
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$30,426)	
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,527,851	
	SURCHARGE FACTOR		
LINE 8	Net KY Retail E(m) (Line 7)	\$1,527,851	
LINE 9	KY Retail R(m) from ES FORM 3.30	\$40,488,923	
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	3.7735%	

Effective Date for Billing:

January 2011

Submitted By :

Title :

unsey

Manager Regulatory Services

Date Submitted :

December 17, 2010

1/ Case No. 2009-00459, dated June 28, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of November 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$3,991,163 3,590,810 3,651,374 3,647,040 3,922,590 3,627,274 3,805,325 4,088,830 3,740,010 3,260,302 2,786,040 4,074,321

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of November 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE			en se son an se son a se son s
NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,638,843
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$49,855
	Third Component: Net Proceeds from Emission Allowances Sales		
	AS 1) SO2 - EPA Auction Proceeds received during Expense Month	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,688,698

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

For the Expense Month of November 2010

LINE NO.	COST COMPONENT		
		2001-141110-1544-1543-1542-15-15-15-15-15-15-15-15-15-15-15-15-15-	
	Return on Rate Base :		
1	Utility Plant at Original Cost	\$191,327,552	
2	Less Accumulated Depreciation	(\$60,382,148)	
3	Less Accum. Def. Income Taxes	(\$45,166,731)	
4	Net Utility Plant		\$85,778,673
5	SO2 Emission Allowance Inventory from ES FORM 3.11		\$7,049,408
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12		\$1,920
7	Cash Working Capital Allowance from ES FORM 3.13, Line 13		\$180,700
8	Total Rate Base		\$93,010,701
9	Weighted Average Cost of Capital - ES FORM 3.15	10.50%	
10	Monthly Weighted Avg. Cost of Capital (9) / 12		0.88%
11	Monthly Return of Rate Base (8) * (10)		\$818,494
	Operating Expenses :		
12	Monthly Depreciation Expense		\$577,252
13	Monthly Catalyst Amortization Expense	34945 A 3 3 3 3	\$46,030
14	Monthly Property Taxes		\$14,298
15	Monthly Kentucky Air Emissions Fee		\$30,551
	Monthly Environmental AEP Pool Capacity Costs		
16	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10		\$2,087,720
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13		\$537,496
18	Monthly SO2 Emission Allowance Consumption		\$527,002
19	Total Operating Expenses [Line 12 thru Line 18]		<u>\$3,820,349</u>
20	Total Revenue Requirement - Big Sandy		
	Record on ES FORM 3.00, Line 1		\$4,638,843

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

n den men en e		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions - EPA Allowances	are of the	1,019	439,224	\$0	\$0	\$0.000
Gavin Reallocation		0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	33,930	\$0	\$9,455,560	\$278.678
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance			_	A 0	\$ 0	
Adjustment		0	4	\$0	\$0	\$0.000
Withdrawals -						
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	52,690	\$0	\$4,758,135	\$90.304
Off - System Sales		0	303,050	\$0	\$29,780,273	\$98,269
SO2 Emissions Allowance						
Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)	4,088					
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)	0	3,922	604,556	\$527,002	\$43,725,916	\$72.327
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,111,239		\$7,049,408	\$6.344
Expense Month Member Load Ratio	or AEP/Ke	ntucky Power	2001			0.06714

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of November 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	49	37,003	\$0	\$0 \$0	
P&E Transfers In	0		\$0	ΦU \$0	\$0.000
Intercompany Purchases Other (List)	0	Ő	\$0 \$0	\$0	\$0.000
Withdrawals -			¢0	¢0.	¢0.000
P & E Transfers Out	0		\$0 \$0	\$0 \$0	\$0.000 \$0.000
Intercompany Sales Off - System Sales	0	2,425	\$0 \$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	3	19,708	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		13,940		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of November 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	107	44,729	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	440	\$0	\$528,874	\$1,201.986
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					.
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	484	14,849	\$1,443	\$526,954	\$35.488
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		30,320		\$1,920	\$0.063

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of November 2010

1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$30,551 \$350,550 <u>\$527,002</u>	\$908,103
5 6 7 8 9	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses	\$0 \$371,089 \$0 \$1,443 \$1,740 <u>\$163,224</u>	
11	Total 2003 Plan O&M Expenses		<u>\$537,496</u>
12	Total Monthly O&M Expenses		<u>\$1,445,599</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$180,700

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs October 2010

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$13,513.53	\$10,579.77	\$0.00	\$24,093.30
SCR Boiler Outlet Ductwork	\$0.00	\$0.00	\$0.00	\$0.00
SCR Booster Fan	(\$93.43)	(\$4,840.76)	\$0.00	(\$4,934.19)
SCR NOx Monitoring	\$610.75	\$0.00	\$0.00	\$610.75
SCR Reactor	\$0.00	\$0.00	\$0.00	\$0.00
Total SCR October 2010 O & M Expense	\$14,030.85	\$5,739.01	\$0.00	\$19,769.86
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$1,740.12
Emission Testing Required Under Permit -	40.00	\$ 2.22	A2 0 2	#0.00
Operation Maintenance	\$0.00 \$32,927.16	\$0.00 \$110,527.00	\$0.00 \$0.00	\$0.00 \$143,454.16

October 2010 O & M Expenses Filed

\$164,964

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of November 2010

		Ohio Power Company's	Indiana Michigan Power Company's	
Line No. (1)	Cost Component (2)	Environmental Cost to KPCo (3)	Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	, \$338,865		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$222,015		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$782,895		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,895		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$642,675		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$66,215		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,068,245	\$19,475	\$2,087,720

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of November 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$458,568		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$272,953		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$7,114,639		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$991,398		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$190,105		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$9,056,560	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.07	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.90	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$350,550	\$0	\$350,550

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
4	Utility Plant at Original Cost	\$601,233,295
1 2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$8,236,896
4	Ohio Power Company's Percentage Ownership - Environmental Investment	100.00%
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
, U	Operations :	· · ·
6	Disposal (5010000)	\$61,863
7	Urea (5020002)	\$271,870
8	Trona (5020003)	\$61,315
9	Lime Stone (5020004)	\$220,669
10	Steam Exp (5020025)	(\$37)
11	Air Emission Fee	<u>\$8,973</u>
12	Total Operations (Lines 6 thru 10)	\$624,653
	Maintenance :	
13	SCR Maintenance (5120000)	\$1,317
14	Scrubber (FGD) Maintenance (5120000)	<u>\$125,013</u>
15	Total Maintnenance (12) + (13)	<u>\$126,330</u>
16	1/2 of Maintenance (14) * 50%	<u>\$63,165</u>
17	Fixed O&M (11) + (15)	\$687,818
18	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
19	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$458,568</u>
	Total Revenue Requirement,	
20	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,695,464
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.03
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	ቀሳ ሰማ
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.87
	Amos Unit No. 3 Costs to Kentucky Power:	<u> </u>
25	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.87 <u>389,500</u>
26	Kentucky Power Capacity Deficit (kw)	<u>369,500</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	\$338,865
27	(ES FORM 3.14, Page 1 of 10, Line 1)	φυυυ _ι ουυ

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$398,290,892
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,456,585
	Operations :	
4	Disposal (5010000)	(\$410,381)
5	Urea (5020002)	\$132,020
6	Trona (5020003)	\$93,435
7	Lime Stone (5020004)	\$309,944
8	Polymer (5020005)	\$4,261
9	Lime Hydrate (5020007)	\$4,865
10	Steam Exp (5020025)	\$36,751
11	Air Emission Fee	<u>\$8,622</u>
12	Total Operations (Line 4 thru 8)	\$179,517
	Maintenance :	
13	SCR Maintenance (5120000)	\$7,211
14	Scrubber (FGD) Maintenance (5120000)	<u>\$179,661</u>
15	Total Maintenance (13) + (14)	\$186,872
16	1/2 Maintenance (15) * 50%	<u>\$93,436</u>
17	Fixed O&M (12) + (16)	<u>\$272,953</u>
	Total Revenue Requirement,	
18	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$5,729,538</u>
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$5,729,538
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Cardinal Unit No. 1 (\$/kw)	\$0.68
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.57
	Cardinal Unit No. 1 Costs to Kentucky Power :	
25	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.57
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	
27	(ES FORM 3.14, Page 1 of 10, Line 2)	\$222,015

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
		\$957,056,293
1	Utility Plant at Original Cost	4957,050,295 1.37%
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$13,111,671
3	Total Rate Base	φισ,ττι,σει
	Operations : Studies Dispagal (5010000)	\$726,834
4	Sludge Disposal (5010000)	\$3,946,163
5	Lime (5020001)	\$1,026,321
6	Urea (5020002)	\$620,529
7	Trona (5020003)	\$020,529
8	Lime Stone (5020004)	پر \$292,241
9	Polymer (5020005)	\$36,017
10		
11	Lease (5070005)	<u>\$0</u> ¢6 649 405
12	Total Operations (Lines 4 thru 10)	\$6,648,105
	Maintenance :	<u> </u>
13	SCR Maintenance (5120000)	\$140,858
14	Scrubber Maintenance (5120000)	<u>\$792,209</u>
15	Total Maintenance (12) + (13)	\$933,067
16	1/2 of Maintenance (13) * 50%	<u>\$466,534</u>
17	Fixed O&M (11) + (15)	<u>\$7,114,639</u>
	Total Revenue Requirement,	#00.000.010
18	Cost Associated with Gavin Plant (3) + (17)	\$20,226,310
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$20,226,310
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Gavin Plant (\$/kw)	\$2.39
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$2.01
	Gavin Plant Costs to Kentucky Power :	
25	Gavin Plant Portion (\$/kw) (23)	\$2.01
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
27	(ES FORM 3.14, Page 1 of 10, Line 3)	\$782,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

For the Expense Month of November 2010

4

LINE NO.	COST	AMOUNTS
4	Utility Plant at Original Cost	\$7,173,774
1	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2 3	Total Rate Base	\$98,281
3	Operations :	400,±01
	Urea (502002)	\$0
4 5	Trona (5020003)	\$0
5 6	Air Emission Fee	<u>\$15,690</u>
0 7	Total Operations (4) + (5) + (6)	\$15,690
1	Maintenance :	4.0,000
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	\$ <u>0</u>
10	Fixed $O&M(7) + (9)$	\$15,690
	Total Revenue Requirement,	
11	Cost Associated with Kammer Plant (3) + (10)	\$113,971
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$113,971
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
, č	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	\$1,139,062,655 <u>1.37%</u>
3	Total Rate Base Operations :	\$15,605,158
4 5	Disposal (5010000) Urea (5020002)	\$139,141 \$304,396
6	Trona (5020003)	\$32,922 \$529,998
7 8	Lime Stone (5020004) Polymer (5020005)	\$1,515
9 10	Lime Hydrate (5020007) Steam Exp (5020025)	\$4,856 \$0
11 12	Air Emission Fee Total Operations (Lines 4 thru 8)	<u>\$12,128</u> \$1,024,956
13	Maintenance : FDG (5120000)	(\$83,239)
14 15	SCR Maintenance (5120000) 1/2 of Maintenance (10 + 11) * 50%	<u>\$16,122</u> (\$33,559)
16	Fixed O&M (9) + (12) Total Revenue Requirement,	<u>\$991,398</u>
17	Cost Associated with Mitchell Plant (3) + (13)	<u>\$16,596,556</u> 100,00%
18 19	Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$16,596,556 8,458,000
20 21	Ohio Power Company Steam Capacity (kw) Mitchell Plant (\$/kw)	\$1.96
22 23	Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	84.00%
	Attributed to Mitchell Plant (\$/kw) (18) X (19) Mitchell Plant Costs to Kentucky Power :	\$1.65
24 25	Mitchell Plant Portion (\$/kw) (20) Kentucky Power Capacity Deficit (kw)	\$1.65 389,500
26	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22) (ES FORM 3.14, Page 1 of 10, Line 5)	\$642,675
20		······································

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$107,185,185
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$1,468,437
Ň	Operations :	
4	Urea (502002)	\$153,241
5	Trona (5020003)	\$0
6	Air Emission Fee	\$34,561
7	Total Operations (4) + (5) + (6)	\$187,802
	Maintenance :	
8	SCR Maintenance (5120000)	\$4,606
9	1/2 of Maintenance (8) * 50%	<u>\$2,303</u>
10	Fixed O&M (7) + (9)	<u>\$190,105</u>
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,658,542</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,658,542
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.20
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.17
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.17
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$66,215

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$20,298,007 <u>1.37%</u> \$278,083
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$13,207</u> \$13,207
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$13,207</u>
11 12 13	Cost Associated with Sporn Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	<u>\$291,290</u> 100.00% \$291,290
14 15 16 17	Ohio Power Company Steam Capacity (kw) Sporn Plant (\$/kw) Ohio Power Surplus Weighing Partian of Weighted Average Capacity Pate	8,458,000 \$0.03 84.00%
17	Portion of Weighted Average Capacity Rate Attributed to Sporn Plant (\$/kw) (15) X (16) Sporn Plant Costs to Kentucky Power : SpornGavin Plant Portion (\$/kw) (17)	\$0.03 \$0.03
19 20	Kentucky Power Capacity Deficit (kw) Sporn Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 7)	<u>389,500</u> \$11,685

ES FORM 3.14 Page 10 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of November 2010

					Kockpon	
	COST	Common	AMOUNTS		Common	Total
Kenery I	(2)	(3)	(4)	(5)	(6)	(2)
	Utility Plant at Original Cost	\$1,777,228	\$10,544,676	\$16,709,416	\$2,202,020	
	Member Primary Capacity Investment Kate (16.44% / 12) Total Rate Base	<u>1.37%</u> \$24,348	<u>1.37%</u> \$144,462	<u>3.37%</u> \$228,919	\$30,168	
10 Keist 17	Operations :					
16 <i>51/685</i> /29	Urea (5020002)	000	0.4	08	0.0	
	trona (≎u∠uuus) Air Emission Fee	\$15.625	2 8	양 영	승 영	
	Total Operations (4) + (5) + (6)	\$15,625	\$0	0\$	\$ 0	
	SCR Maintenance (5120000)	\$0	\$0	\$	\$0	
80 92 9	1/2 of Maintenance (8) * 50%	<u>\$0</u>	<u>8</u>	000		
8000-155 0 0	FIXEd U&M (/) + (%) Total Ravanua Raminament	070,010	р Д	2	Э Ж	
100000000	Cost Associated with Rockport Plant (3) + (10)	\$39,973	\$144,462	\$228,919		
	Indiana Michigan Power Company's Percentage Ownership 18Mis Share of Cost Associated with Rocknort Plant (11) X (12)	\$19.987	<u>85.00%</u> \$122.793	<u>65.08%</u> \$148.980	<u>50.00%</u> \$15.084	
and the second		>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>)))	• • •	
	Total Rockport Plant Common and Units 1 & 2					\$306,844
10 19 (SIN 19	Indiana Michigan Power Company Steam Capacity (kw)					5,416,000
	Rockport Plant (\$/kw) (14) / (15) Kentucky Power Portion of Rockport Plant /				- <u></u>	en.n¢
	Indiana Michigan Power Surplus Weighing					16.00%
-ARCHING AND	Portion of vveignee Average Capacity Rate Attributed to Rockport Plant (\$/kw) (17) X (18)					\$0.01
	Rockport Plant Costs to Kentucky Power : Rockport Plant Portion (\$/kw) (18)					\$0.01
OCCUPATION NO.	Kentucky Power Capacity Deficit (kw)					389,500
Contraction of the local division of the loc	Kockport Units 1 & 2 Environmental to Kentucky Power (19) * (20) (ES FORM 3.14, Page 1 of 10, Line 8)					\$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6) Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement, Cost Associated with Tanners Creek Plant (3) + (10) Indiana Michigan Power Company's Percentage Ownership I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12) Indiana Michigan Power Company Steam Capacity (kw) Tanners Creek Plant (\$/kw) Indiana Michigan Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16) Tanners Creek Plant Costs to Kentucky Power :	AMOUNTS \$98,439,622 <u>1.37%</u> \$1,348,623 \$0 <u>\$0</u> <u>\$15,625</u> \$15,625 \$15,625 <u>\$15,625</u> <u>\$15,625</u> <u>\$115,625</u> <u>\$115,625</u> <u>\$11,364,248</u> 100.00% \$1,364,248 5,416,000 \$0.25 16.00% \$0.04
18 19	Tanners Creek Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	<u>389,500</u>
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of November 2010

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 10/31/2009							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	53.561% 0.000%	6.48% 1.77%		3.47% 0.00%			3.47% 0.00%
3 4	FINANCING C EQUITY	\$46,535,672 \$430,332,408	4.532% 41.907%	2.08% 10.50%	1/	0.09% 4.40%	1.5760	2/	0.09% 6.94%
5	TOTAL	\$1,026,868,080	100.000%			7.96%			10.50%
1/		ited Average Cost o on Common Equity		10 - 00020					
2/		Conversion Factor - 00020 dated - Apri		tion:					
1 2 3		EVENUE LE ACCOUNTS EX Service Commissio					100.0000 0.2600 0.1500		
4 5		LE PRODUCTION II E TAX EXPENSE, N					99.5900 5.6372		
6 7	FEDERAL TAX 199 DEDUCTIO	ABLE PRODUCTIO DN PHASE-IN	N INCOME BEF	ORE 199 DEDL	JCTI	ON	93.9528 5.6372	TT-24400000000-0014000	
8 9		ABLE PRODUCTIO		EDUCTION (359	%)		88.3156 30.9105		
10	AFTER-TAX PF	RODUCTION INCON	ΛE				57.4051		
11 12 13 14 15	AFTER-TA 199 DEDU UNCOLLE	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS Public Service Comm	COME S EXPENSE				57.4051 5.6372 0.2600 0.1500		
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION	INCOME (ROU	NDE	D)	63.4523		
17 18 19 20	BLENDED FED FEDERAL STATE (LII BLENDED TAX	NE 4)	TAX RATE:				30.9105 5.6372 36.5477		
21	GROSS REVE	NUE CONVERSION	FACTOR (100.0	0000 / Line 14)			1.5760		
1 2 3	STATE INCOM PRE-TAX F COLLECTI Kentucky F		100.0000 0.2600 0.1500						
4 5		XABLE PRODUCTION TATE 199 DEDUCTION		FORE 199 DED	UCT	ION	99.5900 5.6372		
6 7		XABLE PRODUCTION COME TAX RATE	ON INCOME BE	FORE 199 DED	UCT	'ION	93.9528 6.0000		
8	STATE INC	COME TAX EXPENS	BE (LINE 5 X LIN	₩E 6)			5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010. ES FORM 3.20

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of November 2010

ſ	1 F	1997-1997-1997-1997-1997-1997-1997-1997	Augusta anna				La tracción de la composition de la comp	Alterna		Mariana	ana kata kata kata kata kata kata kata k		Vorteele		100200		K
Total	(6)															\$49,855	
Rockport Plant Common	(8)			\$2,185,292 /#116.480)	(\$38,527)	\$2,030,285	0.9810%	\$19,917	014 30		\$6,410		170'074	\$7,898			
Total Units 1 & 2 (C5 + C6)	(/)					\$8,733,306	0.9810%	\$85,674	000 000 4	000	\$39,968		740,021 \$	\$37,693			
Unit No. 2	(9)		\$8,353,084	/\$1 033 050V	(\$1,016,861)	\$5,402,273		<u> </u>	507 807 8	0 0							
Unit No. 1	(2)	40- <u>1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1</u>	\$5,272,657	(\$4 708 427)	(\$645,187)	\$3,331,033		r	007 U	4 5 5 5 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4	-						
Rockport Plant Common	(4)	40- <u>14</u> -14-15-14-14 19-14	\$1,777,206	(\$845 084)	(\$158,680)	\$773,445	0.9810%	\$7,587	е С, С, С, С, С, С,	\$15,625	\$20,837		\$4,264				
	(3)					1	11.7715%				1						
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS)	Utility Plant at Original Cost AEGCo Low NOX Burners (LNB) Installed Cost	Flyash Landfill Installed Cost	Less Accum. Def. Income Taxes	ase	Weighted Average Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthly Return of Rate Base (Line 6 * Line 8)	Operating Expenses :	Monuny Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant	CEMS and LNB (LINe 9 + LINe 12) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%)	Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%) Kentucky Dower's Portion of Pocknort Diante'	Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15)	Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2	
		Rockport Plan	Utility Plant at AEGCo Low N	Flyash Landfi	Less Accum.	Total Rate Base	Weighted Av Monthlv Wei	Monthly Retu	and the state	Monthly India	Total Operati	Total Reven	CENIS and L Kentucky Po	Kentucky Po	Total Revenu	Note: Cost in Columi ES FORM 3.00 Line 2	

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 11/30/2010							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	77,291,762 20,087,846	41.7742% 10.8569%	4.9360% 0.2263%		2.0620% 0.0246%			2.0620% 0.0246%
3 4	OFFSETS DEBT	0	0.0000%	3.9645%		0.0000%			0.0000%
5		87,643,330	47.3689%	12.1600%	1/	5.7601%	1.681379	2/	9.6849%
6	TOTAL	185,022,938	100.0000%			7.8467%			11.7715%
1/	WACC = Weighted Cost Rates per the	Average Cost of Provisions of the	f Capital Rockport Unit P	ower Agreemer	nt				
2/	Gross Revenue Co	nversion Factor ((GRCF) Calculati	on:					
1	OPERATING REVE		SS INCOME				100.00		
3	(LINE 1 X .085))					<u>8.500</u> 91.500		
4 5	LESS: FEDERAL								
6 7	(LINE 4 X .35) OPERATING INCO	ME PERCENTA	GE				<u>32.025</u> 59.475		
8 9	GROSS REVENUE FACTOR (100						<u>1.681379</u>		

For the Expense Month of November 2010

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of November 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$40,488,923 \$410,737 \$4,661,941 \$3,884,802	81.9% 0.8% 9.4% 7.9%
5	Total Revenues for Surcharges Purposes	\$49,446,403	100.0%
6	Non-Physical Revenues for Month	\$554,295	
7	Total Revenues for Month	\$50,000,698	

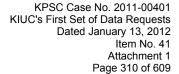
The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line		Amounts
No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for September 2010	1.2323%
2	Kentucky Retail Revenues for Current Expense Month	\$43,372,880
3	Surcharge Collected (1) * (2)	\$534,484
4	Surcharge Amount To Be Collected	\$504,058
5	Over / (Under) Recovery (3) - (4) = (5)	\$30,426

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



Kentucky Power 101A Enterprise Drive P O Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

RECEIVED

JAN 20 2011

PUBLIC SERVICE COMMISSION

January 20, 2010

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of December 2010. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after January 31, 2010.

If there are any questions please contact me at 502-696-7010.

P, Munsey Lila P. Munsey

Manager, Regulatory Services Enclosures



KENTUCKY POWER° A unit of American Electric Power

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 ES FORM 1.00 Page 311 of 609

1/

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of December 2010

	CALCULATION OF E(m)				
	E(m) = CRR - BRR				
LINE 1	CRR from ES FORM 3.00	\$5,974,087			
LINE 2	Brr from ES FORM 1.10	\$4,074,321			
LINE 3	E(m) (LINE 1 - LINE 2)	\$1,899,766			
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	86.5%			
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,643,298			
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$404,652)			
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,238,646			
	SURCHARGE FACTOR				
LINE 8	Net KY Retail E(m) (Line 7)	\$1,238,646			
LINE 9	KY Retail R(m) from ES FORM 3.30	\$56,106,329			
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	2.2077%			

Effective Date for Billing:

February 2011

Submitted By :

Title :

ila Ľ. en

Manager Regulatory Services

Date Submitted :

January 20, 2010

1/ Case No. 2009-00459, dated June 28, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of December 2010

MONTHLY BASE PERIOD REVENUE REQUIREMENT

1

Billing Month	Base Net Environmental Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$3,991,163 3,590,810 3,651,374 3,647,040 3,922,590 3,627,274 3,805,325 4,088,830 3,740,010 3,260,302 2,786,040 4,074,321 \$44,185,079 =========

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of December 2010

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$5,923,090
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$50,997
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during 		
	Expense Month 2) SO2 - Net Gain or (Loss) from Allowance Sales,	\$0	
	in compliance with the AEP Interim Allowance Agreement, received during Expense Month	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	, ,
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$5,974,087

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

For the Expense Month of December 2010

26

LINE		
NO.	COST COMPONENT	
110.		
	Return on Rate Base :	
1	Utility Plant at Original Cost \$191,327,	,552
2	Less Accumulated Depreciation (\$60,908,	,282)
3	Less Accum. Def. Income Taxes (\$45,405,	,568)
4	Net Utility Plant	\$85,013,702
5	SO2 Emission Allowance Inventory from ES FORM 3.11	\$16,910,379
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12	\$184,206
7	Cash Working Capital Allowance from ES FORM 3.13, Line 13	\$331,346
8	Total Rate Base	\$102,439,633
9	Weighted Average Cost of Capital - ES FORM 3.15 10	.50%
10	Monthly Weighted Avg. Cost of Capital (9) / 12	0.88%
11	Monthly Return of Rate Base (8) * (10)	\$901,469
	Operating Expenses :	9.00 G
12	Monthly Depreciation Expense	\$577,252
13	Monthly Catalyst Amortization Expense	\$46,030
14	Monthly Property Taxes	\$14,298
15	Monthly Kentucky Air Emissions Fee	\$37,434
	Monthly Environmental AEP Pool Capacity Costs	
16	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10	\$2,138,355
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13	\$663,977
18	Monthly SO2 Emission Allowance Consumption	\$1,544,275
19	Total Operating Expenses [Line 12 thru Line 18]	<u>\$5,021,621</u>
20	Total Revenue Requirement - Big Sandy	
	Record on ES FORM 3.00, Line 1	\$5,923,090

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of December 2010

		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY Additions -			754,608		\$4,685,726	\$6.209
EPA Allowances		0	439,224	\$0	\$0	\$0.000
Gavin Reallocation		0	94,744	\$0	\$0 \$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		33,701	67,631	\$11,503,061	\$20,958,621	\$309.897
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance						
Adjustment		0	4	\$0	\$0	\$0.000
Withdrawals -						
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		7,297	59,987	\$97,815	\$4,855,950	\$80.950
Off - System Sales		0	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance						
Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1						
(Year 2009 & Prior)		3,525		\$1,529,691		
SO2 Emissions Allowances						
Consumed By Kentucky Power - 2:1						
(Years 2010 to 2014)		1,088	609,169	\$14,584	\$45,270,191	\$74.315
ENDING INVENTORY - Record						
Balance in Column (4) on						
ES FORM 3.10, Line 5			1,133,030		\$16,910,379	\$14.925
Expense Month Member Load Ratio for	AEP/Ker	ntucky Power				0.06714

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of December 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	37,003	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$O	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	0	19,708	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		13,940		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of December 2010

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,729	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	540	980	\$486,000	\$1,014,874	\$1,035.586
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	737	15,586	\$303,714	\$830,668	\$53.296
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		30,123		\$184,206	\$6.115

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of December 2010

1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$37,434 \$405,080 <u>\$1,544,275</u>	\$1,986,789
5 6 7 8 9	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses	\$0 \$325,812 \$0 \$303,714 \$4,813	
10 11	Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	<u>\$29,638</u>	<u>\$663,977</u>
12	Total Monthly O&M Expenses		<u>\$2,650,766</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$331,346

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs December 2010

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$28,253.06	(\$20,733.62)	\$0.00	\$7,519.44
SCR Boiler Outlet Ductwork	\$0.00	\$0.00	\$0.00	\$0.00
SCR Booster Fan	\$93.43	\$25,000.00	\$0.00	\$25,093.43
SCR NOx Monitoring	\$1,991.38	\$0.00	\$0.00	\$1,991.38
SCR Reactor	\$0.00	\$0.00	\$0.00	\$0.00
Total SCR December 2010 O & M Expense	\$30,337.87	\$4,266.38	\$0.00	\$34,604.25
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$4,813.00
Emission Testing Required Under Permit -				
Operation Maintenance	\$0.00 \$65,401.04	\$0.00 (\$70,367.00)	\$0.00 \$0.00	\$0.00 (\$4,965.96)

December 2010 O & M Expenses Filed

\$34,451.29

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of December 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$350,550		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$260,965		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$747,840		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$3,895		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$685,520		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$58,425		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,118,880	\$19,475	\$2,138,355

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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ES FORM 3.14 Page 2 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of December 2010

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$810,117		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$1,309,065		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$6,248,409		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$2,034,504		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$49,083		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$10,480,075	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.24	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$1.04	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$405,080	\$0	\$405,080

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE		
NO.	COST	AMOUNTS
	Likility, Direct at Oviginal Cook	¢604 000 005
1	Utility Plant at Original Cost	\$601,233,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$8,236,896
4	Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,236,896
	Operations :	¢90.007
6	Disposal (5010000)	\$82,697
7	Urea (5020002)	\$374,395
8	Trona (5020003)	\$169,964
9	Lime Stone (5020004)	\$359,838
10	Steam Exp (5020025)	(\$34)
11	Air Emission Fee	\$8,973 \$005,022
12	Total Operations (Lines 6 thru 10)	\$995,833
40	Maintenance :	¢0.440
13	SCR Maintenance (5120000)	\$2,110 \$126.454
14	Scrubber (FGD) Maintenance (5120000)	<u>\$436,451</u> \$438,561
15	Total Maintnenance (12) + (13)	\$438,561 \$210,281
16	1/2 of Maintenance (14) * 50% Fixed O&M (11) + (15)	<u>\$219,281</u> \$1,215,114
17 18		\$1,215,114
10 19	Ohio Power Company's Percentage Ownership - O&M Cost OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>66.67%</u> \$810,117
19	Total Revenue Requirement,	<u></u>
20	Cost Associated with Amos Unit No. 3 (5) + (18)	\$9,047,013
20	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.07
23	Ohio Power Surplus Weighing	84.00%
23 24	Portion of Weighted Average Capacity Rate	0~7.0070
27	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.90
	Amos Unit No. 3 Costs to Kentucky Power :	φ0.00
25	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.90
26	Kentucky Power Capacity Deficit (kw)	389,500
20	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	000,000
27	(ES FORM 3.14, Page 1 of 10, Line 1)	\$350,550
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

[LINE]		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$398,290,892
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,456,585
	Operations :	
4	Disposal (5010000)	\$282,166
5	Urea (5020002)	\$186,931
6	Trona (5020003)	\$81,449
7	Lime Stone (5020004)	\$314,727
8	Polymer (5020005)	\$269
9	Lime Hydrate (5020007)	\$2,209
10	Steam Exp (5020025)	\$40,512
11	Air Emission Fee	<u>\$8,622</u>
12	Total Operations (Line 4 thru 8)	\$916,885
	Maintenance :	
13	SCR Maintenance (5120000)	\$31,083
14	Scrubber (FGD) Maintenance (5120000)	<u>\$753,276</u>
15	Total Maintenance (13) + (14)	\$784,359
16	1/2 Maintenance (15) * 50%	<u>\$392,180</u>
17	Fixed O&M (12) + (16)	<u>\$1,309,065</u>
	Total Revenue Requirement,	
18	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$6,765,650</u>
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$6,765,650
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Cardinal Unit No. 1 (\$/kw)	\$0.80
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.67
	Cardinal Unit No. 1 Costs to Kentucky Power :	
25	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.67
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	
27	(ES FORM 3.14, Page 1 of 10, Line 2)	\$260,965

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$957,056,293
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$13,111,671
	Operations :	
4	Sludge Disposal (5010000)	\$659,817
5	Lime (5020001)	\$3,077,541
6	Urea (5020002)	\$820,329
7	Trona (5020003)	\$670,365
8	Lime Stone (5020004)	\$0
9	Polymer (5020005)	\$292,242
10	Air Emission Fee	\$36,017
11	Lease (5070005)	<u>\$0</u>
12	Total Operations (Lines 4 thru 10)	\$5,556,311
	Maintenance :	
13	SCR Maintenance (5120000)	\$182,254
14	Scrubber Maintenance (5120000)	<u>\$1,201,942</u>
15	Total Maintenance (12) + (13)	\$1,384,196
16	1/2 of Maintenance (13) * 50%	<u>\$692,098</u>
17	Fixed O&M (11) + (15)	<u>\$6,248,409</u>
	Total Revenue Requirement,	
18	Cost Associated with Gavin Plant (3) + (17)	\$19,360,080
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$19,360,080
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Gavin Plant (\$/kw)	\$2.29
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.92
	Gavin Plant Costs to Kentucky Power:	
25	Gavin Plant Portion (\$/kw) (23)	\$1.92
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
27	(ES FORM 3.14, Page 1 of 10, Line 3)	\$747,840

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$7,173,774
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$98,281
Ŭ	Operations :	400, - 07
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	\$15,690
7	Total Operations $(4) + (5) + (6)$	\$15,690
	Maintenance :	. ,
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,690</u>
	Total Revenue Requirement,	
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$113,971</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$113,971
14	Ohio Power Company Steam Capacity (kw)	8,458,000
N 8	Kammer Plant (\$/kw)	\$0.01
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.01
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.01
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$1,139,062,655
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$15,605,158
	Operations :	
4	Disposal (5010000)	\$502,055
5	Urea (5020002)	\$512,549
6	Trona (5020003)	\$70,366
7	Lime Stone (5020004)	\$788,892
8	Polymer (5020005)	\$2,596
9	Lime Hydrate (5020007)	\$4,469
10	Steam Exp (5020025)	\$0
11	Air Emission Fee	<u>\$12,128</u>
12	Total Operations (Lines 4 thru 8)	\$1,893,055
	Maintenance :	
13	FDG (5120000)	\$272,794
14	SCR Maintenance (5120000)	<u>\$10,103</u>
15	1/2 of Maintenance (10 + 11) * 50%	<u>\$141,449</u>
16	Fixed O&M (9) + (12)	<u>\$2,034,504</u>
	Total Revenue Requirement,	
17	Cost Associated with Mitchell Plant (3) + (13)	<u>\$17,639,662</u>
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$17,639,662
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Mitchell Plant (\$/kw)	\$2.09
22	Ohio Power Surplus Weighing	84.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.76
	Mitchell Plant Costs to Kentucky Power :	
24	Mitchell Plant Portion (\$/kw) (20)	\$1.76
25	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
26	(ES FORM 3.14, Page 1 of 10, Line 5)	\$685,520

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$107,185,185
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,468,437
	Operations :	
4	Urea (5020002)	\$14,235
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$34,561</u>
7	Total Operations (4) + (5) + (6)	\$48,796
	Maintenance :	
8	SCR Maintenance (5120000)	\$573
9	1/2 of Maintenance (8) * 50%	<u>\$287</u>
10	Fixed O&M (7) + (9)	<u>\$49,083</u>
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,517,520</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,517,520
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.18
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.15
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.15
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$58,425

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$20,298,007
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$278,083
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$13,207</u>
7	Total Operations (4) + (5) + (6)	\$13,207
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$13,207</u>
	Total Revenue Requirement,	
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$291,290</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$291,290
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Sporn Plant (\$/kw)	\$0.03
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (18M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of December 2010

	COST	Plant Common	UNIT 1 AMOUNTS	UNIT 2 AMOUNTS	Plant Common	Total
	(2)	(3)	(4)	(5)	(6)	(7)
	Utility Plant at Original Cost			\$16,709,416	\$2,202,020	
~ _	Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	<u>1.37%</u> \$24.348	<u>1.37%</u> \$144.462	<u>1.37%</u> \$228.919	<u>1.3/%</u> \$30.168	
1.1	Operations :				-	
	Urea (5020002) Truna (5020003)	09 9	⇔ 4	00 C	0 C	
- 61	Air Emission Fee	\$15.625	<u>Ş</u>	\$	3 03	
~ ~	Total Operations (4) + (5) + (6) Maintenance :	\$15,625	\$0	0\$	80	
	SCR Maintenance (5120000)	\$0	0\$	\$	0\$	
- II.	1/2 of Waimtenance (8) * 50% Fixed O&M (7) + (9)	<u>\$15,625</u>	0.00)))))))))))))))))))	<u> </u>	
	Total Revenue Requirement,	10 10 10 10				
	dost Associated with Nockbult Flain (a) + (10) ndíana Michigan Power Company's Percentage Ownership	409,813	9 144,402 85,00%	0220,918		
	&M's Share of Cost Associated with Rockport Plant (11) X (12)	\$19,987	\$122,793	\$148,980	\$15,084	
	Total Rockport Plant Common and Units 1 & 2					\$306,844
	Indiana Michigan Power Company Steam Capacity (kw)					5,416,000
	Rockport Plant (\$/Kw) (14) / (15) Kentucky Power Portion of Rockport Plant /					\$0.06
	Indiana Michigan Power Surplus Weighing					16.00%
	Portion of Weighted Average Capacity Rate Attributed to Rocknort Plant (\$/kw) (17) X (18)	<u> </u>	<u> </u>			\$0 U
	Rockport Plant Costs to Kentucky Power :					-
	Rockport Plant Portion (\$/kw) (18) Kantircky Bower Canacity Deficit /kw/					\$0.01 289 500
	Rockport Units 1 & 2 Environmental to Kentucky Power (19) * (20)	- to Those share			ra vel adarb	200
	ES FORM 3.14, Page 1 of 10, Line 8)					\$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

For the Expense Month of December 2010

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,439,622
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,348,623
4	Operations :	ф.
4	Urea (5020002)	\$0 \$0
5	Trona (5020003) Air Emission Fee	\$0 \$15 625
6 7	Total Operations (4) + (5) + (6)	<u>\$15,625</u> \$15,625
ſ	Maintenance :	\$10,020
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	\$0
10	Fixed $O&M(7) + (9)$	<u>\$15,625</u>
Ĭ	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	\$1,364,248
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,248
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of	of December 2010
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LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 10/31/2009							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	53.561% 0.000%	6.48% 1.77%		3.47% 0.00%			3.47% 0.00%
3 4	FINANCING C EQUITY	\$46,535,672 \$430,332,408	4.532% 41.907%	2.08% 10.50%	1/	0.09% 4.40%	1.5760	2/	0.09% 6.94%
5	TOTAL	\$1,026,868,080	100.000%			7.96%			10.50%
1/		nted Average Cost o on Common Equity		10 - 00020					
2/		Conversion Factor - 00020 dated - Apr		tion:					
1 2 3		EVENUE BLE ACCOUNTS EX c Service Commissio					100.0000 0.2600 0.1500		
4 5		LE PRODUCTION II E TAX EXPENSE, N					99.5900 5.6372		
6 7	FEDERAL TAX 199 DEDUCTIO	ABLE PRODUCTIO DN PHASE-IN	N INCOME BEF	ORE 199 DEDL	JCTIO	NC	93.9528 5.6372		
8 9		ABLE PRODUCTIO OME TAX EXPENSI		EDUCTION (35%	%)		88.3156 30.9105		
10	AFTER-TAX PF	RODUCTION INCOM	ΛE				57.4051		
11 12 13 14 15	GROSS-UP FA AFTER-TA 199 DEDU UNCOLLE Kentucky F	57.4051 5.6372 0.2600 0.1500							
16	TOTAL GROSS	S-UP FACTOR FOR	PRODUCTION	INCOME (ROUI	NDE	D)	63.4523		
17 18 19 20	BLENDED FEDERAL AND STATE TAX RATE: FEDERAL (LINE 8) STATE (LINE 4) BLENDED TAX RATE								
21	GROSS REVE	NUE CONVERSION	FACTOR (100.0	0000 / Line 14)			1.5760		
1 2 3	STATE INCOM PRE-TAX F COLLECTI Kentucky F	100.0000 0.2600 0.1500							
4 5	STATE TA LESS: ST	99.5900 5.6372							
6 7		XABLE PRODUCTIO	ON INCOME BE	FORE 199 DED	UCT	ION	93.9528 6.0000		
8	STATE INC	COME TAX EXPENS	BE (LINE 5 X LIN	NE 6)			5.6372		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 10/31/2009 based on Case No. 2010-00020, dated April 29, 2010. ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of December 2010

Total	(6)							4				\$50,997	
Rockport Plant Common	(8)		\$2.185.292	(\$122,890) (\$40,885)	\$2,021,517	1.0198%	\$20,615	\$6,410 \$0	\$6,410	\$27,025	\$8,108		
l otal Units 1 & 2 (C5 + C6)					\$8,694,063	1.0198%	\$88,662	\$39,968 \$0	\$39,968	\$128,630	\$38,589		
Unit No. 2	(9)	nan an an Anna	\$8,353,084	(\$1,958,452) (\$1.016.540)	\$5,378,092		L	\$24,502 \$0					
Unit No. 1	(2)	MILTERINGE ENTITIAL ACTAC	\$5,272,657	(\$1,311,903) (\$644.783)	\$3,315,971		an a	\$15,466 \$0			<u></u>		
Rockport Plant Common	(4)	\$1,777,206	- -	(\$850,293) (\$159,197)	\$767,716	1.0198%	\$7,829	\$5,212 \$15.625	\$20,837	\$28,666	\$4,300		
	(3)				l	12.2373%							
COST COMPONENT	and the second	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost	AEGCo Low NOx Burners (LNB) Installed Cost Flyash Landfill Installed Cost	ess Accumulated Depreciation Less Accum. Def. Income Taxes	Fotal Rate Base	Weighted Average Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Vonthly Return of Rate Base (Line 6 * Line 8)	Operating Expenses : Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kentucky Power's Portion of Rockport Plants' Total Revenue Requirement.(C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2	
NO.	Ê	<u>сл</u> 		<u> </u>		► 8		19 19 19			4 5 7 X	<u>6</u> б	

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

For the Expense Month of December 2010

LINE			Cap.	Cost		WACC	THE REPORT OF THE REAL PROPERTY OF THE REAL PROPERT		WACC
NO,	Component	Balances	Structures	Rates		(NET OF TAX)	GRCF		(PRE - TAX)
		As of 12/31/2010							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	77,294,549 11,631,183	44.3499% 6.6737%	4.9358% 0.5211%		2.1890% 0.0348%			2.1890% 0.0348%
3 4	OFFSETS DEBT	0	0.0000%	4.3584%		0.0000%			0.0000%
5	C EQUITY	85,357,628	48.9764%	12.1600%	1/	5.9555%	1.681379	2/	10.0135%
6	TOTAL	174,283,360 ========	100.0000% ======			8.1793% =========			12.2373% ========
1/	WACC = Weighted Cost Rates per the			ower Agreemei	nt				
2/	Gross Revenue Cor	nversion Factor ((GRCF) Calculat	ion:					
1	OPERATING REVE LESS: INDIANA A		SS INCOME				100.00		
34	(LINE 1 X .085) INCOME BEFORE	•					<u>8.500</u> 91.500		
	LESS: FEDERAL I (LINE 4 X .35) OPERATING INCO GROSS REVENUE	<u>32.025</u> 59.475							
9	FACTOR (100						<u>1.681379</u>		

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of December 2010

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$56,106,329 \$639,267 \$2,533,257 \$5,561,003	86.5% 1.0% 3.9% 8.6%
5	Total Revenues for Surcharges Purposes	\$64,839,856	100.0%
6	Non-Physical Revenues for Month	\$240,982	
7	Total Revenues for Month	\$65,080,838	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for October 2010	3.6679%
2	Kentucky Retail Revenues for Current Expense Month	\$50,139,535
3	Surcharge Collected (1) * (2)	 \$1,839,068
4	Surcharge Amount To Be Collected	\$1,434,416
5	Over / (Under) Recovery (3) - (4) = (5)	\$404,652

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



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Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

February 18, 2011

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602 RECEIVED

FEB 18 2011 PUBLIC SERVICE COMMISSION

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of January 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after March 1, 2011.

If there are any questions please contact me at 502-696-7010.

Lila P. Mursey

Lila P. Munsey Manager, Regulatory Services Enclosures

1/

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of January 2011

<u>eránd (Cerpenserver a</u>	CALCULATION OF E(m)	*****
	E(m) = CRR - BRR	
LINE 1	CRR from ES FORM 3.00	\$4,880,732
LINE 2	Brr from ES FORM 1.10	\$3,991,163
LINE 3	E(m) (LINE 1 - LINE 2)	\$889,569
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	84.7%
LINE 5A	KY Retail E(m) (LINE 3 * LINE 4)	\$753,465
LINE 5B	Environmental Surcharge Clause Adjustment Case No. 2010-00318, dated January 24, 2011	(\$49,885
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$877,185
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	(\$173,605
	SURCHARGE FACTOR	
LINE 8	Net KY Retail E(m) (Line 7)	(\$173,605
LINE 9	KY Retail R(m) from ES FORM 3.30	\$65,952,346
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	-0.2632%

Effective Date for Billing:

March 2011

Submitted By :

Date Submitted :

Title :

la

Manager Regulatory Services

February 18, 2010

1/ Case No. 2009-00459, dated June 28, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of January 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER	\$3,991,163 3,590,810 3,651,374 3,647,040 3,922,590 3,627,274 3,805,325 4,088,830 3,740,010 3,260,302 2,786,040 4,074,321
TOTAL	\$44,185,079 ========

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of January 2011

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE		an a	
NO.	COMPONENTS		an a
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,826,570
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$54,162
	Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4.	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,880,732

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE			
NO.	COST COMPONENT		
	COST COMPONENT Return on Rate Base : Utility Plant at Original Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes Net Utility Plant SO2 Emission Allowance Inventory from ES FORM 3.11 ECR & NOX Emission Allowance Inventory from ES FORM 3.12 Cash Working Capital Allowance from ES FORM 3.13, Line 13 Total Rate Base Weighted Average Cost of Capital - ES FORM 3.15 Monthly Weighted Avg. Cost of Capital (9) / 12 Monthly Return of Rate Base (8) * (10) Operating Expenses : Monthly Depreciation Expense Monthly Depreciation Expense Monthly Depreciation Expense Monthly Kentucky Air Emissions Fee Monthly Kentucky Air Emissions Fee Monthly Environmental AEP Pool Capacity Costs from ES FORM 3.14, Page 1 of 11, Column 5, Line 10 Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13	\$191,327,552 (\$61,628,712) (\$40,348,795) 10.70%	\$89,350,045 \$14,838,410 \$200,780 \$189,160 \$104,578,395 0.89% \$930,748 \$577,252 \$46,030 \$14,298 \$31,699 \$2,165,620 \$533,564
18	Monthly SO2 Emission Allowance Consumption		\$527,359
19	Total Operating Expenses [Line 12 thru Line 18]		<u>\$3,895,822</u>
20	Total Revenue Requirement - Big Sandy Record on ES FORM 3.00, Line 1		\$4,826,570

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

		(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -			754,608		\$4,685,726	\$6.209
EPA Allowances		0	439,224	\$0	\$0	\$0.000
Gavin Reallocation		0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201 67,631	\$0 \$156,184	\$4,855,695 \$21,114,805	\$14.840
Intercompany Purchases Other (List)		0	433,206	\$150,164 \$0	\$67,152,857	\$312.206 \$155.014
SO2 Emissions Allowance		U	+00,200	ψΟ	ψ01,102,001	φ100.014
Adjustment		4,116	4,120	(\$1,700,794)	(\$1,700,794)	(\$412.814)
Withdrawals -						
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	59,987	\$0	\$4,855,950	\$80.950
Off - System Sales		0	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance				4 0	\$ 0	\$0.000
Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances						
Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)		797		\$351,033		
SO2 Emissions Allowances	1					
Consumed By Kentucky Power - 2:1						
(Years 2010 to 2014)		9,052	619,018	\$176,326	\$45,797,550	\$73.984
ENDING INVENTORY - Record						
Balance in Column (4) on						
ES FORM 3.10, Line 5		고문학 관광 관광 위	1,127,297		\$14,838,410	\$13.163
Expense Month Member Load Ratio for AEP/Kentucky Power						
Expense monun menuer Load Ralio I	JI AEF/Ref	nucky rower				0.06874

For the Expense Month of January 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of January 2011

	(1) Allowance Activity in Month	(2) Cumulative `Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	37,003	\$0	\$0	
P&E Transfers In	0	0	¢0	\$0 \$0	\$0.000
Intercompany Purchases		U 0	\$0 \$0	۵۵ ۵۵	\$0.000
Other (List)	0	Ŭ	ΨŬ	ΨŪ	
Withdrawals -			<u>^</u>	¢0.	¢0,000
P & E Transfers Out	0		\$0 \$0	\$0 \$0	\$0.000 \$0.000
Intercompany Sales	0	2,425	\$0 \$0	\$0 \$0	\$0.000
Off - System Sales	0	930	\$0 \$0	\$0 \$0	\$0.000
ERC Consumed By Kentucky Power NOx Consumed By Kentucky Power	0 0	19,708	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		13,940		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of January 2011

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,729	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	980	\$45,716	\$1,060,590	\$1,082.235
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	997	16,583	\$29,142	\$859,810	\$51.849
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		29,126		\$200,780	\$6.893

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of January 2011

1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$31,699 \$420,660 <u>\$527,359</u>	\$979,718
5 6 7 8 9	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses	\$0 \$460,384 \$0 \$29,142 \$5,814	
10 11	Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	<u>\$38,224</u>	<u>\$533,564</u>
12	Total Monthly O&M Expenses		<u>\$1,513,282</u>
13	Cash Working Capital Allowance(Line 12 X 1/8)		\$189,160

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs January 2011

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$19,392.25	\$13,708.33	\$0.00	\$33,100.58
SCR Boiler Outlet Ductwork	\$0.00	\$0.00	\$0.00	\$0.00
SCR Booster Fan	\$0.00	(\$12,075.96)	\$0.00	(\$12,075.96)
SCR NOx Monitoring	\$186.28	\$3,104.64	\$0.00	\$3,290.92
SCR Reactor	\$0.00	\$0.00	\$0.00	\$0.00
Total SCR January 2011 O & M Expense	\$19,578.53	\$4,737.01	\$0.00	\$24,315.54
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$5,813.88
Emission Testing Required Under Permit -				
Operation Maintenance	\$0.00 \$7,056.92	\$0.00 \$6,851 <i>.</i> 70	\$0.00 \$0.00	\$0.00 \$13,908.62

January 2011 O & M Expenses Filed

\$44,038.04

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> ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of January 2011

		Ohio Power	Indiana Michigan Power	
Line No. (1)	Cost Component (2)	Company's Environmental Cost to KPCo (3)	Company's Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$342,760		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$268,755		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$794,580		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$7,790		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$662,150		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$58,425		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,146,145	\$19,475	\$2,165,620

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of January 2011

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$613,873		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$1,426,220		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$7,311,120		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$1,437,241		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$38,393		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		. \$15,625	
11	Subtotal	\$10,855,744	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.28	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$1.08	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$420,660	\$0	\$420,660

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

For the Expense Month of January 2011

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$600,434,141
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$8,225,948
4	Ohio Power Company's Percentage Ownership - Environmental Investment	100.00%
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
	Operations :	
6	Disposal (5010000)	\$64,651
7	Urea (5020002)	\$329,147
8	Trona (5020003)	\$124,311
9	Lime Stone (5020004)	\$303,603
10	Steam Exp (5020025)	\$19
11	Air Emission Fee	<u>\$8,973</u>
12	Total Operations (Lines 6 thru 10)	\$830,704
	Maintenance :	
13	SCR Maintenance (5120000)	\$3,850
14	Scrubber (FGD) Maintenance (5120000)	<u>\$176,270</u>
15	Total Maintnenance (12) + (13)	<u>\$180,120</u>
	1/2 of Maintenance (14) * 50%	<u>\$90,060</u>
	Fixed O&M (11) + (15)	\$920,764
18	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
19	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$613,873</u>
	Total Revenue Requirement,	
20	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,839,821
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.05
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.88
	Amos Unit No. 3 Costs to Kentucky Power :	
25	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.88
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
~	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	AA 40 700
27	(ES FORM 3.14, Page 1 of 10, Line 1)	\$342,760

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$400,962,145
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$5,493,181
	Operations :	
4	Disposal (5010000)	\$228,414
5	Urea (5020002)	\$336,096
6	Trona (5020003)	\$158,654
7	Lime Stone (5020004)	\$553,300
8	Polymer (5020005)	\$865
9	Lime Hydrate (5020007)	\$0
10	Steam Exp (5020025)	\$45,805
11	Air Emission Fee	<u>\$8,622</u>
12	Total Operations (Line 4 thru 8)	\$1,331,756
	Maintenance :	
13	SCR Maintenance (5120000)	\$10,130
14	Scrubber (FGD) Maintenance (5120000)	<u>\$178,798</u>
15	Total Maintenance (13) + (14)	\$188,928
16	1/2 Maintenance (15) * 50%	<u>\$94,464</u>
17	Fixed O&M (12) + (16)	<u>\$1,426,220</u>
	Total Revenue Requirement,	
18	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$6,919,401</u>
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$6,919,401
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Cardinal Unit No. 1 (\$/kw)	\$0.82
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	10 00
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.69
	Cardinal Unit No. 1 Costs to Kentucky Power :	
25	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.69
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
07	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	0000 7CC
27	(ES FORM 3.14, Page 1 of 10, Line 2)	\$268,755

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$964,148,720
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$13,208,837
	Operations :	
4	Sludge Disposal (5010000)	\$842,315
5	Lime (5020001)	\$3,937,531
6	Urea (5020002)	\$978,133
7	Trona (5020003)	\$730,063
8	Lime Stone (5020004)	\$0
9	Polymer (5020005)	\$293,860
10	Air Emission Fee	\$34,947
11	Lease (5070005)	<u>\$0</u>
12	Total Operations (Lines 4 thru 10)	\$6,816,849
	Maintenance :	
13	SCR Maintenance (5120000)	\$85,614
14	Scrubber Maintenance (5120000)	<u>\$902,928</u>
15	Total Maintenance (12) + (13)	\$988,542
16	1/2 of Maintenance (13) * 50%	<u>\$494,271</u>
17	Fixed O&M (11) + (15)	<u>\$7,311,120</u>
	Total Revenue Requirement,	
18	Cost Associated with Gavin Plant (3) + (17)	\$20,519,957
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$20,519,957
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Gavin Plant (\$/kw)	\$2.43
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$2.04
	Gavin Plant Costs to Kentucky Power :	
25	Gavin Plant Portion (\$/kw) (23)	\$2.04
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
27	(ES FORM 3.14, Page 1 of 10, Line 3)	\$794,580

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$8,451,624 <u>1.37%</u> \$115,787
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$15,690</u> \$15,690
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,690</u>
11 12 13	Cost Associated with Kammer Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	<u>\$131,477</u> 100.00% \$131,477
14 15 16	Ohio Power Company Steam Capacity (kw) Kammer Plant (\$/kw) Ohio Power Surplus Weighing	8,458,000 \$0.02 84.00%
17	Portion of Weighted Average Capacity Rate Attributed to Kammer Plant (\$/kw) (15) X (16) Kammer Plant Costs to Kentucky Power :	\$0.02
18 19	Kammer Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	\$0.02 <u>389,500</u>
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$7,790

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$1,143,093,101
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$15,660,375
	Operations :	
4	Disposal (5010000)	(\$25,105)
5	Urea (5020002)	\$578,879
6	Trona (5020003)	\$39,990
7	Lime Stone (5020004)	\$791,911
8	Polymer (5020005)	\$1,406
9	Lime Hydrate (5020007)	\$4,821
10	Steam Exp (5020025)	\$0
11	Air Emission Fee	<u>\$12,128</u>
12	Total Operations (Lines 4 thru 8)	\$1,404,030
	Maintenance :	
13	FDG (5120000)	\$53,576
14	SCR Maintenance (5120000)	<u>\$12,846</u>
15	1/2 of Maintenance (10 + 11) * 50%	<u>\$33,211</u>
16	Fixed O&M (9) + (12)	<u>\$1,437,241</u>
	Total Revenue Requirement,	
17	Cost Associated with Mitchell Plant (3) + (13)	<u>\$17,097,616</u>
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$17,097,616
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Mitchell Plant (\$/kw)	\$2.02
22	Ohio Power Surplus Weighing	84.00%
23	Portion of Weighted Average Capacity Rate	· ·
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.70
	Mitchell Plant Costs to Kentucky Power :	×
24	Mitchell Plant Portion (\$/kw) (20)	\$1.70
25	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	\$200.450
26	(ES FORM 3.14, Page 1 of 10, Line 5)	\$662,150

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$108,672,817 <u>1.37%</u> \$1,488,818
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$913 \$0 <u>\$34,561</u> \$35,474
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$5,837 <u>\$2,919</u> <u>\$38,393</u>
11 12	Cost Associated with Muskingum Plant (3) + (10) Ohio Power Company's Percentage Ownership	<u>\$1,527,211</u> 100.00%
13 14	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12) Ohio Power Company Steam Capacity (kw)	\$1,527,211 8,458,000
15 16 17	Muskingum Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	\$0.18 84.00%
	Attributed to Muskingum Plant (\$/kw) (15) X (16) Muskingum Plant Costs to Kentucky Power :	\$0.15
18 19	Muskingum Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	\$0.15 <u>389,500</u>
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$58,425

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

For the Expense Month of January 2011

LINE		
NO.	COST	AMOUNTS
		#00.040.00F
1	Utility Plant at Original Cost	\$20,310,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$278,251
	Operations :	\$ 0
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$13,207</u>
7	Total Operations (4) + (5) + (6)	\$13,207
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$13,207</u>
	Total Revenue Requirement,	
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$291,458</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$291,458
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Sporn Plant (\$/kw)	\$0.03
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685

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ES FORM 3.14 Page 10 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (1&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of January 2011

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,457,579
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,348,869
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,625</u>
7	Total Operations (4) + (5) + (6)	\$15,625
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	* / * / * / * /
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,494</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,494
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	¢0.04
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
40	Tanners Creek Plant Costs to Kentucky Power :	#0.04
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
20	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580
		-

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense	Month of January 2011
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LINE NO.		Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 4/30/2010							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	51.941% 0.000%	6.48% 0.83%		3.37% 0.00%			3.37% 0.00%
3 4	FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%	1.22% 10.50%	1/	0.05% 4.61%	1.5785	2/	0.05% 7.28%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.70%
		an a	et eret 212 w.L. 212 eter 1						
1/		nted Average Cost o on Common Equity		10 - 00020					
2/		Conversion Factor - 00020 dated - Apr		ition:					
1 2 3		EVENUE LE ACCOUNTS EX c Service Commissi					100.0000 0.0024 0.1500		
4 5	STATE TAXABI STATE INCOM	LE PRODUCTION I E TAX EXPENSE, M	NCOME BEFOR NET OF 199 DEI	RE 199 DEDUCT DUCTION (SEE	TON BEL	OW)	99.8476 5.6526		
6 7	FEDERAL TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION 199 DEDUCTION PHASE-IN						94.1950 5.6372		
8 9	FEDERAL TAXABLE PRODUCTION INCOME FEDERAL INCOME TAX EXPENSE AFTER 199 DEDUCTION (35%)						88.5578 30.9952		
10	AFTER-TAX PRODUCTION INCOME						57.5626		
11 12 13 14 15	GROSS-UP FACTOR FOR PRODUCTION INCOME: AFTER-TAX PRODUCTION INCOME 199 DEDUCTION PHASE-IN UNCOLLECTIBLE ACCOUNTS EXPENSE Kentucky Public Service Commission Assessment (0.15%)						57.5626 5.6372 0.0024 0.1500		
16	TOTAL GROSS-UP FACTOR FOR PRODUCTION INCOME (ROUNDED)					63.3522			
17 18 19 20	BLENDED FED FEDERAL STATE (LII BLENDED TAX	NE 4)	TAX RATE:				30.9952 5.6526 36.6478		
21	GROSS REVE	NUE CONVERSION	FACTOR (100.	0000 / Líne 14)			1.5785	www.eeeeeeeeeeeeeee	
1 2 3	PRE-TAX I COLLECTI	E TAX CALCULATI PRODUCTION INCO BLE ACCOUNTS E Public Service Comm	OME XPENSE (0.002				100.0000 0.0024 0.1500		
4 5		XABLE PRODUCTI ATE 199 DEDUCTI		FORE 199 DEE	rouc	ION	99.8476 5.6372		
6 7		XABLE PRODUCTI COME TAX RATE	on income be	FORE 199 DED	DUCI	ION	94.2104 6.0000		
8	STATE INC	COME TAX EXPEN	SE (LINE 5 X LII	NE 6)			5.6526		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of January 2011

Unit Total Rockport Units Rockport No. 1 No. 2 C5 C0mmon Total (b) (b) (c) (c) (c) (c) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) <th></th>	
Units Units Units (6) (7) (7) (7) (5) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	
To Unit No. 2 (G) (G) (C5 (\$3,353,084 (\$5,445,327 (\$6) (\$6) (\$6) (\$5,445,327 (\$8, \$8, \$8, \$60 (\$6) (\$6) (\$6) (\$6) (\$6) (\$6) (\$6) (\$6)	
Unit No. 2 (6) (51,982,9 (51,982,9 (51,982,9 (5),445,5 (5),445,5 (5),445,5 (5),445,5 (5),524,5	
Unit No. 1 (5) (51,322,657 (51,369) (51,322) (51,329) (51,329) (51,366) (51,329) (51,329) (51,366) (51) (51) (51) (51) (51) (51) (51) (51	
Rockport Plant Common (4) (4) (5153,512) (51	
(3)	
COST COMPONENT (2) Return on Rate Base : Return on Rate Base : Return Ox Burners (LNB) Installed Cost Utility Plant at Original Cost Flyash Landfill Installed Cost Flyash Landfill Installed Cost Flyash Landfill Installed Cost Flyash Landfill Installed Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes Total Rate Base Weighted Average Cost of Capital (LINE 7 / 12) Monthly Weighted Avg. Cost of Capital (LINE 7 / 12) Monthly Weighted Avg. Cost of Capital (LINE 7 / 12) Monthly Meighted Avg. Cost of Capital (LINE 7 / 12) Monthly Depreciation Expenses : Monthly Depreciation Expenses : Monthly Indiana Air Emissions Fee Total Operating Expenses (Line 10 + Line 11)) Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12) Kentucky Power's Portion of Rockports CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport Plants' Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2	
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE			Cap.	Cost		WACC			WACC
NO.	Component	Balances	Structures	Rates		(NET OF TAX)	GRCF		(PRE - TAX)
		As of 1/31/2011			-11				
1 2	L/T DEBT S/T DEBT CAPITALIZATION	77,297,336 (139,397)	46.8275% -0.0844%	4.9356% 0.3417%		2.3112% -0.0003%			2.3112% -0.0003%
3 4	OFFSETS DEBT	0	0.0000%	4.9440%		0.0000%			0.0000%
5	C EQUITY	87,910,357	53.2569%	12.1600%	1/	6.4761%	1.681379	2/	10.8888%
6	TOTAL	165,068,296	100.0000%			8.7870%			13.1997% =========
			And the second	1994 - Constant State and State of State					
1/	WACC = Weighted Average Cost of Capital 1/ Cost Rates per the Provisions of the Rockport Unit Power Agreement								
2/	Gross Revenue Conversion Factor (GRCF) Calculation:								
1	OPERATING REVENUE								
2 3 4	LESS: INDIANA ADJUSTED GROSS INCOME (LINE 1 X .085) INCOME BEFORE FED INC TAX LESS: FEDERAL INCOME TAX								
5 6 7 8	(LINE 4 X .35) OPERATING INCOME PERCENTAGE GROSS REVENUE CONVERSION						<u>32.025</u> 59.475		
9	FACTOR (100% / LINE 7)						<u>1.681379</u>		

For the Expense Month of January 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of January 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues		
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$65,952,346 \$603,837 \$5,085,114 \$6,199,202	84.7% 0.8% 6.5% 8.0%		
5	Total Revenues for Surcharges Purposes	\$77,840,499	 100.0%		
6	Non-Physical Revenues for Month	\$1,281,145			
7	Total Revenues for Month	\$79,121,644			

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts		
1	Kentucky Retail Surcharge Factor for November 2010	3.7735%		
2	Kentucky Retail Revenues for Current Expense Month	\$63,734,888		
3	Surcharge Collected (1) * (2)	\$2,405,036		
4	Surcharge Amount To Be Collected	\$1,527,851		
5	Over / (Under) Recovery (3) - (4) = (5)	\$877,185		

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.

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Kentucky Power 101A Enterprise Drive

Frankfort, KY 40602-5190

KentuckyPower.com

P 0 Box 5190

KENTUGKY POWER° A unit of American Electric Power

RECEIVED

MAR 18 2011 PUBLIC SERVICE COMMISSION

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March 18, 2011

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of February 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after March 30, 2011.

If there are any questions please contact me at 502-696-7010.

Lila P. Mensey Lila P. Munsey

Lila P. Munsey C Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 ES FORM 1.00 Rege 361 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of February 2011

	CALCULATION OF E(m)			
E(m) = CRR - BRR				
LINE 1	CRR from ES FORM 3.00	\$6,169,875		
LINE 2	Brr from ES FORM 1.10	\$3,590,810		
LINE 3	E(m) (LINE 1 - LINE 2)	\$2,579,065		
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	85.1%		
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$2,194,784		
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$167,756)		
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$2,027,028		
	SURCHARGE FACTOR			
LINE 8	Net KY Retail E(m) (Line 7)	\$2,027,028		
LINE 9	KY Retail R(m) from ES FORM 3.30	\$58,755,458		
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	3.4499%		

Effective Date for Billing:

April 2011

Submitted By :

Title :

Manager Regulatory Services

Date Submitted :

March 18, 2011

1/ Case No. 2009-00459, dated June 28, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of February 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY	\$3,991,163
FEBRUARY	3,650,810
MARCH	3,651,374
APRIL	3,647,040
MAY	3,922,590
JUNE	3,627,274
JULY	3,805,325
AUGUST	4,088,830
SEPTEMBER	3,740,010
OCTOBER	3,260,302
NOVEMBER	2,786,040
DECEMBER	4,074,321
TOTAL	\$44,185,079

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of February 2011

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$6,120,205
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$49,670
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$6,169,875

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

		(1)	(2)	(3)	(4) Cumulative	(5)	
		Allowance Activity in	Cumulative	Dollar Value	Dollar	Weighted	
		Month	Balance	of Activity	Balance	Average Cost	
		WOILIT	Dalarico	Orreducy	Dalarioo	Thorage cool	
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209	
Additions -							
EPA Allowances		0	439,224	\$0	\$0	\$0.000	
Gavin Reallocation		0	94,744	\$0	\$0	\$0.000	
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840	
Intercompany Purchases		0	67,631	\$156,184	\$21,114,805	\$312.206	
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014	
SO2 Emissions Allowance				(0.000)		(* (()))	
Adjustment		(14)	4,106	(\$188)	(\$1,700,982)	(\$414.267)	
Withdrawals -							
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459	
Intercompany Sales		0	59,987	\$0 \$0	\$4,855,950	\$80.950	
Off - System Sales		0	303,050	\$0 \$0	\$29,780,273	\$98.269	
SO2 Emissions Allowance		0	000,000	ψũ	420,100,210	\$001 <u>2</u> 00	
Adjustment		0	0	\$0	\$0	\$0.000	
		Ű		÷-	+-	+	
SO2 Emissions Allowances							
Consumed By Kentucky Power - 1:1		4,661		\$2,052,904			
(Year 2009 & Prior)		4,001		φ Ζ, 03Ζ,304			
SO2 Emissions Allowances							
Consumed By Kentucky Power - 2:1			000 070	**	¢ 47 050 454	ድንድ ማስብ	
(Years 2010 to 2014)		· 0	623,679	\$0	\$47,850,454	\$76.723	
ENDING INVENTORY - Record							
Balance in Column (4) on				的复数形式分词			
ES FORM 3.10, Line 5		把影響這個影響	1,122,622		\$12,785,318	\$11.389	
Expense Month Member Load Ratio for AEP/Kentucky Power							

For the Expense Month of February 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of February 2011

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	37,003	\$0	\$0	
P&E Transfers In	0	0		\$0	#0.000
Intercompany Purchases	0	0	\$0 \$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -				A B	#0.000
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	. 0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	. 0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	0	19,708	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		13,9 <u>40</u>		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	. 0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of February 2011

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,729	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	• 0	980	\$45,716	\$1,060,590	\$1,082.235
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	832	17,415	\$24,656	\$884,466	\$50.788
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		28,294		\$176,124	\$6.225

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of February 2011

1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$31,699 \$334,970 <u>\$2,052,904</u>	\$2,419,573
5 6 7 8 9 10	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses	\$0 \$444,487 \$0 \$24,656 \$6,372 <u>(\$58,903)</u>	\$416,612
11 12	Total 2003 Plan O&M Expenses Total Monthly O&M Expenses		<u>\$2,836,185</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$354,523

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs February 2011

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia Injection System	\$9,925.65	\$1,750.00	\$0.00	\$11,675.65
SCR Ammonia on Demand (AOD)	\$3,834.00	\$0.00	\$0.00	\$3,834.00
SCR Booster Fan	\$634.72	\$0.00	\$0.00	\$634.72
SCR NOx Monitoring	\$3,745.65	\$0.00	\$0.00	\$3,745.65
SCR Recycle Units Transfer Pump	\$382.96	\$0.00	\$0.00	\$382.96
Total SCR February 2011 O & M Expense	\$18,522.98	\$1,750.00	\$0.00	\$20,272.98
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$5,813.88
Emission Testing Required Under Permit - Operation Maintenance	\$558.00 (\$79,176.24)	\$0.00 \$0.00	\$0.00 \$0.00	\$558.00 (\$79,176.24)
February 2014				

February 2011 O & M Expenses Filed

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(\$52,531.38)

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of February 2011

Line No. (1)	Cost Component (2)	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$338,865		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$245,385		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$751,735		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$7,790		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$638,780		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$66,215		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,060,455	\$19,475	\$2,079,930

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of February 2011

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$495,990		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$852,944		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$6,210,849		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$815,465		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$196,559		
7	Spom Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207	·	
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$8,600,704	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.02	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.86	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$334,970	\$0	\$334,970

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE		
NO.	COST	AMOUNTS
		\$600;434,141
1	Utility Plant at Original Cost	<u>1.37%</u>
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$8,225,948
3	Total Rate Base Ohio Power Company's Percentage Ownership - Environmental Investment	40,220,940 <u>100.00%</u>
4 5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
5		ψ0,220,0 4 0
6	Operations : Disposal (5010000)	(\$57,476)
7	Urea (502002)	\$487,917
8	Trona (5020003)	(\$118,370)
9	Lime Stone (5020004)	\$371,449
10	Steam Exp (5020025)	\$16-
11	Air Emission Fee	\$10,292
12	Total Operations (Lines 6 thru 10)	\$693,828
. ~	Maintenance :	
13	SCR Maintenance (5120000)	\$3
14	Scrubber (FGD) Maintenance (5120000)	<u>\$100,237</u>
15	Total Maintnenance (12) + (13)	<u>\$100,240</u>
16	1/2 of Maintenance (14) * 50%	<u>\$50,120</u>
17	Fixed O&M (11) + (15)	\$743,948
18	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
19	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$495,990</u>
	Total Revenue Requirement,	
20	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,721,938
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.03
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	A A A
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.87
	Amos Unit No. 3 Costs to Kentucky Power :	#0.0 7
25	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.87
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u> .
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	¢220.005
27	(ES FORM 3.14, Page 1 of 10, Line 1)	\$338,865

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ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
		\$400,962,145
1	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2 3	Total Rate Base	\$5,493,181
ാ	Operations :	······
4	Disposal (5010000)	\$96,803
4 5	Urea (502002)	\$255,115
5 6	Trona (5020003)	(\$136,996)
7	Lime Stone (5020004)	\$501,038
8	Polymer (5020005)	\$4,870
о 9	Lime Hydrate (5020007)	\$2,296
9 10	Steam Exp (5020025)	\$43,720
10	Air Emission Fee	\$8,62 <u>2</u>
12	Total Operations (Line 4 thru 8)	\$775,468
12	Maintenance :	
13	SCR Maintenance (5120000)	\$20,012
13	Scrubber (FGD) Maintenance (5120000)	\$134,939
15	Total Maintenance (13) + (14)	\$154,951
16	1/2 Maintenance (15) * 50%	\$77,476
17	Fixed $O&M(12) + (16)$	\$852,944
11	Total Revenue Requirement,	
18	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$6,346,125</u>
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$6,346,125
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Cardinal Unit No. 1 (\$/kw)	\$0.75
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.63
	Cardinal Unit No. 1 Costs to Kentucky Power :	
25	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.63
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	
27	(ES FORM 3.14, Page 1 of 10, Line 2)	\$245,385

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 374 of 609 Page 5 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

For the Expense Month of February 2011

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LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$964,148,720
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$13,208,837
.	Operations :	-
4	Sludge Disposal (5010000)	\$681,646
5	Lime (5020001)	\$3,952,538
6	Urea (5020002)	\$919,642
7	Trona (5020003)	(\$140,818)
8	Lime Stone (5020004)	\$0
9	Polymer (5020005)	\$373,477
10	Steam Exp (5020025)	\$6,660
11	Air Emission Fee	\$34,947
12	Lease (5070005)	<u>\$0</u>
13	Total Operations (Lines 4 thru 10)	\$5,828,092
	Maintenance :	
14	SCR Maintenance (5120000)	\$21,051
15	Scrubber Maintenance (5120000)	<u>\$744,463</u>
16	Total Maintenance (12) + (13)	\$765,514
17	1/2 of Maintenance (13) * 50%	<u>\$382,757</u>
18	Fixed O&M (11) + (15)	<u>\$6,210,849</u>
	Total Revenue Requirement,	
19	Cost Associated with Gavin Plant (3) + (17)	\$19,419,686
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$19,419,686
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Gavin Plant (\$/kw)	\$2.30
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	¢4.00
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.93
	Gavin Plant Costs to Kentucky Power :	#4.00
26	Gavin Plant Portion (\$/kw) (23)	\$1.93
27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
28	(ES FORM 3.14, Page 1 of 10, Line 3)	\$751,735

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
		www.imem.eo.v.c.v. 60.v.
1	Utility Plant at Original Cost	\$8,451,624 1.37%
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37.76</u> \$115,787
3	Total Rate Base	φ110,707
	Operations :	\$0
4	Urea (5020002)	\$0 \$0
5	Trona (5020003)	\$0 <u>\$15,690</u>
6	Air Emission Fee	<u>\$15,690</u> \$15,690
7	Total Operations $(4) + (5) + (6)$	φ10,090
_	Maintenance :	\$0
8	SCR Maintenance (5120000)	
9	1/2 of Maintenance (8) * 50%	<u>\$0</u> ¢15 coo
10	Fixed O&M (7) + (9)	<u>\$15,690</u>
	Total Revenue Requirement,	¢404.477
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$131,477</u> 100.00%
12	Ohio Power Company's Percentage Ownership	
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$131,477 8,458,000
14	Ohio Power Company Steam Capacity (kw)	8,458,000 \$0.02
15	Kammer Plant (\$/kw)	\$0.02 84.00%
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	¢0.00
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.02
	Kammer Plant Costs to Kentucky Power :	¢0.00
18	Kammer Plant Portion (\$/kw) (17)	\$0.02
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	¢7 700
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$7,790

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 376 of 609

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

1 Utility Plant at Original Cost \$\$1,143,093,101 1 Member Primary Capacity Investment Rate (16.44% / 12) 1.37% 3 Total Rate Base \$\$15,660,375 Operations : (\$62,084) 4 Disposal (501000) \$\$4333,368 6 Trona (5020002) \$\$343,368 6 Trona (5020003) \$\$442,749 8 Polymer (5020005) \$\$4,877 9 Lime Hydrate (5020007) \$\$4,913 10 Steam Exp (5020025) \$\$0 11 Air Emission Fee \$\$12,128 12 Total Operations (Lines 4 thru 8) \$\$599,143 Maintenance : \$\$11,805 13 FDG (5120000) \$\$420,839 14 Fixed O&M (9) + (12) \$\$216,322 15 1/2 of Maintenance (5120000) \$\$11,805 14 ScR Maintenance (10 + 11)* 50% \$\$16,475,840 17 Cost Associated with Mitchell Plant (3) + (13) \$\$16,475,840 10 Ohio Power Company Steam Capacity (kw) \$\$16,475,840 10 \$	LINE NO.	COST	AMOUNTS
Member Primary Capacity Investment Rate (16.44% / 12) 1.37% 3 Total Rate Base \$15,660,375 Operations : (\$62,084) 4 Disposal (501000) \$334,368 5 Urea (5020002) \$343,368 6 Trona (5020003) (\$146,808) 7 Lime Stone (5020004) \$442,749 8 Polymer (5020005) \$0 11 Air Emission Fee \$12,128 12 Total Operations (Lines 4 thru 8) \$599,143 Maintenance : \$12,000) \$14,805 13 FDG (5120000) \$11,805 14 Fixed O&M (9) + (12) \$216,322 15 1/2 of Maintenance (10 + 11) * 50% \$216,322 16 Fixed O&M (9) + (12) \$11,805 17 Cost Associated with Mitchell Plant (3) + (13) \$16,475,840 10 Ohio Power Company's Percentage Ownership 100.00% 19 OPCo's Share of Cost Associated with Mitchell Plant (14) X (15) \$16,475,840 20 Ohio Power Company Steam Capacity (kw) \$1,95 21 Ohio Power Company Steam Capacity (kw) \$4,00%	NO.	0001	,
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	25	Nitchell Plant Environmental Cost to Kentucky Power (21) * (22)	<u></u>
	00		\$638,780
	20	$(\Box \circ F \cup f M \circ A, F a g e F \cup F v, E = 0)$,,

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 377 of 609

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3 , 4 & 5)

LINE NO.	COST	AMOUNTS
		\$108,672,817
1	Utility Plant at Original Cost	1.37 <u>%</u>
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$1,488,818
3	Total Rate Base	φ1,400,010
	Operations :	\$159,477
4	Urea (5020002)	\$0
5	Trona (5020003) Air Emission Fee	\$34,561
6 7		\$194,038
1	Total Operations (4) + (5) + (6) Maintenance :	<i><i></i></i>
	SCR Maintenance (5120000)	\$5,041
8 9	1/2 of Maintenance (8) * 50%	\$2,521
9 10	Fixed $O&M(7) + (9)$	\$196 <u>,559</u>
10	Total Revenue Requirement,	<u></u>
11	Cost Associated with Muskingum Plant (3) + (10)	\$1, <u>685,377</u>
12	Ohio Power Company's Percentage Ownership	100.00%
12	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,685,377
13	Ohio Power Company Steam Capacity (kw)	8,458,000
14	Muskingum Plant (\$/kw)	\$0.20
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
11	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.17
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.17
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$66,215

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ES FORM 3.14 Page 9 of 11

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
		\$20,310,295
1	Utility Plant at Original Cost	1.37%
2 3	Member Primary Capacity Investment Rate (16.44% / 12)	\$278,251
3	Total Rate Base	φ210,201
4	Operations :	\$0
4	Urea (5020002) Trona (5020003)	\$0 \$0
5 6	Air Emission Fee	\$13,207
0 7	Total Operations $(4) + (5) + (6)$	\$13,207
1	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	\$0
10	Fixed O&M (7) + (9)	\$13,207
10	Total Revenue Requirement,	<u> </u>
11	Cost Associated with Sporn Plant (3) + (10)	\$291,4 <u>58</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$291,458
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Sporn Plant (\$/kw)	\$0.03
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (1&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of February 2011

	COST	Rockport Plant Common	UNIT 1 AMOUNTS	UNIT 2 AMOUNTS	Rockport Plant Common	Total
	(2)	(3)	(4)	(5)	(9)	(7)
Ven	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16,44% / 12)	\$1,787,996 1.37%	\$10,544,676 1.37%	\$16,709,416 1.37%	\$2,202,020 1.37%	
Tota	Total Rate Base	\$24,496	\$144,462	\$228,919	\$30,168	
Trea		\$0	С У	\$0	\$0	
Tron ≜ir E	Trona (502003) Air Emission Fee	\$0 \$15.625	0\$0	04 05 05	80 80	
Tota	Total Operations (4) + (5) + (6) Maintenance	\$15,625	\$	G G	ß	
SCR	SCR Maintenance (5120000)	\$0	\$0	0\$	Q, G∳	
1/2 0 Fixe0	1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9)	<u>\$15,625</u>	S S	ମ କ	영 영	
Tota Cost	Total Revenue Requirement, - Cost Associated with Rockport Plant (3) + (10)	\$40,121	\$144,462	\$228,919	\$30,168	
lndia &M	Indiana Michigan Power Company's Percentage Ownership I&M's Share of Cost Associated with Rockport Plant (11) X (12)	<u>50%</u> \$20,061	<u>85.00%</u> \$122,793	<u>65.08%</u> \$148,980		
Tota	Total Rockport Plant Common and Units 1 & 2					\$306,918
ndi	Indiana Michigan Power Company Steam Capacity (kw)					5,416,000
Koot Kent	Rockport Plant (\$/kw) (14) / (15) Kentucky Power Portion of Rockport Plant /					\$0.06
ndia	Indiana Michigan Power Surplus Weighing		-			16.00%
Porti Attrik	Portion of Weighted Average Capacity Rate Attributed to Rocknort Plant (\$Kw) (17) X (18)					\$0.01
Roc	Rockport Plant Costs to Kentucky Power :					•
Rock Kent	Rockport Plant Portion (\$/kw) (18) Kentuckv Power Capacity Deficit (kw)					\$0.01 389.500
Rock	Rockport Units 1 & 2 Environmental to Kentucky Power (19) * (20)				балбанайн <i>4</i> лт	
ES J	(ES FORM 3.14, Page 1 of 10, Line 8)					\$3,895

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ES FORM 3.14 Page 11 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,457,579
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,348,869
Ŭ	Operations :	+ .,,
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,625</u>
7	Total Operations $(4) + (5) + (6)$	\$15,625
	Maintenance :	- ,
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,494</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,494
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of February 2011

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 4/30/2010							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	51.941% 0.000%	6.48% 0.83%		3.37% 0.00%			3.37% 0.00%
3 4	FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%	1.22% 10.50%	1/	0.05% 4.61%	1.5785	2/	0.05% 7.28%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.70%
1/	Rate of Return	nted Average Cost o on Common Equity	per Case No. 20						
2/		Conversion Factor - 00020 dated - Apr		tion:					
1 2 3		EVENUE LE ACCOUNTS EX c Service Commissi					100.0000 0.0024 0.1500		
4 5		LE PRODUCTION I E TAX EXPENSE, N					99.8476 5.6526		
6 7	FEDERAL TAX 199 DEDUCTIO	ABLE PRODUCTIO NN PHASE-IN	N INCOME BEF	ORE 199 DEDU	JCTI	ON	94.1950 5.6372		
8 9		ABLE PRODUCTIO DME TAX EXPENSI		EDUCTION (359	%)		88.5578 30.9952		
10	AFTER-TAX PF	RODUCTION INCOM	ИE				57.5626		
11 12 13 14 15	AFTER-TA 199 DEDU UNCOLLE	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS Public Service Comm	ICOME S EXPENSE				57.5626 5.6372 0.0024 0.1500		
16	TOTAL GROSS	S-UP FACTOR FOR	PRODUCTION	INCOME (ROU	NDE	D)	63.3522		
17 18 19 20	BLENDED FED FEDERAL STATE (LII BLENDED TAX	NE 4)	TAX RATE:				30.9952 5.6526 36.6478		
21	GROSS REVER	NUE CONVERSION	FACTOR (100.	0000 / Line 14)			1.5785		
1 2 3	STATE INCOM PRE-TAX F COLLECTI Kentucky F	100.0000 0.0024 0.1500							
4 5		XABLE PRODUCTI ATE 199 DEDUCTI		FORE 199 DED	UC1	ION	99.8476 5.6372		
6 7		XABLE PRODUCTI COME TAX RATE	ON INCOME BE	FORE 199 DED	UCT	ION	94.2104 6.0000		
8	STATE INC	COME TAX EXPEN	SE (LINE 5 X LII	NE 6)			5.6526		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9.

Weighted Average Cost of Captial Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of February 2011

Totai	(6)	\$49,670
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Rockport Plant. Common	(8)	\$2,185,292 (\$135,710) (\$135,710) \$1,103 \$2,050,685 \$19,968 \$6,410 \$6,410 \$6,410 \$5,410 \$5,410 \$5,410 \$5,410
Total Units 1 & 2 (C5 + C6)	(/)	\$8,749,878 \$85,198 \$39,968 \$39,968 \$33,968 \$125,166 \$37,550
Unit No. 2	(6)	\$8,353,084 (\$2,007,456) (\$932,117) \$5,413,511 \$5,413,511 \$5,413,511
Unit No. 1	(5)	\$5,272,657 (\$1,342,835) (\$593,455) \$3,336,367 \$15,466 \$15,466
Rockport Plant Common	. (4)	\$1,777,206 (\$860,717) (\$175,937) (\$175,937) (\$175,9377) (\$175,9377) (\$175,625 (\$12,625 (\$12,625 (\$20,837 (\$20,837 (\$4,207 (\$4,207) (\$4,207)
	(3)	11.6848%
COST COMPONENT	(2)	Return on Rate Base : Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOx Burners (LNB) Installed Cost Flyash Landfill Installed Cost Less Accumulated Depreciation Less Accumulated Depreciation Monthly Weighted Avg. Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12) Monthly Return of Rate Base (Line 6 * Line 8) Operating Expenses : Monthly Indiana Air Emissions Fee Monthly Indiana Air Emissions Fee Total Operating Expenses (Line 10 + Line 11)) Total Operating Expenses (Line 10 + Line 11)) Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of Rockport Plants' Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2
NO.	(1)	-00400000 220 526 6

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 2/28/2011							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	77,300,123 21,902,958	41.2297% 11.6824%	4.9355% 0.1923%		2.0349% 0.0225%			2.0349% 0.0225%
3 4	OFFSETS	0	0.0000%	3.8883%		0.0000%			0.0000%
5	C EQUITY	88,283,597	47.0879%	12.1600%	1/	5.7259%	1.681379	2/	9.6274%
6	TOTAL	187,486,678	100.0000%			7.7833%			11.6848%
							alasti Thin, internation and an and an and		
1/	WACC = Weighted Cost Rates per the			ower Agreemer	nt	:			
2/	Gross Revenue Co	nversion Factor ((GRCF) Calculati	ion:					
1	OPERATING REVE						100.00		
2 3 4 5	LESS: INDIANA A (LINE 1 X .085) INCOME BEFORE LESS: FEDERAL) FED INC TAX	SSINCOME				<u>8.500</u> 91.500		
6 7 8	(LINE 4 X .35) OPERATING INCO GROSS REVENUE		<u>32.025</u> 59.475	-					
9	FACTOR (100						<u>1.681379</u>		

For the Expense Month of February 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of February 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$58,755,458 \$529,203 \$4,720,801 \$5,024,766	85.1% 0.8% 6.8% 7.3%
5	Total Revenues for Surcharges Purposes	\$69,030,228	100.0%
6	Non-Physical Revenues for Month	\$913,143	
7	Total Revenues for Month	\$69,943,371	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for December 2010	2.2077%
2	Kentucky Retail Revenues for Current Expense Month	\$63,704,398
3	Surcharge Collected (1) * (2)	\$1,406,402
4	Surcharge Amount To Be Collected	\$1,238,646
5	Over / (Under) Recovery (3) - (4) = (5)	\$167,756

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.

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101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

April 19, 2011

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602 RECEIVED

APR 1 9 2011

PUBLIC SERVICE COMMISSION

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of March 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after April 29, 2011.

Please note on ES FORM 3.30, Over/(Under) Recovery Adjustment, Line 3 shows a surcharge collected for March of \$1,334, even though our Environmental Surcharge for January was -.2632%. The positive surcharge collected for March was a result of a surcharge billed for March of -\$115,627.12 plus accounts billed for February but received in March of \$105,433.11 plus \$11,528.05 billed for March 30 and 31 at the positive April surcharge rate, for a Net Billing for March of \$1,334.04.

If there are any questions please contact me at 502-696-7010.

Lela P. Y

Lila P. Munsey Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 1.00 Item No. 41 Attachment 1 Page 386 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of March 2011

CALCULATION OF E(m)						
	E(m) = CRR - BRR					
LINE 1	CRR from ES FORM 3.00	\$5,748,092				
LINE 2	Brr from ES FORM 1.10	\$3,651,374	1			
LINE 3	E(m) (LINE 1 - LINE 2)	\$2,096,718				
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	79.3%				
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,662,697				
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$174,939)				
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,487,758				
	SURCHARGE FACTOR					
LINE 8	Net KY Retail E(m) (Line 7)	\$1,487,758				
LINE .9	KY Retail R(m) from ES FORM 3.30	\$44,307,469				
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	3.3578%				

Effective Date for Billing:

May 2011

Submitted By :

Title :

unser

Manager Regulatory Services

Date Submitted :

April 19, 2011

1/ Case No. 2009-00459, dated June 28, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of March 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net
	8
	Environmental
Billing Month	Costs
JANUARY	\$3,991,163
FEBRUARY	3,590,810
MARCH	3,651,374
APRIL	3,647,040
MAY	3,922,590
JUNE	3,627,274
JULY	3,805,325
AUGUST	4,088,830
SEPTEMBER	3,740,010
OCTOBER	3,260,302
NOVEMBER	2,786,040
DECEMBER	4,074,321
TOTAL	\$44,185,079

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of March 2011

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

			a an
LINE NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$5,701,019
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$47,073
	Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month	\$0	
	2) SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		• \$0
. 4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$5,748,092

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

For the Expense Month of March 2011

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of March 2011

		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Allowance Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions - FPA Allowances		0	439,224	\$0	\$0	• \$0.000
Gavin Reallocation		0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	67,631	\$0	\$21,114,805	\$312.206
Other (List)	11111	0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance Adjustment		0	4,106	\$0	(\$1,700,982)	(\$414.267)
Withdrawals - P & E Transfers Out Intercompany Sales		0	11,382 59,987	\$0 \$0 \$0	\$836,106 \$4,855,950 \$29,780,273	\$73.459 \$80.950 \$98.269
Off - System Sales SO2 Emissions Allowance Adjustment		0	303,050 0	\$0 \$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)		3,443		\$1,516,445		
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)		0	627,122	\$0	\$49,366,899	\$78.720
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,119,179		\$11,268,873	\$10.069
Expense Month Member Load Ratio for AEP/Kentucky Power						0.06852

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY		0		\$0	\$0.000
Additions - EPA Allowances	0	37,003	\$0	\$0	
P&E Transfers In	0	0	\$0	\$0 \$0	\$0.000
Intercompany Purchases		0	\$0 \$0	\$0 \$0	\$0.000
Other (List)			and the second		
Withdrawals -		0	\$0	\$0	\$0.000
P & E Transfers Out		0	\$0	\$0	\$0.000
Intercompany Sales	· 0	2,425	\$0	\$0	\$0.000
Off - System Sales ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	0	19,708	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in					
Column (4) on ES FORM 3.10, Line 5		13,940	<u> </u>	\$0	\$0.000

For the Expense Month of March 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note: For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1)	(2)	(3)	(4)	(5)
	Allowance Activity in Month	Cumulative Balance	Dollar Value of Activity	Cumulative Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY		0		\$0	\$0.000
Additions -	0	44,729	\$0	\$0	\$0.000
EPA Allowances	Ő	0	\$0	\$0	\$0.000
P&E Transfers In Intercompany Purchases	Ő	0	\$0	\$0	\$0.000
External Purchases	Ō	980	\$45,716	\$1,060,590	\$1,082.235
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	867	18,282	\$25,294	\$909,760	\$49.763
ENDING INVENTORY - Record Balance in					
Column (4) on ES FORM 3.10, Line 5		27,427		\$150,830	\$5.499

For the Expense Month of March 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of March 2011

		-	
1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$31,699 \$377,815 <u>\$1,516,445</u>	\$1,925,959
6 7 8 9	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses	\$0 \$346,559 \$0 \$25,294 \$4,305	
10 11	Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	<u>\$136,546</u>	<u>\$512,704</u>
12	Total Monthly O&M Expenses		<u>\$2,438,663</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$304,833

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

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Kentucky Power Company Environmental Equipment Operation and Maintenance Costs March 2011

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia on Demand (AOD)	\$3,118.68	\$7,936.14	\$0.00	\$11,054.82
SCR Ammonia on Demand (AOD)	\$149.46	\$0.00	\$0.00	\$149.46
SCR Boiler Outlet Ductwork	\$84,347.69	\$606.05	\$0.00	\$84,953.74
SCR Reactor	\$0.00	\$2,749.13	\$0.00	\$2,749.13
SCR NOx Monitoring	\$1,583.50	\$0.00	\$0.00	\$1,583.50
SCR Urea Solution Feed Pump	\$4,858.00	\$291.48	\$0.00	\$5,149.48
Total SCR March 2011 O & M Expense	\$94 , 057.33	\$11,582.80	\$ 0.00	\$105,640.13
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$4,028.36
Emission Testing Required Under Permit - Operation Maintenance	\$276.68 \$30,906.02	\$0.00 \$0.00	\$0.00 \$0.00	\$276.68 \$30,906.02
March 2011 O & M Expenses Filed				\$140,851.19

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> ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

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For the Expense Month of March 2011

Line No. (1)	Cost Component (2)	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$338,865		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$257,070		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$767,315		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$7,790	~	
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$646,570		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$70,110		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
. 9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,099,405	\$19,475	\$2,118,880

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

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For the Expense Month of March 2011

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Line No. (1)	Cost Component {2}	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$609,562	• .	
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$1,091,455		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$6,614,236		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$1,105,599		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$277,872		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$9,727,621	\$31,250	
、 12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	,
13	Environmental Base (\$/kw)	\$1.15	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	. \$0.97	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$377,815	\$0	\$377,815

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$600,434,141
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2 3	Total Rate Base	\$8,225,948
4	Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
Ŭ	Operations :	
6	Disposal (5010000)	\$4,189
7	Urea (5020002)	\$337,059
8	Trona (5020003)	\$128,101
	Lime Stone (5020004)	\$302,808
10	Steam Exp (5020025)	\$81
	Air Emission Fee	<u>\$10,292</u>
12	Total Operations (Lines 6 thru 10)	\$782,530
	Maintenance :	
13	SCR Maintenance (5120000)	\$24,635
14	Scrubber (FGD) Maintenance (5120000)	<u>\$238,901</u>
15	Total Maintnenance (12) + (13)	<u>\$263,536</u>
16	1/2 of Maintenance (14) * 50%	<u>\$131,768</u>
17	Fixed O&M (11) + (15)	\$914,298
18	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
19	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$609,562</u>
	Total Revenue Requirement,	
20	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,835,510
21	Ohio Power Company Steam Capacity (kw)	8,458,000
	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.04
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	ው የ የ የ የ የ የ የ የ የ የ የ የ የ የ የ የ የ የ የ
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.87
	Amos Unit No. 3 Costs to Kentucky Power:	\$0.87
25	Amos Unit No. 3 Portion (\$/kw) (23)	ە.87 389,500
26	Kentucky Power Capacity Deficit (kw)	<u>309,000</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	\$338,865
27	(ES FORM 3.14, Page 1 of 10, Line 1)	yuuu,uuu

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations :	\$400,962,145 <u>1.37%</u> \$5,493,181 \$77,199
4 5	Disposal (5010000) Urea (5020002)	\$251,463
6	Trona (5020003)	\$76,705
7	Lime Stone (5020004)	\$441,224
8	Polymer (5020005)	\$60,331
9	Lime Hydrate (5020007)	\$0
10	Steam Exp (5020025)	\$46,250
11	Air Emission Fee	<u>\$8,622</u>
12	Total Operations (Line 4 thru 8)	\$961,794
	Maintenance:	\$9,943
13	SCR Maintenance (5120000)	\$249,379
14	Scrubber (FGD) Maintenance (5120000)	\$259,322
15	Total Maintenance (13) + (14) 1/2 Maintenance (15) * 50%	\$129,66 <u>1</u>
16 17	Fixed $O&M(12) + (16)$	<u>\$1,091,455</u>
17	Total Revenue Requirement,	<u> </u>
18	Cost Associated with Cardinal Unit No. 3 (3) + (17)	\$6,584,636
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$6,584,636
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Cardinal Unit No. 1 (\$/kw)	\$0.78
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.66
	Cardinal Unit No. 1 Costs to Kentucky Power :	AA AA
25	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.66
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
27	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26) (ES FORM 3.14, Page 1 of 10, Line 2)	\$257,070

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$964,148,720
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$13,208,837
Ŭ	Operations :	
4	Sludge Disposal (5010000)	\$734,555
	Lime (5020001)	\$3,221,563
6	Urea (5020002)	\$1,160,823
7	Trona (5020003)	\$803,765
8	Lime Stone (5020004)	\$0
9	Polymer (5020005)	\$345,415
10	Steam Exp (5020025)	\$8,715
11	Air Emission Fee	\$34,947
12	Lease (5070005)	<u>\$0</u>
13	Total Operations (Lines 4 thru 10)	\$6,309,783
-	Maintenance :	
14	SCR Maintenance (5120000)	\$8,182
8	Scrubber Maintenance (5120000)	\$600,723
a 1	Total Maintenance (12) + (13)	\$608,905
	1/2 of Maintenance (13) * 50%	\$304,453
18	Fixed O&M (11) + (15)	<u>\$6,614,236</u>
	Total Revenue Requirement,	¢40.000.070
19	Cost Associated with Gavin Plant (3) + (17)	\$19,823,073
20	Ohio Power Company's Percentage Ownership	
21	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$19,823,073
22	Ohio Power Company Steam Capacity (kw)	8,458,000 \$2.34
23	Gavin Plant (\$/kw)	φ2.34 84.00%
24	Ohio Power Surplus Weighing	04.0070
25	Portion of Weighted Average Capacity Rate	\$1.97
	Attributed to Gavin Plant (\$/kw) (21) X (22)	φι.97
	Gavin Plant Costs to Kentucky Power :	\$1.97
26	Gavin Plant Portion (\$/kw) (23) Kantualar Power Conasity Deficit (kw)	389,500
27	Kentucky Power Capacity Deficit (kw) Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	000,000
20	(ES FORM 3.14, Page 1 of 10, Line 3)	\$767,315
28		\$101,010

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ES FORM 3.14 Page 6 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$8,451,624
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$115,787
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,690</u>
7	Total Operations $(4) + (5) + (6)$	\$15,690
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,690</u>
	Total Revenue Requirement,	
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$131,477</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$131,477
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.02
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.02
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.02
19	Kentucky Power Capacity Deficit (kw)	389,500
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$7,790

ES FORM 3.14 Page 7 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
	Utility Plant at Original Cost	\$1,143,093,101
1 2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$15,660,375
	Operations :	
4.	Disposal (5010000)	\$31,924
5	Urea (502002)	\$404,888
6	Trona (5020003)	\$30,176
7	Lime Stone (5020004)	\$483,039
8	Polymer (5020005)	\$1,343
9	Lime Hydrate (502007)	\$0
10	Steam Exp (5020025)	\$0
11	Air Emission Fee	<u>\$12,128</u>
12	Total Operations (Lines 4 thru 8)	\$963,498
	Maintenance :	
13	SCR Maintenance (5120000)	\$12,076
14	FDG (5120000)	<u>\$272,125</u>
15	1/2 of Maintenance (10 + 11) * 50%	<u>\$142,101</u>
16	Fixed O&M (9) + (12)	<u>\$1,105,599</u>
	Total Revenue Requirement,	
17	Cost Associated with Mitchell Plant (3) + (13)	<u>\$16,765,974</u>
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$16,765,974
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Mitchell Plant (\$/kw)	\$1.98
22	Ohio Power Surplus Weighing	84.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.66
-	Mitchell Plant Costs to Kentucky Power :	
24	Mitchell Plant Portion (\$/kw) (20)	\$1.66
25	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
26	(ES FORM 3.14, Page 1 of 10, Line 5)	\$646,570

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3 , 4 & 5)

2 M 3 T 0 4 U 5 T 6 A	Jtility Plant at Original Cost /lember Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations : Jrea (5020002)	\$108,672,817 <u>1.37%</u> \$1,488,818 \$237,329
8 S 9 L 10 F T 11 C 12 C 13 C 14 C 15 M 16 C 17 P A W	Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6) Maintenance : SCR Maintenance (5120000) Maintenance (8) * 50% Total Revenue Requirement, Cost Associated with Muskingum Plant (3) + (10) Dhio Power Company's Percentage Ownership DPCo's Share of Cost Associated with Muskingum Plant (11) X (12) Dhio Power Company Steam Capacity (kw) Muskingum Plant (\$/kw) Dhio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Muskingum Plant (\$/kw) (15) X (16) Muskingum Plant Costs to Kentucky Power :	\$237,323 \$0 <u>\$34,561</u> \$271,890 \$11,963 <u>\$5,982</u> <u>\$277,872</u> \$1,766,690 100.00% \$1,766,690 8,458,000 \$0.21 84.00% \$0.18 \$0.18
19 K N	Auskingum Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Auskingum Plant Environmental Cost to Kentucky Power (18) * (19) ES FORM 3.14, Page 1 of 10, Line 6)	<u>389,500</u> \$70,110

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

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LINE NO.	COST	AMOUNTS
NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6) Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement, Cost Associated with Sporn Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Sporn Plant (11) X (12) Ohio Power Company Steam Capacity (kw) Sporn Plant (\$/kw) Ohio Power Surplus Weighing	AMOUNTS \$20,310,295 <u>1.37%</u> \$278,251 \$0 \$0 <u>\$13,207</u> \$13,207 \$13,207 \$13,207 \$13,207 <u>\$0</u> <u>\$0</u> <u>\$13,207</u> \$13,207 \$0 <u>\$0</u> <u>\$13,207</u> \$13,207 \$0 <u>\$0</u> \$13,207 \$13,207 \$13,207 \$13,207 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
17	Portion of Weighted Average Capacity Rate Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
18 19 20	Sporn Plant Costs to Kentucky Power : SpornGavin Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Sporn Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 7)	\$0.03 <u>389,500</u> \$11,685

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of March 2011

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ST Description UNIT 1 UNIT 2 2) (1) (1) (1) (1) 2) (3) (4) (5) (5) 2) (3) (4) (5) (5) 2) (3) (4) (5) (5) (3) (4) (5) (5) (5) (4) (5) (4) (5) (5) (5) (3) (4) (5) (5) (5) (3) (4) (5) (5) (5) (3) (4) (5) (5) (6) (10) (10) (11) (10) (6) (10) (11) (12) (12) (12) (6) (10) (11) (12) (12) (12) (6) (10) (11) (12) (12) (12) (6) (12) (12) (12) (12) (12) (7) (12) (12) (12) (12) (12) (7) (12) (12) (12) (12) (12) (7) (12) (12) (12) (12) (12) (7) (12) (12) (12) (12) <th></th> <th></th> <th></th> <th></th> <th>l</th> <th></th> <th></th>					l		
COST Control MUNIT 3 M			LINUARD				
(2) (2) (4) (5) (4) (5) Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) \$1,37% \$1,37% \$16,709,416 \$2, 1.37% Total Rate Base Coperations : \$1,37% \$16,709,416 \$2, 1.37% Total Rate Base Coperations : \$1,37% \$24,496 \$14,462 \$22,919 Operations : Control (5020003) \$1,44,462 \$22,919 \$20 \$20 Total Operations (40,000) Sili Ension Fee \$1,37% \$24,496 \$1,44,462 \$20,99 Total Operations (40,000) Sili Ecz5 \$0 \$0 \$0 \$0 Air Emission Fee Total Operations (4) + (5) + (6) \$1,0000) \$21,625 \$20 \$0 Air Emission Fee Total Operations (4) + (5) + (6) \$1,0000) \$21,625 \$20 \$0 Air Emission Fee Total Operations (4) + (5) \$1,0000) \$21,626 \$20 \$20 Total Operations (4) Sili Sili Sili Sili Sili Sili Sili Sili	N N		Plant Common	AMOUNTS	UNIT 2 AMOUNTS	Plant Common	Total
Utility Plant at Original Cost \$1,787,996 \$10,544,676 \$16,709,416 \$2, 1,37% Mernber Primary Capacity Investment Rate (16,44% / 12) \$1,37% \$24,496 \$16,709,416 \$2, 1,37% Total Rate Base Operations : \$50,544,676 \$16,709,416 \$2, 1,37% Operations : Operations : \$50,544,676 \$16,709,416 \$2, 1,37% Operations : Operations : \$50,544,676 \$16,709,416 \$2, 1,37% Operations : Operations : \$50,546,676 \$16,709,416 \$2, 1,37% Total (5220002) The file interactions (4) + (5) + (5) \$50 \$50 \$50 \$50 Air Emission Fee Total (52,20000) \$51,625 \$50 \$50 \$50 \$50 Maintenance (51,20000) \$51,625 \$50 \$50 \$50 \$50 \$50 SCR Maintenance (51,20000) \$50,661 \$1,10 \$51,625 \$50 \$50 \$50 Maintenance (51,20000) \$50,661 \$1,4442 \$50,561 \$51,62,52 \$50 \$50 \$50 Total Revenue Requirement, Cost Associated with Rockport Plant (1) X (12) \$1,44,4	E	(2)	(3)	(4)	(5)	(9)	(2)
Member Primary Capacity Investment Rate (16, 44% / 12) 1.37% 1.37% 1.37% Total Rate Base Operations: \$0 \$0 \$0 Operations: Urea (5020003) \$0 \$0 \$0 \$0 Total Rate Base Operations: \$0 \$0 \$0 \$0 \$0 Operations: Urea (5020003) \$16,525 \$0	-	utility Plant at Original Cost	\$1,787,996	\$10,544,676	\$16,709,416	\$2,202,020	
$ \begin{array}{c} \mbox{Total Rate Base} \\ \mbox{Coperations:} \\ Coper$	2	nvestr	1.37%	1.37%	1.37%	1.37%	
Cperations: S0 \$0	ო		\$24,496	\$144,462	\$228,919	\$30,168	
Urea (502002) \$0 <td></td> <td>Operations :</td> <td></td> <td></td> <td></td> <td></td> <td></td>		Operations :					
Trona (5020003) $$00$ $$0$	Ŕ	Urea (5020002)	\$0	0\$	ŝ	\$0	
Air Emission Fee S15,625 \$0 <t< td=""><td>ഹ</td><td>Trona (5020003)</td><td></td><td>0,5</td><td>Q (</td><td>0\$ \$</td><td></td></t<>	ഹ	Trona (5020003)		0,5	Q (0\$ \$	
Total Operations (4) + (5) + (6) \$15,625 \$0 \$0 \$0 Maintenance : \$0 Maintenance (5120000) \$0 \$0 \$0 \$0 State of Maintenance (5120000) \$12 of Maintenance (5120000) \$0 \$0 \$0 \$0 Fixed O&M (7) + (9) \$0% \$0	o	Air Emission Fee	<u>\$15,625</u>)))		
Maintenance : \$0 <td>2</td> <td>Total Operations $(4) + (5) + (6)$</td> <td>\$15,625</td> <td>0\$</td> <td>0.2</td> <td>0 7</td> <td></td>	2	Total Operations $(4) + (5) + (6)$	\$15,625	0\$	0.2	0 7	
Accontinuentance (or Leoucu) 200	c		Ç	¢	C 4	Ğ	
Fixed O&M (7) + (9) S15.625 S0 Fixed O&M (7) + (9) Total Recenter Requirement, Cost Associated with Rockport Plant (3) + (10) \$40,121 \$144,452 \$228,919 Cost Associated with Rockport Plant (1) X (12) \$40,121 \$144,452 \$228,919 Rives Share of Cost Associated with Rockport Plant (11) X (12) \$40,121 \$124,733 \$148,980 Rives Share of Cost Associated with Rockport Plant (11) X (12) \$20,061 \$122,733 \$148,980 Indiana Michigan Power Company Steam Capacity (kw) Rockport Plant (14) / (15) \$20,061 \$122,733 \$148,980 Rockport Plant (Si(w) (14) / (15) Rockport Plant / Indiana Michigan Power Company Steam Capacity (kw) \$20,061 \$122,733 \$148,980 Rockport Plant (Si(w) (14) / (15) Rockport Plant / Indiana Michigan Power Supius Weighing Portion of Weighting \$122,733 \$148,980 Portion of Weighting Rockport Plant (13) * (16) \$20,061 \$122,733 \$148,980 Rockport Plant (Si(w) (14) / (15) Rockport Plant (Si(w) (17) X (18) \$122,733 \$148,980 Rockport Plant Portion of Weighting Power Supius Weighting \$122,733 \$148,980 Rockport Plant Portion (Si(w) (17) X (18) Rockport Plant Costs to Kentucky Power (19)	0 0		2 C	÷	D €	2 C	
Total Revenue Requirement, Cost Associated with Rockport Plant (3) + (10) \$40,121 \$144,452 \$228,919 Cost Associated with Rockport Plant (3) + (10) \$40,121 \$144,452 \$228,919 Indiana Michigan Power Company's Percentage Ownership \$40,121 \$144,462 \$20,061 I&M's Share of Cost Associated with Rockport Plant (11) X (12) \$20,061 \$122,793 \$148,980 Indiana Michigan Power Company Steam Capacity (kw) Rockport Plant (14) / (15) \$20,061 \$122,793 \$148,980 Indiana Michigan Power Company Steam Capacity (kw) Rockport Plant (%W) (14) / (15) \$20,061 \$122,793 \$148,980 Rockport Plant (%Kw) (14) / (15) Rentucky Power Portion of Rockport Plant / Indiana Michigan Power Company Steam Capacity (kw) \$122,793 \$148,980 Portion of Weighting Power Company Steam Capacity (kw) \$122,793 \$148,980 Portion of Wolghted Average Capacity Rate Attributed to Rockport Plant (%W) (17) X (18) \$122,793 \$148,980 Portion of Weighting Power Steam Capacity Rate Attributed to Rockport Plant (%W) (17) X (18) \$122,793 \$148,980 Rockport Plant Costs to Kentucky Power : Rockport Plant (%W) (17) X (18) Rockport Plant (%W) (17) \$122,793 Rockp	5 2		\$15.625	6	6	9	
Cost Associated with Rockport Plant (3) + (10) \$40,121 \$144,462 \$228,919 Indiana Michigan Power Company's Percentage Ownership \$40,121 \$144,462 \$208,919 IkM's Share of Cost Associated with Rockport Plant (11) X (12) \$40,121 \$144,462 \$20,003 Indiana Michigan Power Company's Percentage Ownership \$500% \$500% \$500% Indiana Michigan Power Company Steam Capacity (kw) \$20,061 \$122,793 \$148,980 Indiana Michigan Power Company Steam Capacity (kw) Rockport Plant (5/kw) (14) / (15) \$122,793 \$148,980 Rockport Plant (%/kw) (17) X (18) Rockport Plant (%/kw) (17) X (18) \$122,793 \$148,980 Portion of Rockport Plant (%/kw) (17) X (18) Rockport Plant (%/kw) (17) X (18) \$122,793 \$148,980 Rockport Plant (%/kw) (17) X (18) Rockport Plant (%/kw) (17) X (18) \$122,793 \$148,980 Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (%/kw) (17) X (18) \$122,793 \$148,980 Rockport Plant (%/kw) (17) X (18) Rockport Plant (%/kw) (17) X (18) \$122,793 \$148,980 Rockport Plant (%/kw) (17) X (18) Rockport Plant (%/kw) (17) X (18) \$122,793 \$148,980 Rockport Plant (%/kw) (17		Total Revenue Requirement,					
Indiana Michigan Power Company's Percentage Ownership [&M's Share of Cost Associated with Rockport Plant (11) X (12) \$20,061 \$122,793 \$148,980 Total Rockport Plant Common and Units 1 & 2 Indiana Michigan Power Company Steam Capacity (kw) Rockport Plant (\$/kw) (14) / (15) Kentucky Power Portion of Rockport Plant / Indiana Michigan Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (17) X (18) Rockport Plant (\$/kw) (17) X (18) Rockport Plant Costs to Kentucky Power (19) * (20) Kentucky Power Capacity Deficit (kw) Rockport Units 1 & 2 Environmental to Kentucky Power (19) * (20)	~	Cost Associated with Rockport Plant (3) + (10)	\$40,121	\$144,462	έð.		
[&M's Share of Cost Associated with Rockport Plant (11) X (12) \$20,061 Total Rockport Plant Common and Units 1 & 2 Total Rockport Plant Common and Units 1 & 2 Indiana Michigan Power Company Steam Capacity (kw) Rockport Plant (\$/kw) (14) / (15) Kentucky Power Portion of Rockport Plant / Indiana Michigan Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (17) X (18) Rockport Plant Costs to Kentucky Power : Rockport Plant Costs to Kentucky Power (19) * (20) (ES FORM 3.14. Page 1 of 10. Line 8)	£	Indiana Michigan Power Company's Percentage Ownership	50%	85.00%	(
Total Rockport Plant Common an Indiana Michigan Power Compan Rockport Plant (\$/kw) (14) / (15) Kentucky Power Portion of Rock Indiana Michigan Power Surplus Portion of Weighted Average Car Attributed to Rockport Plant (\$/kw Rockport Plant Portion (\$/kw) (18 Kentucky Power Capacity Deficit Rockport Units 1 & 2 Environmen (ES FORM 3.14. Page 1 of 10. Li	<u>6</u>	I&W's Share of Cost Associated with Rockport Plant (11) X (12)	\$20,061	\$122,793		\$15,084	
Indiana Michigan Power Compan Rockport Plant (\$/kw) (14) / (15) Kentucky Power Portion of Rocky Indiana Michigan Power Surplus' Portion of Weighted Average Car Attributed to Rockport Plant (\$/kw Rockport Plant Costs to Kentuck) Rockport Plant Portion (\$/kw) (18 Kentucky Power Capacity Deficit Rockport Units 1 & 2 Environmen (ES FORM 3.14. Page 1 of 10. Li	4	Total Rockport Plant Common and Units 1 & 2				,	\$306,918
Rockport Plant (\$/kw) (14) / (15) Kentucky Power Portion of Rockg Indiana Michigan Power Surplus Portion of Weighted Average Car Attributed to Rockport Plant (\$/kw Rockport Plant Costs to Kentucky Rockport Plant Portion (\$/kw) (18 Kentucky Power Capacity Deficit Rockport Units 1 & 2 Environment (ES FORM 3.14. Page 1 of 10. Li	ΰ	Indiana Michigan Power Company Steam Capacity (kw)					5,416,000
Kentucky Power Portion of Rocky Indiana Michigan Power Surplus Portion of Weighted Average Car Attributed to Rockport Plant (\$/kw Rockport Plant Costs to Kentuck) Rockport Plant Portion (\$/kw) (18 Kentucky Power Capacity Deficit Rockport Units 1 & 2 Environmen (ES FORM 3.14. Page 1 of 10. Li	9	Rockport Plant (\$/kw) (14) / (15)					\$0.06
Indiana Microgan Power Surplus Portion of Weighted Average Cap Attributed to Rockport Plant (\$/kw Rockport Plant Costs to Kentuck) Rockport Plant Portion (\$/kw) (18 Kentucky Power Capacity Deficit Rockport Units 1 & 2 Environmen (ES FORM 3.14. Page 1 of 10. Li	1	Kentucky Power Portion of Rockport Plant /					7020 82
Attributed to Rockport Plant (\$/w Rockport Plant Costs to Kentuck) Rockport Plant Portion (\$/w) (18 Kentucky Power Capacity Deficit Rockport Units 1 & 2 Environmen (ES FORM 3.14. Page 1 of 10. Li	<u>~ «</u>	i indiana iviichigan Fower Surpius vreigning * Portion of Weichthed Averade Capacity Rate	•				5
Rockport Plant Costs to Kentucky Rockport Plant Portion (\$/kw) (18 Kentucky Power Capacity Deficit Rockport Units 1 & 2 Environmen (ES FORM 3.14. Page 1 of 10. Li	2	Attributed to Rockport Plant (\$/kw) (17) X (18)					\$0.01
Rockport Plant Portion (\$/kw) (18 Kentucky Power Capacity Deficit Rockport Units 1 & 2 Environmen (ES FORM 3.14. Page 1 of 10. Li		Rockport Plant Costs to Kentucky Power :					1
Kentucky Power Capacity Deficit Rockport Units 1 & 2 Environmen (ES FORM 3.14. Page 1 of 10. Li	0	Rockport Plant Portion (\$/kw) (18)					\$0.01
reception of the Total State 1 of 10. Li	20	Kentucky Power Capacity Deficit (kw)					100,885
	й	(ES FORM 3.14, Page 1 of 10, Line 8)			· .		\$3,895

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ES FORM 3.14 Page 11 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE		1997 - 19
NO.	COST	AMOUNTS
		\$98,457,579
1	Utility Plant at Original Cost	
	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,348,869
	Operations :	ሰ ሰ ነ
4	Urea (5020002)	\$0 \$0
и и	Trona (5020003)	\$0 \$45.005
8 1	Air Emission Fee	<u>\$15,625</u>
7	Total Operations (4) + (5) + (6)	\$15,625
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	<u> </u>
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,494</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,494
	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of March 2011

LINE NO.		Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 4/30/2010							
1 2	L/T DEBT S/T DEBT	\$550,000,000 \$0	51.941% 0.000%	6.48% 0.83%		3.37% 0.00%			3.37% 0.00%
3 4	ACCTS REC FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%	1.22% 10.50%		0.05% 4.61%	1.5762	2/	0.05% 7.27%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.69%
1/		nted Average Cost o on Common Equity		10 - 00020		le			
2/		Conversion Factor - 00020 dated - Apri		tion:					
1 2 3		EVENUE LE ACCOUNTS EX c Service Commissio					100.0000 0.2400 0.1500		
4 5	STATE TAXAB	LE PRODUCTION II E TAX EXPENSE, N	NCOME BEFOR IET OF 199 DEC	E 199 DEDUCT DUCTION (SEE	ION BEL	OW)	99.6100 5.6384		
6 7	FEDERAL TAX 199 DEDUCTIO	ABLE PRODUCTIO	N INCOME BEF	ORE 199 DEDL	JCTI	NC	93.9716 5.6372		
8 9		ABLE PRODUCTIO		EDUCTION (355	%)		88.3344 30.9171		
10	AFTER-TAX PF	RODUCTION INCOM	1E				57.4173		
11 12 13 14 15	AFTER-TA 199 DEDU UNCOLLE	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS Public Service Comm	COME SEXPENSE				57.4173 5.6372 0.2400 0.1500		
16	TOTAL GROSS	S-UP FACTOR FOR	PRODUCTION	INCOME (ROU	NDE	D)	63.4445	1	
17 18 19 20		,	TAX RATE:				30.9171 <u>5.6384</u> 36.5555		
21	GROSS REVE	NUE CONVERSION	FACTOR (100.0	0000 / Line 14)			1.5762		
1 2 3	STATE INCOM PRE-TAX F COLLECTI Kentucky F		100.0000 0.2400 0.1500						
4 5		XABLE PRODUCTION TATE 199 DEDUCTION		FORE 199 DED	TOUC	ION	99.6100 5.6372		
6 7		XABLE PRODUCTION COME TAX RATE	ON INCOME BE	FORE 199 DED	NUCT	ION	93.9728 6.0000		
8	STATE INC	COME TAX EXPENS	SE (LINE 5 X LIN	IE 6)			5.6384		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.

ES FORM 3.20

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT .COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of March 2011

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Total	(6)															\$47,073	
Rockport Plant Common	(8)	<u></u>	\$2,185,292	(\$142,120)	\$3,346	0 8988%	\$18,394	\$6,410	\$0	\$6,410	ADA ROA		\$7,441				-
Lotal Units 1 & 2 (C5 + C6)	(/)				\$8.723.898	0 8988%	\$78,410	\$39,968	\$0	\$39,968	4 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	\$35,513				
Unit No. 2	(6)		\$8,353,084	(\$2,031,958)	(\$923,542) \$5.397.584	• • • • • •		\$24,502	\$0			<u>-1</u>	<u></u>			Barton Barton	
Unit No. 1	(2)	<u></u>	\$5,272,657	(\$1,358,301)	(\$588,042) \$3.326.314			\$15,466	\$0						<u>.</u>		
Rockport Plant Common	(4)	\$1,777,206		(\$865,929)	(\$174,114) \$737,163	0 898 <i>8</i> %	\$6,626	\$5,212	\$15,625	\$20,837	CO7 162	\$4,119				· · ·	
	(3)					10.7851%											
COST COMPONENT	$\langle 2 \rangle$	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost	AEGCo Low NOx Burners (LNB) Installed Cost Flvash I andfill Installed Cost	ess Accumulated Depreciation	.ess Accum. Uet. income Laxes Total Rate Base	Neighted Average Cost of Capital - ES FORM 3.21 Monthly Weitchted Aver Cost of Carital // INE 7 / 12)	Wonthly Return of Rate Base (Line 6 * Line 8)	Operating Expenses : Monthly Depreciation Expense	Wonthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant	Centucky Power's Portion of Rockport's CEMS (Line 13 * 15%)	Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kentucky Power's Portion of Kockport Plants' Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15)	Note: Cost in Column 8, Line 16 is to be Recorded on	ES FORM 3.00 Line 2	
NO.		<u>к</u> р				ν α	• F•	10	linered.	<u>.</u>	; ;	-	15 X	<u>~ ~</u>	4	е Ф	

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KPSC Case No. 2011-00401 KUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 407 of 609

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 3/31/2011							
1 2	L/T DEBT S/T DEBT	77,302,910 26,346,293	42.9763% 14.6471%	4.9353% 0.0000%		2.1210% 0.0000%			2.1210% 0.0000%
3	CAPITALIZATION OFFSETS	0	0.0000%	3.6808%		0.0000%			0.0000%
4 5	DEBT C EQUITY	76,224,160	42.3766%	12.1600%	1/	5.1530%	1.681379	2/	8.6641%
6	TOTAL	179,873,363	100.0000%			7.2740%			10.7851% ========
1/ 2/	WACC = Weighted Cost Rates per the Gross Revenue Con	Provisions of the	Rockport Unit F		nt				
	OPERATING REVE		()				100.00		
2 3 4	LESS: INDIANA A (LINE 1 X .085) INCOME BEFORE LESS: FEDERAL) FED INC TAX	SS INCOME				<u>8.500</u> 91.500		
5 6 7	(LINE 4 X .35) OPERATING INCO	ME PERCENTA	GE				<u>32.025</u> 59.475		
8 9	GROSS REVENUE FACTOR (100						<u>1.681379</u>		

For the Expense Month of March 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of March 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$44,307,469 \$459,737 \$5,691,192 \$5,445,168	79.3% 0.8% 10.2% 9.7%
5	Total Revenues for Surcharges Purposes	\$55,903,566	100.0%
6	Non-Physical Revenues for Month	\$632,852	
7	Total Revenues for Month	\$56,536,418	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for January 2010	-0.2632%
2	Kentucky Retail Revenues for Current Expense Month	(\$506,839)
3	Surcharge Collected (1) * (2)	\$1,334
4	Surcharge Amount To Be Collected	(\$173,605)
5	Over / (Under) Recovery (3) - (4) = (5)	\$174,939

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

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NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 410 of 609

Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com



A unit of American Electric Power

May 20, 2011

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602 RECEIVED

MAY 2 0 2011

PUBLIC SERVICE COMMISSION

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of April 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after May 31, 2011.

If there are any questions please contact me at 502-696-7010.

Lila P. Menney

Lila P. Munsey Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 ES FORM 1.00 Attachment 1 Page 411 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of April 2011

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CALCULATION OF E(m)					
E(m) = CRR - BRR					
LINE 1	CRR from ES FORM 3.00	\$5,830,053			
LINE 2	Brr from ES FORM 1.10	3,647,040	1.		
LINE 3	E(m) (LINE 1 - LINE 2)	\$2,183,013			
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	78.7%			
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,718,031			
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	\$759,603			
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$2,477,634			
	SURCHARGE FACTOR				
LÍNE 8	Net KY Retail E(m) (Line 7)	\$2,477,634			
LINE 9	KY Retail R(m) from ES FORM 3.30	\$42,540,201			
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	5.8242%			

Effective Date for Billing:

May 31, 2011

Submitted By :

Title :

se

Manager Regulatory Services

Date Submitted :

May 19, 2011

1/ Case No. 2009-00459, dated June 28, 2010

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of April 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$3,991,163 3,590,810 3,651,374 3,647,040 3,922,590 3,627,274 3,805,325 4,088,830 3,740,010 3,260,302 2,786,040 4,074,321

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of April 2011

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		999 1999 1997 1997 1997 1997 1997 1997
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$5,783,944
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$46,109
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$5,830,053

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE NO.	COST COMPONENT		
NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Return on Rate Base : Utility Plant at Original Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes Net Utility Plant SO2 Emission Allowance Inventory from ES FORM 3.11 ECR & NOx Emission Allowance Inventory from ES FORM 3.12 Cash Working Capital Allowance from ES FORM 3.13, Line 13 Total Rate Base Weighted Average Cost of Capital - ES FORM 3.15 Monthly Weighted Avg. Cost of Capital (9) / 12 Monthly Return of Rate Base (8) * (10) Operating Expenses : Monthly Depreciation Expense Monthly Depreciation Expense Monthly Property Taxes Monthly Kentucky Air Emissions Fee Monthly Environmental AEP Pool Capacity Costs from ES FORM 3.14, Page 1 of 11, Column 5, Line 10	\$191,327,552 (\$63,498,558) (\$40,665,290) 10.69%	\$87,163,704 \$9,444,558 \$127,987 \$317,725 \$97,053,974 0.89% \$863,780 \$577,252 \$46,030 \$14,017 \$31,699 \$2,095,510
17 18	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13 Monthly SO2 Emission Allowance Consumption		\$331,341 \$1,824,315
10	Total Operating Expenses [Line 12 thru Line 18]		\$4,920,164
20	Total Revenue Requirement - Big Sandy Record on ES FORM 3.00, Line 1		\$5,783,944

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

		(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
FPA Allowances		o	439,224	\$0	· \$0	\$0.000
Gavin Reallocation		0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	67,631	\$0	\$21,114,805	\$312.206
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance Adjustment	1979 X 1999 X 19	0	4,106	\$0	(\$1,700,982)	(\$414.267)
Withdrawals -			44.000	¢0.	\$836,106	\$73.459
P & E Transfers Out		0	11,382 59,987	\$0 \$0	\$4,855,950	\$80.950
Intercompany Sales Off - System Sales		0	303,050	\$0 \$0	\$29,780,273	\$98.269
SO2 Emissions Allowance		U	000,000	ΨŬ	φ20,100,210	\$00.200
Adjustment		0	0	\$0	\$0	<u>\$</u> 0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)		4,142		\$1,824,315		
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)		0	631,264	\$0	\$51,191,214	\$81.093
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,115,037		\$9,444,558	\$8.470
Expense Month Member Load Ratio	or AEP/Ke	ntucky Power				0.06877

For the Expense Month of April 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of April 2011

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0	t o	\$0 #0	\$0.000
EPA Allowances	0	37,003	\$0	\$0 \$0	
P&E Transfers In Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	Ő	Û	\$0	\$0	\$0.000
Withdrawals -	0	0	\$0	\$0	\$0.000
P & E Transfers Out	0	0 0	\$0 \$0	\$0 \$0	\$0.000
Intercompany Sales Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	0	19,708	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		13,940		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of April 2011

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions - EPA Allowances P&E Transfers In Intercompany Purchases External Purchases	0 0 0 0	0 44,729 0 980	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$1,060,590	\$0.000 \$0.000 \$0.000 \$0.000 \$1,082.235
Other (List) Withdrawals - P & E Transfers Out Intercompany Sales Off - System Sales NOx Consumed By Kentucky Power	0 0 0 783	0 0 0 19,065	\$0 \$0 \$0 \$0 \$22,843	\$0 \$0 \$0 \$0 \$932,603	\$0.000 \$0.000 \$0.000 \$0.000 \$48.917
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		26,644		\$127,987	\$4.804

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

	of April 2011
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1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$31,699 \$354,445 <u>\$1,824,315</u>	\$2,210,459
5 6 7 8 9 10	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses	\$0 \$279,762 \$0 \$22,843 \$465 \$28,271	
11	Total 2003 Plan O&M Expenses		<u>\$331,341</u>
12	Total Monthly O&M Expenses		<u>\$2,541,800</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$317,725

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

	April 4	2011		
Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia on Demand (AOD)	\$1,846.08	\$787.47	\$0.00	\$2,633.55
SCR Boiler Outlet Ductwork	\$0.00	\$215.84	\$0.00	\$215.84
SCR Reactor	\$0.00	\$84.15	\$0.00	\$84.15
SCR NOx Monitoring	\$2,367.75	\$0.00	\$0.00	\$2,367.75
SCR Boiler Acoustic Horn	\$3,714.52	\$0.00	\$0.00	\$3,714.52
Total SCR March 2011 O & M Expense	\$7,928.35	\$1,087.46	\$0.00	\$9,015.81
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$465.00
Emission Testing Required Under Permit - Operation Maintenance	\$0.00 \$17,094.42	\$0.00 \$2,160.95	\$0.00 \$0.00	\$0.00 \$19,255.37

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs April 2011

April 2011 O & M Expenses Filed

\$28,736.18

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ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of April 2011

Line No.	Cost Component	Ohio Power Company's Environmental Cost to KPCo	Indiana Michigan Power Company's Environmental Cost to KPCo	Total
(1)	(2)	(3)	(4)	(5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$342,760		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$260,965		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$740,050		-
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$7,790		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$642,675		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$70,110		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,076,035	\$19,475	\$2,095,510

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of April 2011

Line No.	Cost Component	Ohio Power Company's (OPCo) Environmental Cost to KPCo	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo	Total
(1)	(2)	(3)	(4)	(5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$632,234		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$1,284,406		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$5,870,239	· ·	
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$996,917		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$328,475		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8.	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$9,141,168	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.08	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.91	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$354,445	, \$0	\$354,445

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$600,434,141
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$8,225,948
4	Ohio Power Company's Percentage Ownership - Environmental Investment	100.00%
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
Ŭ	Operations :	
6	Disposal (5010000)	\$8,193
7	Urea (5020002)	\$364,147
8	Trona (5020003)	\$137,030
9	Lime Stone (5020004)	\$283,759
10	Steam Exp (5020025)	(\$91)
11	Air Emission Fee	<u>\$10,292</u>
12	Total Operations (Lines 6 thru 10)	\$803,330
	Maintenance :	
13	SCR Maintenance (5120000)	\$7,983
14	Scrubber (FGD) Maintenance (5120000)	<u>\$281,963</u>
15	Total Maintnenance (12) + (13)	<u>\$289,946</u>
16	1/2 of Maintenance (14) * 50%	<u>\$144,973</u>
17	Fixed O&M (11) + (15)	\$948,303
18	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
19	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$632,234</u>
	Total Revenue Requirement,	
20	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,858,182
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.05
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	¢0.00
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.88
	Amos Unit No. 3 Costs to Kentucky Power :	\$0.88
25	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.88 389,500
26	Kentucky Power Capacity Deficit (kw)	<u>309,500</u>
07	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	\$342,760
27	(ES FORM 3.14, Page 1 of 10, Line 1)	ψυτ2,700

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ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

NO.	COST	AMOUNTS
4	Utility Plant at Original Cost	\$400,962,145
1 2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
∠ 3	Total Rate Base	\$5,493,181
3	Operations :	
4	Disposal (5010000)	\$108,945
5	Urea (502002)	\$308,511
6	Trona (5020003)	\$169,122
7	Lime Stone (5020004)	\$504,699
8	Polymer (5020005)	(\$12,167)
9	Lime Hydrate (5020007)	\$4,505
10	Steam Exp (5020025)	\$54,388
11	Air Emission Fee	<u>\$8,622</u>
12	Total Operations (Line 4 thru 8)	\$1,146,625
1.	Maintenance :	
13	SCR Maintenance (5120000)	\$20,170
14	Scrubber (FGD) Maintenance (5120000)	<u>\$255,391</u>
15	Total Maintenance (13) + (14)	\$275,561
16	1/2 Maintenance (15) * 50%	<u>\$137,781</u>
17	Fixed O&M (12) + (16)	<u>\$1,284,406</u>
	Total Revenue Requirement,	
18	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$6,777,587</u>
19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$6,777,587
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Cardinal Unit No. 1 (\$/kw)	\$0.80
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.67
	Cardinal Unit No. 1 Costs to Kentucky Power :	· · · · ·
25	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.67
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	
27	(ES FORM 3.14, Page 1 of 10, Line 2)	\$260,965

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
INO.	U051	AMOUNTS
1	Utility Plant at Original Cost	\$964,148,720
2	Member Primary Capacity Investment Rate (16.44% / 12)	φ 304 , 140,720 1.37%
23		<u>1.37%</u> \$13,208,837
3	Total Rate Base	φ13,200,037
	Operations :	#650,900
4	Sludge Disposal (5010000)	\$659,892
5	Lime (5020001)	\$3,132,975
6	Urea (5020002)	\$841,636
7	Trona (5020003)	\$582,621
8	Lime Stone (5020004)	\$0
9	Polymer (5020005)	\$313,470
10	Steam Exp (5020025)	\$6,455
11	Air Emission Fee	\$34,947
12	Lease (5070005)	<u>\$0</u>
13	Total Operations (Lines 4 thru 10)	\$5,571,996
	Maintenance :	
14	SCR Maintenance (5120000)	\$80,756
15	Scrubber Maintenance (5120000)	<u>\$515,730</u>
16	Total Maintenance (12) + (13)	\$596,486
17	1/2 of Maintenance (13) * 50%	<u>\$298,243</u>
18	Fixed O&M (11) + (15)	<u>\$5,870,239</u>
	Total Revenue Requirement,	
19	Cost Associated with Gavin Plant (3) + (17)	\$19,079,076
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$19,079,076
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Gavin Plant (\$/kw)	\$2.26
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.90
	Gavin Plant Costs to Kentucky Power:	
26	Gavin Plant Portion (\$/kw) (23)	\$1.90
27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
28	(ES FORM 3.14, Page 1 of 10, Line 3)	\$740,050

ES FORM 3.14 Page 6 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$8,451,624
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$115,787
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,690</u>
7	Total Operations (4) + (5) + (6)	\$15,690
	Maintenance :	
8	SCR Maintenance (5120000)	· \$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,690</u>
	Total Revenue Requirement,	
11	Cost Associated with Kammer Plant (3) + (10)	<u>\$131,477</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$131,477
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.02
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.02
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.02
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$7,790

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ES FORM 3.14 Page 7 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE NO.	- COST	AMOUNTS
NO.		AMOUNTO
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$1,143,093,101 <u>1.37%</u> \$15,660,375
4 5 6 7	Operations : Disposal (5010000) Urea (5020002) Trona (5020003) Lime Stone (5020004)	(\$18,726) \$323,525 \$55,744 \$449,681
8 9 10 11	Polymer (5020005) Lime Hydrate (5020007) Steam Exp (5020025) Air Emission Fee	\$1,345 \$0 \$0 <u>\$12,128</u>
12 13 14 15 16	Total Operations (Lines 4 thru 8) Maintenance : SCR Maintenance (5120000) FDG (5120000) 1/2 of Maintenance (10 + 11) * 50% Fixed O&M (9) + (12)	\$823,697 \$2,495 <u>\$343,945</u> <u>\$173,220</u> <u>\$996,917</u>
17 18 19 20 21 22 23	Total Revenue Requirement, Cost Associated with Mitchell Plant (3) + (13) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Mitchell Plant (14) X (15) Ohio Power Company Steam Capacity (kw) Mitchell Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Mitchell Plant (\$/kw) (18) X (19)	<u>\$16,657,292</u> 100.00% \$16,657,292 8,458,000 \$1.97 84.00% \$1.65
24 25 26	Mitchell Plant Costs to Kentucky Power : Mitchell Plant Portion (\$/kw) (20) Kentucky Power Capacity Deficit (kw) Mitchell Plant Environmental Cost to Kentucky Power (21) * (22) (ES FORM 3.14, Page 1 of 10, Line 5)	\$1.65 <u>389,500</u> \$642,675

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ES FORM 3.14 Page 8 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3 , 4 & 5)

LINE NO.	COST	AMOUNTS
4	Litite Direct of Original Coot	\$108,672,817
1	Utility Plant at Original Cost	1.37 <u>%</u>
2 3	Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$1,488,818
3		φ1,100,010
	Operations :	\$292,815
4	Urea (5020002) Trans (5020003)	\$0
5	Trona (5020003) Air Emission Fee	\$34,561
6 7	Total Operations (4) + (5) + (6)	\$327,376
1	Maintenance :	<i>QOL1,010</i>
•	SCR Maintenance (5120000)	\$2,198
8	1/2 of Maintenance (8) * 50%	\$1,099
9 10	Fixed $O&M(7) + (9)$	\$328,475
10	Total Revenue Requirement,	40201110
44	Cost Associated with Muskingum Plant (3) + (10)	\$1,817,293
11 12	Ohio Power Company's Percentage Ownership	100.00%
12 13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,817,293
13 14	Ohio Power Company Steam Capacity (kw)	8,458,000
14	Muskingum Plant (\$/kw)	\$0.21
16	Ohio Power Surplus Weighing	84.00%
10	Portion of Weighted Average Capacity Rate	
17	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.18
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.18
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
10	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$70,110
20		

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ES FORM 3.14 Page 9 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

For the Expense Month of April 2011

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$20,310,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$278,251
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$13,207</u>
7	Total Operations (4) + (5) + (6)	\$13,207
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed $O&M(7) + (9)$	<u>\$13,207</u>
	Total Revenue Requirement,	\$004 (FR
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$291,458</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$291,458
14	Ohio Power Company Steam Capacity (kw)	8,458,000 \$0.03
15	Sporn Plant (\$/kw)	\$0.03 84.00%
16 17	Ohio Power Surplus Weighing Dertion of Weighted Average Connective Pote	04.0070
17	Portion of Weighted Average Capacity Rate Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	φ 0.00
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	389,500
13	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	<u></u>
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685
20	(. ,

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ES FORM 3.14 Page 10 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

Total	(2)	жонның байалала			NURSE #JANENALIST	ana ang ang ang ang ang ang ang ang ang	-473-49972		\$306,918	5,416,000 \$0.06	16.00%	\$0.01	\$0.01 380 500	202,200	\$3,895
Rockport Plant Common	(6)	\$2,202,020 <u>1.37%</u>	\$30,168	\$0 \$0 \$0	0 0 00 00 00 00 00 00 00 00 00 00 00 00	800	05	\$30,168 <u>50.00%</u> \$15,084	2-1 MERINA PERINA PERINA P		insidea no-cesar	CLEATE In Provident		275 un W	
UNIT 2 AMOUNTS	(5)	\$16,709,416 <u>1.37%</u>	\$228,919	0 0 9 9	영윦	0\$	S	\$228,919 <u>65.08%</u> \$148,980	2011 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 -					CONTRACTOR OF	
UNIT 1 AMOUNTS	(4)	\$10,544,676 <u>1.37%</u>	\$144,462	\$0 \$0	80 80 80	<mark>8 8</mark>	05	\$144,462 <u>85.00%</u> \$122,793							
Rockport Plant Common	(3)	\$1,787,996 <u>1.37%</u>	\$24,496	0\$ 0\$	<u>\$15,625</u> \$15,625	G S	\$15,625	\$40,121 <u>50%</u> \$20,061							
						A									
COST	(2)	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	Total Rate Base Operations :	Urea (5020002) Trona (5020003)	Air Emission Fee Total Operations (4) + (5) + (6) Maintenance :	SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50%	Fixed O&M (7) + (9)	rotar Revenue Requirement, Cost Associated with Rockport Plant (3) + (10) Indiana Michigan Power Company's Percentage Ownership I&M's Share of Cost Associated with Rockport Plant (11) X (12)	Total Rockport Plant Common and Units 1 & 2	Indiana Michigan Power Company Steam Capacity (kw) Rockport Plant (\$/kw) (14) / (15)	Kentucky Power Portion of Kockport Plant / Indiana Michigan Power Surplus Weighing	Portion of Weighted Average Capacity Kate Attributed to Rockport Plant (\$/kw) (17) X (18) Rocknort Plant Costs to Kantricky Power :	Rockport Plant Portion (\$/kw) (18) Rockhorty Plant Portion (\$/kw) (18)	Rockport Units 1 & 2 Environmental to Kentucky Power (19) * (20)	(ES FORM 3.14, Page 1 of 10, Line 8)

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
4	Utility Plant at Original Cost	\$98,457,579
1 2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
∠ 3	Total Rate Base	\$1,348,869
J	Operations :	4 - 1 ,
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,625</u>
7	Total Operations $(4) + (5) + (6)$	\$15,625
ľ,	Maintenance :	· ·
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,494</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,494
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

			Con	Cost		WACC			WACC
LINE NO.	Component	Balances	Cap. Structure	Rates		(Net of Tax)	GRCF		(PRE-TAX)
ł		As of 4/30/2010							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	51.941% 0.000%	6.48% 0.83%		3.37% 0.00%			3.37% 0.00%
3 4	FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%	1.22% 10.50%	1/	0.05% 4.61%	1.5762	2/	0.05% 7.27%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.69%
1/	WACC ≕ Weigl Rate of Return								
2/	Gross Revenue Case No. 2010								
1 2 3	OPERATING R UNCOLLECTIE Kentucky Public	100.0000 0.2400 0.1500							
4 5	STATE TAXAB STATE INCOM	99.6100 5.6384							
6 7	FEDERAL TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION 199 DEDUCTION PHASE-IN								
8 9	FEDERAL TAXABLE PRODUCTION INCOME FEDERAL INCOME TAX EXPENSE AFTER 199 DEDUCTION (35%)								
10	AFTER-TAX PI	57.4173							
11 12 13 14 15	GROSS-UP FA AFTER-TA 199 DEDU UNCOLLE Kentucky F	57.4173 5.6372 0.2400 0.1500							
16	TOTAL GROSS	63.4445							
17 18 19 20	BLENDED FED FEDERAL STATE (LI BLENDED TAX	30.9171 5.6384 36.5555							
21	GROSS REVE	1.5762							
1 2 3	STATE INCOM PRE-TAX COLLECT Kentucky I	100.0000 0.2400 0.1500							
4 5	STATE TA LESS: S	99.6100 5.6372							
6 7	STATE TA STATE IN	93.9728 6.0000							
8	STATE INCOME TAX EXPENSE (LINE 5 X LINE 6)								

For the Expense Month of April 2011

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010. ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

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For the Expense Month of April 2011

Total	(6)							\$46,109
Rockport Plant Common	(8)	\$2,185,292 (\$148,530) \$5,550 \$2,042,352	0.8724%	\$17,817 \$6,410	\$6,410	\$24,227 \$7,268		
Total Units 1 & 2 (C5 + C6)	(/)	\$8 697,919	0.8724%	\$75,881 \$39,968	\$39,968	\$115,849 \$34.755		
Unit No. 2	(9)	\$8,353,084 (\$2,056,460) (\$914,966) \$5,381,658		\$24,502	D A	erzemburgenopy né (kuli, mine meninense		
Unit No. 1	(၄)	\$5,272,657 (\$1,373,767) (\$582,629) \$3,316,261	erar suu qorkoh	\$15,466	Ģ			
Rockport Plant Common	(4)	\$1,777,206 (\$871,141) (\$172,289) \$733,776	0.8724%	\$6,401 \$5,212	\$20,837	\$27,238 \$4,086	aaroon belande oor de	
	(3)		10.4692%					
COST COMPONENT	(2)	Reckport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOX Burners (LNB) Installed Cost Flyash Landfill Installed Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes	Weighted Average Cost of Capital - ES FOKM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthly Return of Rate Base (Line 6 * Line 8) Operating Expenses : Monthly Depreciation Expense	Montniy indiana Air Emissions ree Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12) Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AFGCo's I NR and Landfill (line 13 * 30%)	Kentucky Power's Portion of Accord and and Edition (2007) Total Revenue Requirement. (C 4, Ln 14+ C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8, Line 16 is to be Recorded on	ES FORM 3.00 Line 2
NO. LINE	Ē	10045001	~ ~	о <u>С</u>	55	<u>ω</u> 4 τ	2	16

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 4/30/2011							
1 2	L/T DEBT S/T DEBT	76,892,474 33,190,618	40.9838% 17.6906%	4.9276% 0.0022%		2.0195% 0.0004%			2.0195% 0.0004%
3	CAPITALIZATION OFFSETS DEBT	0	0.0000%	3.4426%		0.0000%			0.0000%
4 5	C EQUITY	77,533,739	41.3256%	12.1600%	1/	5.0252%	1.681379	2/	8.4493%
6	TOTAL	187,616,831	100.0000%			7.0451% =========			10.4692% =========
1/	WACC = Weighted Average Cost of Capital 1/ Cost Rates per the Provisions of the Rockport Unit Power Agreement								
2/	Gross Revenue Co	nversion Factor	(GRCF) Calculat	ion:					
1	OPERATING REVE						100.00		
2 3 4	3 (LINE 1 X .085) 4 INCOME BEFORE FED INC TAX						<u>8.500</u> 91.500		
5 6 7	6 (LINE 4 X .35) 7 OPERATING INCOME PERCENTAGE						<u>32.025</u> 59.475		
8 9	GROSS REVENUE FACTOR (100					NAMES OF A DESCRIPTION OF	<u>1.681379</u>		

For the Expense Month of April 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 434 of 609 ES FORM 3,30

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of April 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$42,540,201 \$427,836 \$4,530,299 \$6,578,375	78.7% 0.8% 8.4% 12.1%
5	Total Revenues for Surcharges Purposes	\$54,076,711	100.0%
6	Non-Physical Revenues for Month	\$661,356	
7	Total Revenues for Month	\$54,738,067	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for February 2010	3.4499%
2	Kentucky Retail Revenues for Current Expense Month	\$36,738,021
3	Surcharge Collected (1) * (2)	\$1,267,425
4	Surcharge Amount To Be Collected	\$2,027,028
5	Over / (Under) Recovery (3) - (4) = (5)	(\$759,603)

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 435 of 609

Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

RECEIVED

JUN 1 7 2011 PUBLIC SERVICE COMMISSION

June 17, 2011

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of May 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after June 29, 2011.

If there are any questions please contact me at 502-696-7010.

Lila P. Mursey

Lila P. Munsey ' Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 1.00 Item No. 41 Attachment 1 Page 436 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of May 2011

	CALCULATION OF E(m)	<u></u>				
E(m) = CRR - BRR						
LINE 1	CRR from ES FORM 3.00	\$5,705,345				
LINE 2	Brr from ES FORM 1.10	3,922,590				
LINE 3	E(m) (LINE 1 - LINE 2)	\$1,782,755				
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	77.6%				
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,383,418				
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	\$179,377				
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,562,795				
	SURCHARGE FACTOR					
LINE 8	Net KY Retail E(m) (Line 7)	\$1,562,795				
LINE 9	KY Retail R(m) from ES FORM 3.30	\$40,424,987				
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	3.8659%				

Effective Date for Billing:

June 29, 2011

Submitted By :

sey

Manager Regulatory Services

Date Submitted :

Title :

June 17, 2011

1/ Case No. 2009-00459, dated June 28, 2010

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 437 of 609

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of May 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$3,991,163 3,590,810 3,651,374 3,647,040 3,922,590 3,627,274 3,805,325 4,088,830 3,740,010 3,260,302 2,786,040 4,074,321

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of May 2011

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$5,656,761
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$48,584
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$5,705,345

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

Vonth 0 0 0 0 0	Balance 754,608 439,224 94,744 327,201 67,631 433,206	of Activity \$0 \$0 \$0 \$0	Balance \$4,685,726 \$0 \$4,855,695	Average Cost \$6.209 \$0.000 \$0.000			
0 0 0	439,224 94,744 327,201 67,631	\$0 \$0 \$0	\$0 \$0 \$4,855,695	\$0.000 \$0.000			
0 0 0	94,744 327,201 67,631	\$0 \$0 \$0	\$0 \$4,855,695	\$0.000			
0 0 0	94,744 327,201 67,631	\$0 \$0 \$0	\$0 \$4,855,695	\$0.000			
0 0	67,631	\$0					
0				\$14.840			
_	433,206		\$21,114,805	\$312.206			
0		\$0	\$67,152,857	\$155.014			
n				(******			
0	4,106	\$0	(\$1,700,982)	(\$414.267)			
0	11,382	\$0	\$836,106	\$73.459			
0	59,987	\$0	\$4,855,950	\$80.950			
0	303,050	\$0	\$29,780,273	\$98.269			
0	0	\$0	\$0	\$0.000			
4,025		\$1,772,783					
				\$22			
0	635,289	\$0	\$52,963,997	\$83.370			
				•• • • • • •			
영양 사람을	1,111,012		\$7,671,775	\$6.905			
v Powor		Expense Month Member Load Ratio for AEP/Kentucky Power					
	0 0 0 4,025 0	0 11,382 0 59,987 0 303,050 0 0 4,025 0 635,289 1,111,012	0 11,382 \$0 59,987 \$0 0 303,050 \$0 0 0 \$0 4,025 \$1,772,783 0 635,289 \$0 1,111,012	0 11,382 \$0 \$836,106 0 59,987 \$0 \$4,855,950 0 303,050 \$0 \$29,780,273 0 0 \$0 \$0 4,025 \$ \$1,772,783 \$0 6 635,289 \$0 \$52,963,997			

For the Expense Month of May 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	37,003	\$ 0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawais -	-				
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	677	20,385	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		13,263		\$0	\$0.000

For the Expense Month of May 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOx EMISSIONS ALLOWANCE INVENTORY

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	Activity in	Cumulative	Dollar Value of	Cumulative	Weighted
	Month	Balance	Activity	Dollar Balance	Average Cost
BEGINNING INVENTORY		0		\$0	\$0.000
Additions - EPA Allowances	Ω	44,729	\$0	\$0	\$0.000
P&E Transfers In	Ő	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	980	\$0	\$1,060,590	\$1,082.235
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$ 0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	677	19,742	\$19,751	\$952,354	\$48.240
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		25,967		\$108,236	\$4.168

For the Expense Month of May 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of May 2011

1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$31,699 \$257,070 <u>\$1,772,783</u>	\$2,061,552
5 6 7 8 9	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses	\$0 \$335,186 \$0 \$19,751 \$288 \$9,737	
10 11	Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	<u> 49,101</u>	<u>\$364,962</u>
12	Total Monthly O&M Expenses		<u>\$2,426,514</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$303,314

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

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Kentucky Power Company Environmental Equipment Operation and Maintenance Costs May 2011

	Work scription	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia on Derr	and (AOD)	(\$912.71)	\$595.31	\$0.00	(\$317.40)
SCR Boiler Outlet	Ductwork	\$0.00	\$8,812.62	\$0.00	\$8,812.62
SCR Reactor		\$0.00	\$221.71	\$0.00	\$221.71
SCR Booster Fan		\$99.04	\$0.00	\$0.00	\$99.04
Ma	tal SCR ay 2011 I Expense	(\$813.67)	\$9,629.64	\$0.00	\$8,815.97
Additional Operat The Ozone Sease	or Overtime During on	\$0.00	\$0.00	\$0.00	\$288.21
•	Required Under peration ntenance	\$0.00 \$308.81	\$0.00 \$612.24	\$0.00 \$0.00	\$0.00 \$921.05

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May 2011 O & M Expenses Filed

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\$10,025.23

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ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of May 2011

Line No. (1)	Cost Component (2)	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$338,865		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$233,700		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$681,625		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$7,790		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$642,675		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$70,110		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$1,986,450	\$19,475	\$2,005,925

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of May 2011

		.,		
Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$472,899	•	
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$481,277		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$4,365,525		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$993,264		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$318,655		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$6,660,517	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$0.79	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.66	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$257,070	\$0	\$257,070

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
4	Utility Diant of Original Cost	\$600,434,141
1	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2 3	Total Rate Base	\$8,225,948
	Ohio Power Company's Percentage Ownership - Environmental Investment	100.00%
4 5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
Э	Operations :	
6	Disposal (5010000)	\$5,182
7	Urea (5020002)	\$227,767
7 8	Trona (5020002)	\$119,193
9 9	Lime Stone (5020004)	\$209,268
9 10	Steam Exp (5020025)	\$16
11	Air Emission Fee	<u>\$10,292</u>
12	Total Operations (Lines 6 thru 10)	\$571,718
12	Maintenance :	
13	SCR Maintenance (5120000)	\$21,147
14	Scrubber (FGD) Maintenance (5120000)	<u>\$254,042</u>
15	Total Maintnenance (12) + (13)	<u>\$275,189</u>
16	1/2 of Maintenance (14) * 50%	<u>\$137,595</u>
17	Fixed O&M (11) + (15)	\$709,313
18	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
19	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$472,899</u>
	Total Revenue Requirement,	
20	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,698,847
21	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.03
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.87
	Amos Unit No. 3 Costs to Kentucky Power :	10.0
25	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.87
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	#000.00F
27	(ES FORM 3.14, Page 1 of 10, Line 1)	\$338,865

ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
4	Utility Direct at Original Coat	\$400,962,145
1	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	φ - 00,302,1 4 0 1.37%
2 3	Total Rate Base	\$5,493,181
3		φ0,100,101
A	Operations : Disposal (5010000)	(\$175,679)
4 5	Urea (502002)	\$199,680
a 1	Trona (5020002)	\$74,220
6	Lime Stone (5020004)	\$224,616
7	Polymer (5020005)	\$4,240
8 9	Lime Hydrate (5020007)	¢1,210 \$0
9 10	Steam Exp (5020025)	\$60,699
10	Air Emission Fee	\$8,622
12	Total Operations (Line 4 thru 8)	\$396,398
12	Maintenance :	4000,000
13	SCR Maintenance (5120000)	\$3,826
13 14	Scrubber (FGD) Maintenance (5120000)	\$165,931
14	Total Maintenance (13) + (14)	\$169,757
15 16	1/2 Maintenance (15) * 50%	<u>\$84,879</u>
17	Fixed O&M (12) + (16)	<u>\$481,277</u>
17	Total Revenue Requirement,	<u></u>
18	Cost Associated with Cardinal Unit No. 3 (3) + (17)	\$5,974,458
10 19	Ohio Power Company's Percentage Ownership	100.00%
20	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$5,974,458
20	Ohio Power Company Steam Capacity (kw)	8,458,000
22	Cardinal Unit No. 1 (\$/kw)	\$0.71
23	Ohio Power Surplus Weighing	84.00%
24	Portion of Weighted Average Capacity Rate	
44	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.60
	Cardinal Unit No. 1 Costs to Kentucky Power :	•
25	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.60
25 26	Kentucky Power Capacity Deficit (kw)	389,500
20	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	
27	(ES FORM 3.14, Page 1 of 10, Line 2)	\$233,700
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS

1	Utility Plant at Original Cost	\$964,148,720
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$13,208,837
	Operations :	
4	Sludge Disposal (5010000)	\$799,911
5	Lime (5020001)	\$1,819,574
6	Urea (5020002)	\$503,998
7	Trona (5020003)	\$293,505
8	Lime Stone (5020004)	\$213
9	Polymer (5020005)	\$293,228
10	Steam Exp (5020025)	\$0
11	Air Emission Fee	\$34,947
12	Lease (5070005)	<u>\$0</u>
13	Total Operations (Lines 4 thru 10)	\$3,745,376
	Maintenance :	
14	SCR Maintenance (5120000)	\$127,564
15	Scrubber Maintenance (5120000)	<u>\$1,112,733</u>
16	Total Maintenance (12) + (13)	\$1,240,297
17	1/2 of Maintenance (13) * 50%	<u>\$620,149</u>
18	Fixed O&M (11) + (15)	<u>\$4,365,525</u>
	Total Revenue Requirement,	
19	Cost Associated with Gavin Plant (3) + (17)	\$17,574,362
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$17,574,362
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Gavin Plant (\$/kw)	\$2.08
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.75
	Gavin Plant Costs to Kentucky Power :	
26	Gavin Plant Portion (\$/kw) (23)	\$1.75
27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
28	(ES FORM 3.14, Page 1 of 10, Line 3)	\$681,625

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$8,451,624 <u>1.37%</u> \$115,787
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$15,690</u> \$15,690
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,690</u>
11 12 13	Cost Associated with Kammer Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	<u>\$131,477</u> 100.00% \$131,477
13 14 15 16	Ohio Power Company Steam Capacity (kw) Kammer Plant (\$/kw) Ohio Power Surplus Weighing	8,458,000 \$0.02 84.00%
17	Portion of Weighted Average Capacity Rate Attributed to Kammer Plant (\$/kw) (15) X (16) Kammer Plant Costs to Kentucky Power :	\$0.02
18 19	Kammer Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	\$0.02 <u>389,500</u>
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$7,790

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE NO.	· COST	AMOUNTS
1 2 3 4	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations : Disposal (5010000)	\$1,143,093,101 <u>1.37%</u> \$15,660,375 \$37,772
5 6	Urea (5020002) Trona (5020003)	\$278,570 \$59,435
7 8 9	Lime Stone (5020004) Polymer (5020005) Lime Hydrate (5020007)	\$361,973 \$394 \$0
10 11	Steam Exp (5020025) Air Emission Fee	\$0 <u>\$12,128</u>
12 13	Total Operations (Lines 4 thru 8) Maintenance : SCR Maintenance (5120000)	\$750,272 \$1,397
13 14 15	FDG (5120000) 1/2 of Maintenance (10 + 11) * 50%	<u>\$484,587</u> <u>\$242,992</u>
16	Fixed O&M (9) + (12) Total Revenue Requirement,	<u>\$993,264</u>
17 18	Cost Associated with Mitchell Plant (3) + (13) Ohio Power Company's Percentage Ownership	<u>\$16,653,639</u> 100.00%
19 20	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15) Ohio Power Company Steam Capacity (kw)	\$16,653,639 8,458,000 \$1.97
21 22 23	Mitchell Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	84.00%
20	Attributed to Mitchell Plant (\$/kw) (18) X (19) Mitchell Plant Costs to Kentucky Power :	\$1.65
24 25	Mitchell Plant Portion (\$/kw) (20) Kentucky Power Capacity Deficit (kw)	\$1.65 <u>389,500</u>
26	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22) (ES FORM 3.14, Page 1 of 10, Line 5)	\$642,675

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ES FORM 3.14 Page 8 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3 , 4 & 5)

LINE NO.	COST	AMOUNTS
1 2	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	\$108,672,817 <u>1.37%</u> \$1,488,818
3	Total Rate Base Operations :	\$1,400,010 \$282,970
4 5 6	Urea (5020002) Trona (5020003) Air Emission Fee	\$0 \$34,561
7	Total Operations (4) + (5) + (6) Maintenance :	\$317,531
8 9	SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50%	\$2,247 <u>\$1,124</u>
10	Fixed O&M (7) + (9) Total Revenue Requirement,	<u>\$318,655</u>
11 12	Cost Associated with Muskingum Plant (3) + (10) Ohio Power Company's Percentage Ownership	<u>\$1,807,473</u> 100.00%
13 14	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12) Ohio Power Company Steam Capacity (kw)	\$1,807,473 8,458,000
15 16	Muskingum Plant (\$/kw) Ohio Power Surplus Weighing	\$0.21 84.00%
17	Portion of Weighted Average Capacity Rate Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.18
18	Muskingum Plant Costs to Kentucky Power : Muskingum Plant Portion (\$/kw) (17) Kentucky Rewar Capacity Deficit (kw)	\$0.18 389,500
19 20	Kentucky Power Capacity Deficit (kw) Muskingum Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 6)	\$70,110

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
		\$20,310,295
1	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2 3	Total Rate Base	\$278,251
ত	Operations :	\$L 10, L 01
	Urea (502002)	\$0
4	Trona (5020003)	\$0
5 6	Air Emission Fee	\$13,207
7	Total Operations $(4) + (5) + (6)$	\$13,207
ſ	Maintenance :	+ · - / ·
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed $O&M(7) + (9)$	\$13,207
10	Total Revenue Requirement,	
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$291,458</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$291,458
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Sporn Plant (\$/kw)	\$0.03
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685

ES FORM 3.14 Page 10 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of May 2011

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				10(8)
	(4)	(c)		1.1
.37%	\$10,544,676 1.37%	\$16,709,416 1.37%	\$2,202,020 1.37%	
\$24,496	\$144,462	\$228,919	\$30,168	
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2 09	2 6	CA CA CA CA CA CA CA CA CA CA CA CA CA C	0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0	
\$15,625	Ср	୍ଷ	S S S	
\$15,625	0\$	0\$	D y	
04	\$0	0\$	0\$	
	<u>ମ</u> ୍ଭ	o G G G G G G G G G G G G G G G G G G G	8	
<u>\$10,020</u>	2	20		
\$40,121	\$144,462	\$228,919	\$30,168	
<u>50%</u> \$20.061	<u>85.00%</u> \$122.793	<u>65.08%</u> \$148,980	<u>50.00%</u> \$15,084	
				\$306,918
				5,416,000 *0.06
				55-54
				16.00%
				10.00
				- 0.04
			*****	\$0.01 000 - 000
14 Mar 200 A				389,000
				\$3,895
	\$15.625 \$40,121 \$20,061	\$144,5 82,22,1 2,22,1	\$144,462 \$5,00% \$122,793	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$

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ES FORM 3.14 Page 11 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
		\$98,457,579
1	Utility Plant at Original Cost	\$90,407,579 1.37%
2	Member Primary Capacity Investment Rate (16.44% / 12)	\$1,348,869
3	Total Rate Base	φ1,040,003
	Operations :	\$0
4	Urea (5020002)	\$0 \$0
5	Trona (5020003)	\$15,625
6	Air Emission Fee	\$15,625
7	Total Operations (4) + (5) + (6)	φ10,020
	Maintenance :	\$0
8 9	SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50%	\$0 \$0
9 10	Fixed $O&M(7) + (9)$	<u>\$15,625</u>
10	Total Revenue Requirement,	<u> </u>
11	Cost Associated with Tanners Creek Plant (3) + (10)	\$1,364,494
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,494
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
14	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	389,500
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580
20	(

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT **BIG SANDY PLANT COST OF CAPITAL**

For the Expense Month of May 2011

LINE NO.	Component	Balances	Cap. Structure	Cost Rates	agana kalabitati (WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
NO.	Component	As of 4/30/2010							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	51.941% 0.000%	6.48% 0.83%		3.37% 0.00%			3.37% 0.00%
3 4	FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%		1/	0.05% 4.61%	1.5762	2/	0.05% 7.27%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.69%
1/ 2/	WACC = Weigl Rate of Return Gross Revenue								
1 2 3	OPERATING R	- 00020 dated - Apr REVENUE SLE ACCOUNTS EX c Service Commissi	PENSE (0.24%)) (0.15%)			100.0000 0.2400 0.1500		
4 5	STATE TAXAB STATE INCOM	LE PRODUCTION I IE TAX EXPENSE, I	NCOME BEFOF NET OF 199 DE	RE 199 DEDUCT DUCTION (SEE	FION BEL	.OW)	99.6100 5.6384		
6 7	FEDERAL TAX 199 DEDUCTIO	ABLE PRODUCTIO	IN INCOME BEF	FORE 199 DEDI	JCTI	ON	93.9716 5.6372		
8 9	FEDERAL TAX	ABLE PRODUCTIO	N INCOME E AFTER 199 D	EDUCTION (35	%)		88.3344 30.9171		
10	AFTER-TAX PI	RODUCTION INCO	ME				57.4173		
11 12 13 14 15	GROSS-UP FA AFTER-TA 199 DEDU UNCOLLE Kentucky b		57.4173 5.6372 0.2400 0.1500						
16	TOTAL GROS	S-UP FACTOR FOR	PRODUCTION	INCOME (ROU	INDE	D)	63.4445	-	
17 18 19 20	BLENDED FEI FEDERAL STATE (LI BLENDED TA)	30.9171 5.6384 36.5555							
21	GROSS REVE	NUE CONVERSION	1 FACTOR (100	.0000 / Line 14)			1.5762		
1 2 3	PRE-TAX COLLECT Kentucky	AE TAX CALCULATI PRODUCTION INC IBLE ACCOUNTS E Public Service Com		100.0000 0.2400 0.1500					
4 5	STATE TA LESS: S	TION	99.6100 5.6372	_					
6 7		XABLE PRODUCT	ION INCOME BI	EFORE 199 DEI	DUC	TION	93.9728 6.0000		
8	STATE IN	COME TAX EXPEN	ISE (LINE 5 X LI	NE 6)			5.6384		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of May 2011

م													\$48,584 N
Total	(6)												9
Rockport Plant Common	(8)		ФО 185 707	(\$154,940) (\$154,940)	\$2,038,185	0.9494%	\$19,351	\$6,410 \$0	\$6,410	\$25,761	\$7,728		
Total Units 1 & 2 (C5 + C6)	(/)			a 	\$8,671,939	0.9494%	\$82,331	\$39,968 \$0	\$39,968	\$122,299	\$36,690		
Unit No. 2	(9)		\$8,353,084	(\$2,080,962)	(\$5,365,731		ι	\$24,502 \$0	-				
Unit No. 1	(2)		\$5,272,657	(\$1,389,233)	(\$3,306,208			\$15,466 \$0					
Rockport Plant Common	(4)		\$1,777,206	(\$876,353)	\$730,389	0.9494%	\$6,934	\$5,212 \$15.625	\$20,837	\$27,771	\$4,166		
	(3)					11.3925%							
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS)	Utility Plant at Original Cost AEGCo Low NOX Burners (LNB) Installed Cost	Flyash Landnil Installed Cost Less Accumulated Depreciation	Less Accum. Det. Income Taxes Total Rate Base	Weighten Average Cost of Capital - ES FORM 3.21 Monthly Weighted Aver Cost of Capital (INE 7 / 12)	Monthly Return of Rate Base (Line 8)	Monthly Depreciation Expense Monthly Indiana Air Emissions Eae	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kentucky Power's Portion of Rockport Plants' Total Revenue Requirement.(C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Motes - Cost in Column 8.1 ine 16 is to be Recorded on	ES FORM 3.00 Line 2
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 5/31/2011			-		andar din him him and a sama a sama a sa		no ne se su
1 2	L/T DEBT S/T DEBT	76,895,261 15,665,983	45.9948% 9.3706%	4.9274% 0.0021%		2.2664% 0.0002%			2.2664% 0.0002%
3	CAPITALIZATION OFFSETS DEBT	0	0.0000%	4.0939%		0.0000%			0.0000%
5		74,621,431	44.6346%	12.1600%	1/	5.4276%	1.681379	2/	9.1259%
6	TOTAL	167,182,675	100.0000%			7.6942% =========			11.3925% =========
1/ 2/ 1 2 3	WACC = Weighted Cost Rates per the Gross Revenue Co OPERATING REVE LESS: INDIANA A (LINE 1 X .085	100.00 8.500							
3 4 5 6 7 8 9	(LINE T X .083 INCOME BEFORE LESS: FEDERAL (LINE 4 X .35) OPERATING INCC GROSS REVENUE FACTOR (10)	FED INC TAX INCOME TAX ME PERCENTA CONVERSION		91.500 <u>32.025</u> 59.475 <u>1.681379</u>					

For the Expense Month of May 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of May 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$40,424,987 \$784,420 \$6,373,043 \$4,536,768	77.6% 1.5% 12.2% 8.7% 100.0%
5	Total Revenues for Surcharges Purposes	\$52,119,218	100.0%
6	Non-Physical Revenues for Month	\$721,634	
7	Total Revenues for Month	\$52,840,852	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for March 2010	3.3578%
2	Kentucky Retail Revenues for Current Expense Month	\$38,965,424
3	Surcharge Collected (1) * (2)	\$1,308,381
4	Surcharge Amount To Be Collected	\$1,487,758
5	Over / (Under) Recovery (3) - (4) = (5)	(\$179,377)

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 460 of 609

ICentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

July 19, 2011

RECEIVED

JUL 19 2011

PUBLIC SERVICE COMMISSION

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of June 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after July 29, 2011.

If there are any questions please contact me at 502-696-7010.

Lila P. Mursey

Lila P. Munsey C Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 1.00 Item No. 41 Attachment 1 Page 461 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of June 2011

.

	CALCULATION OF E(m)								
	E(m) = CRR - BRR								
LINE 1	CRR from ES FORM 3.00	\$5,508,388							
LINE 2	Brr from ES FORM 1.10	3,627,274	1						
LINE 3	E(m) (LINE 1 - LINE 2)	\$1,881,114							
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	72.7%							
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,367,570							
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	\$7,110							
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$1,374,680							
	SURCHARGE FACTOR								
LINE 8	Net KY Retail E(m) (Line 7)	\$1,374,680							
LINE 9	KY Retail R(m) from ES FORM 3.30	\$46,953,714							
LINE 10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	2.9277%							

Effective Date for Billing:

July 29, 2011

Submitted By :

Title :

Manager Regulatory Services

Date Submitted :

July 19, 2011

1/ Case No. 2009-00459, dated June 28, 2010

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of June 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net
	Environmenta
Billing Month	Costs
	¢2.004.40
JANUARY	\$3,991,16
FEBRUARY	3,590,81
MARCH	3,651,37
APRIL	3,647,04
MAY	3,922,59
JUNE	3,627,27
JULY	3,805,32
AUGUST	4,088,83
SEPTEMBER	3,740,01
OCTOBER	3,260,30
NOVEMBER	2,786,04
DECEMBER	4,074,32
TOTAL	 \$44,185,07

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of June 2011

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE			
NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$5,460,286
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$48,102
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during 		
	Expense Month 2) SO2 - Net Gain or (Loss) from Allowance Sales,	\$0	
	in compliance with the AEP Interim Allowance Agreement, received during Expense Month	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$5,508,388

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

For the Expense Month of June 2011

LINE NO.	COST COMPONENT		
NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	COST COMPONENT Return on Rate Base : Utility Plant at Original Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes Net Utility Plant SO2 Emission Allowance Inventory from ES FORM 3.11 ECR & NOx Emission Allowance Inventory from ES FORM 3.12 Cash Working Capital Allowance from ES FORM 3.13, Line 13 Total Rate Base Weighted Average Cost of Capital - ES FORM 3.15 Monthly Weighted Avg. Cost of Capital (9) / 12 Monthly Return of Rate Base (8) * (10) Operating Expenses : Monthly Depreciation Expense Monthly Depreciation Expense Monthly Catalyst Amortization Expense Monthly Property Taxes Monthly Environmental AEP Pool Capacity Costs from ES FORM 3.14, Page 1 of 11, Column 5, Line 10 Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13 Monthly SO2 Emission Allowance Consumption Total Revenue Requirement - Big Sandy Record on ES FORM 3.00, Line 1	\$191,327,552 (\$64,745,122) (\$40,228,991) 10.69%	\$86,353,439 \$6,322,016 \$84,138 \$281,245 \$93,040,838 0.89% \$828,063 \$577,252 \$46,030 \$14,017 \$31,699 \$2,146,145 \$467,322 \$1,349,758 \$4,632,223 \$5,460,286

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

	Allov Acti	1) vance vity in	(2) Cumulative	(3) Dollar Value	(4) Cumulative Dollar	(5) Weighted
	IVic	onth	Balance	of Activity	Balance	Average Cost
BEGINNING INVENTORY Additions -			754,608		\$4,685,726	\$6.209
EPA Allowances		0	439,224	\$0	\$0	\$0.000
Gavin Reallocation		ō	94,744	\$0	\$0	\$0,000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	67,631	\$0	\$21,114,805	\$312.206
Other (List)		. 0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance						
Adjustment		0	4,106	\$0	(\$1,700,982)	(\$414.267)
Withdrawals -		City of the City o				
P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	59,987	\$0 \$0	\$4,855,950	\$80.950
Off - System Sales		Ő	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance			,			, , , , , , , , , , , , , , , , , , ,
Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances		125 K (1)				
Consumed By Kentucky Power - 1:1						
(Year 2009 & Prior)		2,894		\$1,274,642		
SO2 Emissions Allowances						1
Consumed By Kentucky Power - 2:1						
(Years 2010 to 2014)		3,856	642,039	\$75,116	\$54,313,756	\$84.596
ENDING INVENTORY - Record	E I					
Balance in Column (4) on						
ES FORM 3.10, Line 5			1,104,262		\$6,322,016	\$5.725
nan an ann an ann an ann ann ann ann an			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	an a		
Expense Month Member Load Ratio for A	EP/Kentucky F	Power				0.06877

For the Expense Month of June 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense	Month of June 2011
-----------------	--------------------

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	37,003	\$O	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$O	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0 \$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0 \$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	827	21,212	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		12,436		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC) Consumed:	930
June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance	(2)	(3)	(4)	(5)
	Activity in	Cumulative	Dollar Value of	Cumulative	Weighted
	Month	Balance	Activity	Dollar Balance	Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0,000
EPA Allowances	0	44,729	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	980	\$0	\$1,060,590	\$1,082.235
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	826	20,568	\$24,098	\$976,452	\$47.474
ENDING INVENTORY - Record Balance in					
Column (4) on ES FORM 3.10, Line 5		25,141		\$84,138	\$3.347

For the Expense Month of June 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of June 2011

			and a second
1	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool	\$31,699	
2	Environmental Capacity Costs	\$401,185	
3	Monthly SO2 Allowance Consumption	<u>\$1,349,758</u>	
4	Total 1997 Plan O&M Expenses		\$1,782,642
5 6 7 8 9 10	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses	\$0 \$422,964 \$0 \$24,098 \$1,077 <u>\$19,182</u>	
11	Total 2003 Plan O&M Expenses		<u>\$467,322</u>
12	Total Monthly O&M Expenses		<u>\$2,249,964</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$281,245

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs June 2011

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia on Demand (AOD)	\$159.48	\$0.00	\$0.00	\$159.48
Boiler Acoustic Horns	\$234.15	\$0.00	\$0.00	\$234.15
Hydrolyzer	\$0.00	\$850.00	\$0.00	\$850.00
SCR Ammonia on Demand (AOD)	\$3,427.95	\$0.00	\$0.00	\$3,427.95
SCR Booster Fan	\$99.04	\$0.00	\$0.00	\$99.04
SCR NOX Monitoring	\$373.13	\$1,490.36	\$0.00	\$1,863.49
Urea Conveyor	\$834.30	\$387.60	\$0.00	\$1,221.90
Total SCR June 2011 O & M Expense	\$5,128.05	\$2,727.96	\$0.00	\$7,856.01
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$1,077.20
Emission Testing Required Under Permit - Operation Maintenance	\$0.00 \$9,406.61	\$0.00 \$1,919.79	\$0.00 \$0.00	\$0.00 \$11 836 40
Mantenance	୬୫,୫୦୦.୦୮	\$1,919.79	ຈ ບ.ບບ	\$11,326.40

June 2011 O & M Expenses Filed

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\$20,259.61

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of June 2011

Line		Ohio Power Company's Environmental	Indiana Michigan Power Company's Environmental	
No. (1)	Cost Component (2)	Cost to KPCo (3)	Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$350,550		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$276,545		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$747,840		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$7,790		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$662,150		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$70,110		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,126,670	\$19,475	\$2,146,145

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of June 2011

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$831,976		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$1,735,241		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$6,113,570		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	, \$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$1,411,720		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$317,065		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$10,438,469	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.23	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$1.03	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$401,185	\$0	\$401,185

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$600,434,141
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$8,225,948
4	Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
	Operations :	
6	Disposal (5010000)	\$307,752
7	Urea (5020002)	\$262,602
8	Trona (5020003)	\$159,928
9	Lime Stone (5020004)	\$377,596
10	Steam Exp (5020025)	(\$45)
11	Air Emission Fee	<u>\$10,292</u>
12	Total Operations (Lines 6 thru 10)	\$1,118,125
	Maintenance :	
13	SCR Maintenance (5120000)	\$28,716
14	Scrubber (FGD) Maintenance (5120000)	<u>\$230,837</u>
15	Total Maintnenance (12) + (13)	<u>\$259,553</u>
16	1/2 of Maintenance (14) * 50%	<u>\$129,777</u>
17	Fixed O&M (11) + (15)	\$1,247,902
18	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
19	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$831,976</u>
	Total Revenue Requirement,	\$9,057,924
20	Cost Associated with Amos Unit No. 3 (5) + (18)	\$9,037,924 8,458,000
21	Ohio Power Company Steam Capacity (kw)	\$1.07
22	Amos Unit No. 3 Environmental Rate (\$/kw)	84.00%
23	Ohio Power Surplus Weighing	04.0070
24	Portion of Weighted Average Capacity Rate Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.90
	Amos Unit No. 3 Costs to Kentucky Power :	φ0.00
25	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.90
26	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
20	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	
27	(ES FORM 3.14, Page 1 of 10, Line 1)	\$350,550
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE		
NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$400,962,145
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,493,181
	Operations :	
4	Disposal (5010000)	\$63,820
5	Lime (5020001)	\$0
6	Urea (5020002)	\$387,335
7	Trona (5020003)	\$198,244
8	Lime Stone (5020004)	\$931,572
9	Polymer (5020005)	\$5,453
10	Lime Hydrate (5020007)	\$0
11	Steam Exp (5020025)	\$70,273
12	Air Emission Fee	<u>\$8,622</u>
13	Total Operations (Line 4 thru 8)	\$1,665,319
	Maintenance :	- · ·
14	SCR Maintenance (5120000)	\$13,769
15	Scrubber (FGD) Maintenance (5120000)	<u>\$126,074</u>
16	Total Maintenance (13) + (14)	\$139,843
17	1/2 Maintenance (15) * 50%	<u>\$69,922</u>
18	Fixed O&M (12) + (16)	<u>\$1,735,241</u>
	Total Revenue Requirement,	<u> </u>
19	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$7,228,422</u>
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$7,228,422
22	Ohio Power Company Steam Capacity (kw) Cardinal Unit No. 1 (\$/kw)	8,458,000 \$0.85
23	Ohio Power Surplus Weighing	84.00%
24 25	Portion of Weighted Average Capacity Rate	04.0070
20	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.71
	Cardinal Unit No. 1 Costs to Kentucky Power :	ψυ.τι
26	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.71
20	Kentucky Power Capacity Deficit (kw)	389,500
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	000,000
28	(ES FORM 3.14, Page 1 of 10, Line 2)	\$276,545
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
		an a
1	Utility Plant at Original Cost	\$964,148,720
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$13,208,837
	Operations :	
4	Sludge Disposal (5010000)	\$759,648
5	Lime (5020001)	\$3,408,039
6	Urea (5020002)	\$841,323
7	Trona (5020003)	\$384,709
8	Lime Stone (5020004)	\$456
9	Polymer (5020005)	\$160,279
10	Steam Exp (5020025)	\$11,697
11	Air Emission Fee	\$34,947
12	Lease (5070005)	<u>\$0</u>
13	Total Operations (Lines 4 thru 10)	\$5,601,098
	Maintenance :	
14	SCR Maintenance (5120000)	\$135,777
15	Scrubber Maintenance (5120000)	<u>\$889,166</u>
16	Total Maintenance (12) + (13)	\$1,024,943
17	1/2 of Maintenance (13) * 50%	<u>\$512,472</u>
18	Fixed O&M (11) + (15)	<u>\$6,113,570</u>
	Total Revenue Requirement,	
19	Cost Associated with Gavin Plant (3) + (17)	\$19,322,407
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$19,322,407
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Gavin Plant (\$/kw)	\$2.28
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$1.92
	Gavin Plant Costs to Kentucky Power :	
26	Gavin Plant Portion (\$/kw) (23)	\$1.92
27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
28	(ES FORM 3.14, Page 1 of 10, Line 3)	\$747,840
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$8,451,624 <u>1.37%</u> \$115,787
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$15,690</u> \$15,690
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,690</u>
11 12 13	Cost Associated with Kammer Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	<u>\$131,477</u> 100.00% \$131,477
13 14 15 16	Ohio Power Company Steam Capacity (kw) Kammer Plant (\$/kw) Ohio Power Surplus Weighing	8,458,000 \$0.02 84.00%
17	Portion of Weighted Average Capacity Rate Attributed to Kammer Plant (\$/kw) (15) X (16) Kammer Plant Costs to Kentucky Power :	\$0.02
18 19	Kammer Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	\$0.02 <u>389,500</u>
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$7,790

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
and a second		
1	Utility Plant at Original Cost	\$1,143,093,101
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$15,660,375
	Operations :	
4	Disposal (5010000)	\$78,042
5	Urea (5020002)	\$497,952
6	Trona (5020003)	\$102,868
7	Lime Stone (5020004)	\$663,842
8	Polymer (5020005)	\$1,157
9	Lime Hydrate (5020007)	\$4,838
10	Steam Exp (5020025)	\$0
11	Air Emission Fee	<u>\$12,128</u>
12	Total Operations (Lines 4 thru 8)	\$1,360,827
	Maintenance :	
13	SCR Maintenance (5120000)	\$1,342
14	FDG (5120000)	<u>\$100,444</u>
15	1/2 of Maintenance (10 + 11) * 50%	<u>\$50,893</u>
16	Fixed O&M (9) + (12)	<u>\$1,411,720</u>
	Total Revenue Requirement,	
17	Cost Associated with Mitchell Plant (3) + (13)	<u>\$17,072,095</u>
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$17,072,095
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Mitchell Plant (\$/kw)	\$2.02
22	Ohio Power Surplus Weighing	84.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.70
	Mitchell Plant Costs to Kentucky Power :	
24	Mitchell Plant Portion (\$/kw) (20)	\$1.70
25	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
26	(ES FORM 3.14, Page 1 of 10, Line 5)	\$662,150

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE NO.	CODT	
INO.	COST	AMOUNTS
1 2	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	\$108,672,817 <u>1.37%</u>
3	Total Rate Base	\$1,488,818
	Operations :	
4	Urea (5020002)	\$273,129
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$34,561</u>
7	Total Operations (4) + (5) + (6)	\$307,690
	Maintenance :	
8	SCR Maintenance (5120000)	\$18,750
9	1/2 of Maintenance (8) * 50%	<u>\$9,375</u>
10	Fixed O&M (7) + (9)	<u>\$317,065</u>
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,805,883</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,805,883
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.21
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.18
	Muskingum Plant Costs to Kentucky Power :	62 42
18	Muskingum Plant Portion (\$/kw) (17)	\$0.18
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	φ <u>το</u> 440
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$70,110
		<u> </u>

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$20,310,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$278,251
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$13,207</u>
7	Total Operations (4) + (5) + (6)	\$13,207
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$13,207</u>
	Total Revenue Requirement,	
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$291,458</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$291,458
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Sporn Plant (\$/kw)	\$0.03
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	\$0.00
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
40	Sporn Plant Costs to Kentucky Power :	¢0.00
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw) Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	<u>389,500</u>
20		014 COF
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of June 2011

		Rocknort			Rocknort I	
LINE			UNIT 1	UNIT 2	Plant	
Ň	COST	Common	AMOUNTS	AMOUNTS	Common	Total
E	(2)	(3)	(4)	(2)	(9)	(7)
~	1 Hiltv Dlant at Original Cost	41 787 006	\$10 511 676	\$16 700 116	\$0 000 COC	
- 0	Member Primary Capacity Investment Rate (16,44% / 12)	1.37%	1.37%	4.0,100,100	44,404,040 1.37%	
ო	Total Rate Base	\$24,496	\$144,462	\$228,919	\$30,168	
	Operations :	-		-		
4	Urea (5020002)	80 80	\$0	\$0	\$0	
ហ	Trona (5020003)	\$0	\$0	\$0	\$0	
ю	Air Emission Fee	\$15,625	80	8	80	
	Total Operations (4) + (5) + (6)	\$15,625	\$0	0\$	\$0	
	Maintenance :					
00	SCR Maintenance (5120000)	\$0	\$0	0\$	\$0	
ത	1/2 of Maintenance (8) * 50%	\$0	80	0\$	\$0	
0	Fixed O&M (7) + (9)	\$15,625	80	\$0	\$0	
	Total Revenue Requirement,					
-	Cost Associated with Rockport Plant (3) + (10)	\$40,121	\$144,462	\$228,919	\$30,168	
£ ₽	Indiana Michigan Power Company's Percentage Ownership	50%	85.00%	65.08%	50.00%	
<u></u>	I&M's Share of Cost Associated with Rockport Plant (11) X (12)	\$20,061	\$122,793	\$148,980	\$15,084	
14	Total Rockport Plant Common and Units 1 & 2					\$306,918
			<u>MA-167 FX</u>			
5	Indiana Michigan Power Company Steam Capacity (kw)		10.0 <i>1</i>		*******	5,416,000
	Rockport Plant (\$/kw) (14) / (15)					\$0.06
	~~					
17	Indiana Michigan Power Surplus Weighing					16.00%
ŝ	Portion of Weighted Average Capacity Rate			ini and a second		
	Attributed to Rockport Plant (\$/kw) (17) X (18)					\$0.01
σ	Rockport Flant Cosis to Relitucky Power . Rockport Plant Portion (\$/kw) (18)		N COPPORT		- 	50 03
202	Kentricky Power Capacity Deficit (kw/)					389 500
	Rockport Units 1 & 2 Environmental to Kentucky Power (19) * (20)		2000			
21	(ES FORM 3.14, Page 1 of 10, Line 8)		- <u></u>			\$3,895
		-				

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,457,579
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,348,869
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,625</u>
7	Total Operations (4) + (5) + (6)	\$15,625
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,494</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	1&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,494
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of June 2011

LINE NO.	D	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
-		As of 4/30/2010		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -					
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	51.941% 0.000%	6.48% 0.83%		3.37% 0.00%			3.37% 0.00%
3 4	FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%	1.22% 10.50%	1/	0.05% 4.61%	1.5762	2/	0.05% 7.27%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.69%
1/		nted Average Cost o on Common Equity		10 - 00020			a th <u>i</u>		
2/		Conversion Factor - 00020 dated - Apr		tion:					
1 2 3		EVENUE LE ACCOUNTS EX c Service Commissio					100.0000 0.2400 0.1500		
4 5		LE PRODUCTION II E TAX EXPENSE, N				OW)	99.6100 5.6384		
6 7	FEDERAL TAXABLE PRODUCTION INCOME BEFORE 199 DEDUCTION 199 DEDUCTION PHASE-IN								
8 9	FEDERAL TAXABLE PRODUCTION INCOME FEDERAL INCOME TAX EXPENSE AFTER 199 DEDUCTION (35%)								713 - 404 2011 - 101 2011 - 101 2011 - 101 2011 - 101 2011 - 101 2011 - 101 2011 - 101 2011 - 101 2011 - 101 20
10	AFTER-TAX PF		1E				57.4173		
11 12 13 14 15	GROSS-UP FACTOR FOR PRODUCTION INCOME: AFTER-TAX PRODUCTION INCOME 199 DEDUCTION PHASE-IN UNCOLLECTIBLE ACCOUNTS EXPENSE Kentucky Public Service Commission Assessment (0.15%)								
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION	INCOME (ROUI	NDEI	C)	63.4445		
17 18 19 20	BLENDED FEDERAL AND STATE TAX RATE: FEDERAL (LINE 8) STATE (LINE 4) BLENDED TAX RATE								
21	GROSS REVEN	NUE CONVERSION	FACTOR (100.0)000 / Line 14)			1.5762		
1 2 3	STATE INCOME TAX CALCULATION: PRE-TAX PRODUCTION INCOME COLLECTIBLE ACCOUNTS EXPENSE (0.24%) Kentucky Public Service Commission Assessment (0.15%)								
4 5	STATE TA) LESS: ST	99.6100 5.6372							
6 7	STATE TAX STATE INC	93.9728 6.0000							
8	STATE INC		5.6384						

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010. ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of June 2011

						· ·, ·						~
Total	(6)										:	\$48,102
Rockport Plant Common	(8)	4,000,000 - 9,000,000 - 0,000,000 - 0,000,000	\$2,185,292 (\$161,350) \$10.077	\$2,034,019	0.9376%	\$19,071	\$6,410 \$0	\$6,410	\$25,481	\$7,644		22 (()
1 0 cal Units 1 & 2 (C5 + C6)	(1)			\$8,645,962	0.9376%	\$81,065	\$39,968 \$0	\$39,968	\$121,033	\$36,310		
Unit No. 2	(9)	\$8,353,084	(\$2,105,464) (\$897.814)	\$5,349,806			\$24,502 \$0			*****	90%rto®iedzia	
Unit No. 1	(5)	\$5,272,657	(\$1,404,699) (\$571.802)	\$3,296,156			\$15,466 \$0	34		• • • second contraction		
Rockport Plant Common	(4)	\$1,777,206	(\$881,565) (\$168,639)	\$727,002	0.9376%	\$6,816	\$5,212 \$15,625	\$20,837	\$27,653	\$4,148		
	(3)				%AUGZ 11			- -				
COST COMPONENT	(2)	Return on Rate Base : Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOX Burners (LNB) Installed Cost	Flyash Landfill installed Cost Less Accumulated Depreciation Less Accum. Def. income Taxes	Total Rate Base	weignted Average Cost of Capital - ES FOKM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Vonthly Return of Rate Base (Line 6 * Line 8) Operating Expenses :	Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%) Kentucky Douter's Doction of Dockbord Dionte'	restructy notes a notion of rockport name Total Revenue Requirement. (C.4, n.14 + C.7, Ln 15 + C.8, L.15) Motor: Constitution of the factor of Deconstant of	NOLE. VOSTIN VORTINI O, LINE 10 IS 10 DE RECORDED ON ES FORM 3.00 Line 2
NO.	Ê	<u>> ⊂ X</u>		2 – 1 0	- وحاط التكرير	<u>≥</u> ດ	10 11 M	·		4 භ ススス		16 ТП

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 6/30/2011					100 0 2000 () - A		
1 2	L/T DEBT S/T DEBT CAPITALIZATION	76,898,048 18,439,322	45.2451% 10.8493%	4.9273% 0.4141%		2.2293% 0.0449%			2.2293% 0.0449%
3	OFFSETS	0	0.0000%	4.0544%		0.0000%			0.0000%
5	C EQUITY	74,621,431	43.9056%	12.1600%	1/	5.3389%	1.681379	2/	8.9767%
6	TOTAL	169,958,801	100.0000%			7.6131%			11.2509%
				0///01/10.2007/07/07/10/10/10/2007/07/2007/07/2007/07/2007/07/2007/2007/2007/2007/2007/2007/2007/2007/2007/200					
1/	WACC = Weighted Cost Rates per the			ower Agreemer	ıt				
2/	Gross Revenue Cor	version Factor (GRCF) Calculat	ion:					
1	OPERATING REVE						100.00		
3									
5	5 LESS: FEDERAL INCOME TAX								
	7 OPERATING INCOME PERCENTAGE								
8 9	3 GROSS REVENUE CONVERSION								

For the Expense Month of June 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of June 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$46,953,714 \$462,091 \$6,987,065 \$10,149,681	72.7% 0.8% 10.8% 15.7%
5	Total Revenues for Surcharges Purposes	 \$64,552,551	100.0%
6	Non-Physical Revenues for Month	\$681,485	
7	Total Revenues for Month	\$65,234,036	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for April 2010	5.8242%
2	Kentucky Retail Revenues for Current Expense Month	\$42,418,255
3	Surcharge Collected (1) * (2)	\$2,470,524
4	Surcharge Amount To Be Collected	\$2,477,634
5	Over / (Under) Recovery (3) - (4) = (5)	. (\$7,110)

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



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Kentucky Power 101A Enterprise Drive P O Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

RECEIVE

AUG 19 20 PUBLIC COMIVILOSION

August 19, 2011

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of July 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after August 29, 2011.

If there are any questions please contact me at 502-696-7010.

-Jila P. Munsey, St

Lila P. Munsey Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 1.00 Item No. 41 Attachment 1 Page 486 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of July 2011

.

	CALCULATION OF E(m)						
E(m) = CRR - BRR							
LINE 1	CRR from ES FORM 3.00	\$4,372,798					
LINE 2	Brr from ES FORM 1.10	3,805,325	1/				
LINE 3	E(m) (LINE 1 - LINE 2)	\$567,473					
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	68.3%					
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$387,584					
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$235,309)					
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$152,275					
	SURCHARGE FACTOR						
LINE 8	Net KY Retail E(m) (Line 7)	\$152,275					
LINE 9	KY Retail R(m) from ES FORM 3.30	\$46,534,433					
LINE 10	Environmental Surcharge Factor for Expense Month (Line 8 / LINE 9)	0.3272%					

Effective Date for Billing:

August 29, 2011

Manager Regulatory Services

Date Submitted :

Submitted By :

Title :

August 19, 2011

1/ Case No. 2009-00459, dated June 28, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of July 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY	\$3,991,163
FEBRUARY	3,590,810
MARCH	3,651,374
APRIL	3,647,040
MAY	3,922,590
JUNE	3,627,274
JULY	3,805,325
AUGUST	4,088,830
SEPTEMBER	3,740,010
OCTOBER	3,260,302
NOVEMBER	2,786,040
DECEMBER	4,074,321
TOTAL	\$44,185,079

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of July 2011

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,329,100
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$43,698
	Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during		
	Expense Month	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,372,798

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions -			(74.400	40	4 0	
EPA Allowances		34,945	474,169	\$0 \$0	\$0 \$0	\$0.000
Gavin Reallocation P & E Transfers In		0 0	94,744 327,201	\$U \$0	۵∪ \$4,855,695	\$0.000 \$14.840
Intercompany Purchases		0	67,631	\$0 \$0	\$21,114,805	\$14.840
Other (List)		0	433,206	\$0 \$0	\$67,152,857	\$155.014
SO2 Emissions Allowance Adjustment		0	4,106	\$0	(\$1,700,982)	(\$414.267)
Withdrawals -	:					
P & E Transfers Out		0	11,382	\$ 0	\$836,106	\$73.459
Intercompany Sales		0	59,987	\$0	\$4,855,950	\$80.950
Off - System Sales		. 0	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances						
Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)		0		\$0		-
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)		10,632	652,671	\$207,115	\$54,520,871	\$83.535
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,128,575		\$6,114,901	\$5.418
	an the first state of the state		1,120,010		ψ0, Π4,001	φυ.+10
Expense Month Member Load Ratio fo	r AEP/Kei	ntuckv Power				0.06877

For the Expense Month of July 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	37,003	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	957	22,169	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		11,479		\$0	\$0.000

For the Expense Month of July 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930		
Consumed: June 2004 July 2004	420 510		
Total Consumed	930		
Remaining Early Reduction Credits (ERC)			

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	. 0	44,729	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	980	\$0	\$1,060,590	\$1,082.235
Other (List)	0	0	\$0	\$0	\$0,000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	956	21,524	\$27,891	\$1,004,343	\$46.662
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		24,185		\$56,247	\$2.326

For the Expense Month of July 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of July 2011

1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$31,699 \$436,240 <u>\$207,115</u>	\$675,054
5 6 7 8 9 10 11	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	\$0 \$401,099 \$0 \$27,891 \$3,762 <u>\$14,029</u>	\$446,781
12	Total Monthly O&M Expenses		<u>\$1,121,835</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$140,229

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs July 2011

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia on Demand (AOD)	\$1,912.70	\$1,029.60	\$0.00	\$2,942.30
Boiler Acoustic Horns	(\$4,960.07)	\$307.40	\$0.00	(\$4,652.67)
Hydrolyzer	\$92.44	\$0.00	\$0.00	\$92.44
SCR Booster Fan	(\$2,734.80)	\$0.00	\$0.00	(\$2,734.80)
SCR NOX Monitoring	\$823.62	\$0.00	\$0.00	\$823.62
Urea Solution Feed Pump	\$328.04	\$387.60	\$0.00	\$715.64
Total SCR July 2011 O & M Expense	(\$4,538.07)	\$1,724.60	\$0.00	(\$2,813.47)
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$3,761.58
Emission Testing Required Under Permit -				
Operation Maintenance	\$0.00 \$15,663.57	\$0.00 \$1,179.28	\$0.00 \$0.00	\$0.00 \$16,842.85
July 2011 O & M Expenses Filed				\$17,790.96

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> ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of July 2011

Line No. (1)	Cost Component (2)	Ohio Power Company's Environmental Cost to KPCo (3)	Indiana Michigan Power Company's Environmental Cost to KPCo (4)	r Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$354,445		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$272,650		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$782,895		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$7,790		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$666,045		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$70,110		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,165,620	\$19,475	\$2,185,095

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of July 2011

Line No. (1)	Cost Component {2}	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$915,890		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$1,499,609		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$7,007,337		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$1,469,857		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$322,181		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$11,243,771	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.33	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$1.12	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$436,240	\$0	\$436,240

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$600,434,141
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$8,225,948
4	Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
-	Operations :	
6	Disposal (5010000)	\$78,781
7	Urea (5020002)	\$499,772
8	Trona (5020003)	\$232,454
9	Lime Stone (5020004)	\$343,369
10	Lime Hydrate (5020007)	\$3,249
11	Steam Exp (5020025)	(\$49)
12	Air Emission Fee	<u>\$10,292</u>
13	Total Operations (Lines 6 thru 10)	\$1,167,868
	Maintenance :	
14	SCR Maintenance (5120000)	\$22,148
15	Scrubber (FGD) Maintenance (5120000)	<u>\$389,649</u>
16	Total Maintnenance (12) + (13)	<u>\$411,797</u>
17	1/2 of Maintenance (14) * 50%	<u>\$205,899</u>
18	Fixed O&M (11) + (15)	\$1,373,767
19	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
20	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$915,890</u>
	Total Revenue Requirement,	
21	Cost Associated with Amos Unit No. 3 (5) + (18)	\$9,141,838
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.08
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.91
	Amos Unit No. 3 Costs to Kentucky Power :	
26	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.91
27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	
28	(ES FORM 3.14, Page 1 of 10, Line 1)	\$354,445

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$400,962,145
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,493,181
	Operations :	AA 4 A A
4	Disposal (5010000)	\$94,988
5	Lime (5020001)	\$0
6	Urea (5020002)	\$402,486
7	Trona (5020003)	\$233,037
8	Lime Stone (5020004)	\$654,052
9	Polymer (5020005)	\$2,689
10	Lime Hydrate (5020007)	\$2,862
11	Steam Exp (5020025)	\$56,867
12	Air Emission Fee	<u>\$8,622</u>
13	Total Operations (Line 4 thru 8)	\$1,455,603
	Maintenance :	#0 500
14	SCR Maintenance (5120000)	\$3,532
15	Scrubber (FGD) Maintenance (5120000)	<u>\$84,479</u>
16	Total Maintenance (13) + (14)	\$88,011
17	1/2 Maintenance (15) * 50%	<u>\$44,006</u>
18	Fixed O&M (12) + (16)	<u>\$1,499,609</u>
10	Total Revenue Requirement,	¢0,000,700
19	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$6,992,790</u>
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$6,992,790
22	Ohio Power Company Steam Capacity (kw)	8,458,000 \$0.83
23	Cardinal Unit No. 1 (\$/kw)	\$0.83 84.00%
24 25	Ohio Power Surplus Weighing Dertion of Weighted Average Canacity Rete	04.00%
20	Portion of Weighted Average Capacity Rate	\$0.70
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	φ0.70
26	Cardinal Unit No. 1 Costs to Kentucky Power : Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.70
26 27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
21	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	<u>309,500</u>
28	(ES FORM 3.14, Page 1 of 10, Line 2)	\$272,650
20	$(\Box \cup \Box \cup \Box)$, $\Box = (\Box \cup \Box)$, $\Box = (\Box \cup \Box)$, $\Box = (\Box \cup \Box)$	φ272,000

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
		Amoonro
1	Utility Plant at Original Cost	\$964,148,720
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$13,208,837
Ū	Operations :	\$10,200,001
4	Sludge Disposal (5010000)	\$947,838
5	Lime (5020001)	\$3,831,612
6	Urea (5020002)	\$1,032,739
7	Trona (5020003)	\$489,424
8	Lime Stone (5020004)	\$479
9	Polymer (5020005)	\$274,773
10	Steam Exp (5020025)	\$0
11	Air Emission Fee	\$34,947
12	Lease (5070005)	<u>\$0</u>
13	Total Operations (Lines 4 thru 10)	\$6,611,812
	Maintenance :	÷-))-/-
14	SCR Maintenance (5120000)	\$63,686
15	Scrubber Maintenance (5120000)	\$727,363
16	Total Maintenance (12) + (13)	\$791,049
17	1/2 of Maintenance (13) * 50%	\$395,525
18	Fixed O&M (11) + (15)	\$7,007,337
	Total Revenue Requirement,	
19	Cost Associated with Gavin Plant (3) + (17)	\$20,216,174
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$20,216,174
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Gavin Plant (\$/kw)	\$2.39
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$2.01
	Gavin Plant Costs to Kentucky Power :	
26	Gavin Plant Portion (\$/kw) (23)	\$2.01
27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
28	(ES FORM 3.14, Page 1 of 10, Line 3)	\$782,895

ES FORM 3.14 Page 6 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$8,451,624
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$115,787
	Operations :	\$ 2
4	Urea (5020002)	\$0 \$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,690</u>
7	Total Operations $(4) + (5) + (6)$	\$15,690
	Maintenance :	¢0.
8	SCR Maintenance (5120000)	\$0 \$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u> <u>\$15,690</u>
10	Fixed O&M (7) + (9) Tatal Bayanya Baguirament	<u>\$10,080</u>
11	Total Revenue Requirement, Cost Associated with Kammer Plant (3) + (10)	\$131,477
12	Ohio Power Company's Percentage Ownership	<u>4107,477</u> 100.00%
12	OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	\$131,477
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Kammer Plant (\$/kw)	\$0.02
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Kammer Plant (\$/kw) (15) X (16)	\$0.02
	Kammer Plant Costs to Kentucky Power :	
18	Kammer Plant Portion (\$/kw) (17)	\$0.02
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$7,790

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$1,143,093,101
1 2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2 3	Total Rate Base	\$15,660,375
3	Operations :	φτ0,000,070
4	Disposal (5010000)	\$77,757
5	Urea (5020002)	\$455,838
6	Trona (5020003)	\$122,056
7	Lime Stone (5020004)	\$766,304
8	Polymer (5020005)	\$3,189
9	Lime Hydrate (5020007)	\$0
10	Steam Exp (5020025)	\$0 \$0
11	Air Emission Fee	\$12,128
12	Total Operations (Lines 4 thru 8)	\$1,437,272
15	Maintenance :	Ţ,,,Ţ,,,,,,,
13	SCR Maintenance (5120000)	\$5,247
14	FDG (5120000)	\$59,922
15	1/2 of Maintenance (10 + 11) * 50%	\$32,585
16	Fixed O&M (9) + (12)	\$1,469,857
	Total Revenue Requirement,	
17	Cost Associated with Mitchell Plant (3) + (13)	<u>\$17,130,232</u>
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$17,130,232
20	Ohio Power Company Steam Capacity (kw)	8,458,000
21	Mitchell Plant (\$/kw)	\$2.03
22	Ohio Power Surplus Weighing	84.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.71
	Mitchell Plant Costs to Kentucky Power :	
24	Mitchell Plant Portion (\$/kw) (20)	\$1.71
25	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	
26	(ES FORM 3.14, Page 1 of 10, Line 5)	\$666,045

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

	COST	AMOUNTS
	Utility Plant at Original Cost	\$108,672,817
	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
	Total Rate Base	\$1,488,818
5	Operations :	¢ i i roojo ro
4	Urea (502002)	\$286,398
5	Trona (5020003)	\$0
	Air Emission Fee	\$34,561
7	Total Operations $(4) + (5) + (6)$	\$320,959
-	Maintenance :	
8	SCR Maintenance (5120000)	\$2,444
9	1/2 of Maintenance (8) * 50%	<u>\$1,222</u>
10	Fixed O&M (7) + (9)	<u>\$322,181</u>
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,810,999</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,810,999
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.21
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	\$0.40
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.18
	Muskingum Plant Costs to Kentucky Power :	#0.40
18	Muskingum Plant Portion (\$/kw) (17)	\$0.18
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	\$70,110
20	(ES FORM 3.14, Page 1 of 10, Line 6)	φευ, ΠΟ

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

	COST	AMOUNTS
4	Utility Plant at Original Cost	\$20,310,295
	Member Primary Capacity Investment Rate (16.44% / 12)	ψ20,510,235 1.37%
	Total Rate Base	\$278,251
-	Operations :	Ψ210,201
	Urea (502002)	\$0
	Trona (5020003)	\$0
	Air Emission Fee	\$13,207
-	Total Operations $(4) + (5) + (6)$	\$13,207
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$13,207</u>
	Total Revenue Requirement,	
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$291,458</u>
	Ohio Power Company's Percentage Ownership	100.00%
	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$291,458
	Ohio Power Company Steam Capacity (kw)	8,458,000
	Sporn Plant (\$/kw)	\$0.03
	Ohio Power Surplus Weighing	84.00%
	Portion of Weighted Average Capacity Rate	AA AA
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	#0.00
	SpornGavin Plant Portion (\$/kw) (17)	\$0.03 280 500
	Kentucky Power Capacity Deficit (kw) Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	<u>389,500</u>
	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685
20	(ES FORW 5.14, Fage FOFTO, LINE /)	φτι,000

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of July 2011

		Plant Common	AMOUNTS	UNIT 2 AMOUNTS	Plant Common	Total
	(2)	(3)	(4)	(5)	(9)	(2)
	Utility Plant at Original Cost	\$1,787,996	\$10,544,676	\$16,709,416	\$2,202,020	
a <u>kontek</u> tekt	Wember Primary Capacity Investment Rate (16.44% / 12) Total Rate Rase	474 406	\$144 462	1.37% \$228.010	430.168	
1059	ocial rate base Operations :	0)) 	401-1-1-0-	\$10.077¢	400° 100	
akaka	Jrea (5020002)	\$0	0\$	\$0	\$0	
р Ч С	Trona (502003) Air Emission Fee	\$0 815 605	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Q\$	
	Total Operations $(4) + (5) + (6)$	\$15,625	 ₽	\$ \$	\$ \$	
	Maintenance ;					
0 0	SCR Maintenance (5120000)	\$0	0\$	29	80	
	7/2	\$15.625		S 6		
and a work	Total Revenue Requirement,				1	
	Cost Associated with Rockport Plant (3) + (10)	\$40,121	\$144,462	\$228,919	\$30,168	
12 13 13	ndiana Michigan Power Company's Percentage Ownership &M's Share of Cost Associated with Rockbort Plant (11) X (12)	<u>50%</u> \$20.061	<u>85.00%</u> \$122 793	<u>65.08%</u> \$148.980	<u>50.00%</u> \$15.084	
WASHEND))) }		
41 14	Total Rockport Plant Common and Units 1 & 2		*****			\$306,918
15 In	Indiana Michigan Power Company Steam Capacity (kw)					5,416,000
MARCHAR &	Rockport Plant (\$/kw) (14) / (15)					\$0.06
2 <u>-</u> - -	Reinucky Fower Found of Rockbort Flaint/ Indiana Michigan Power Surplus Weighing					16.00%
	Portion of Weighted Average Capacity Rate					
< ⊻	Attributed to Rockport Plant (\$/kw) (17) X (18) Rockport Plant.Cosis to Kentucky Power :		********			\$0.01
0 2 2	Rockport Plant Portion (\$/kw) (18)					\$0.01
000000000	Centucky Power Capacity Deficit (kw)					389,500
21 (E	ES FORM 3.14, Page 1 of 10, Line 8)					\$3,895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

For the Expense Month of July 2011

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,457,579
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,348,869
l v	Operations :	φ1,040,000
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	\$15,625
7	Total Operations $(4) + (5) + (6)$	\$15,625
'	Maintenance :	φ10,020
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	\$0
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	,
11	Cost Associated with Tanners Creek Plant (3) + (10)	\$1,364,494
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,494
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580
	· · · · · ·	,

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of July 2011

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 4/30/2010							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	51.941% 0.000%	6.48% 0.83%		3.37% 0.00%			3.37% 0.00%
3 4	FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%	1.22% 10.50%		0.05% 4.61%	1.5762	2/	0.05% 7.27%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.69%
1/		nted Average Cost o on Common Equity		010 - 00020	1				l <u></u> ,
2/		Conversion Factor - 00020 dated - Apr		tion:					
1 2 3		EVENUE LE ACCOUNTS EX c Service Commissi					100.0000 0.2400 0.1500		
4 5		LE PRODUCTION I E TAX EXPENSE, I					99.6100 5.6384		
6 7	FEDERAL TAX 199 DEDUCTIC	ABLE PRODUCTIO)N-PHASE-IN	N INCOME BEF	ORE 199 DEDU	JCTI	ON	93.9716 5.6372		
8 9		ABLE PRODUCTIO		EDUCTION (355	%)		88.3344 30.9171		
10	AFTER-TAX PF	RODUCTION INCOM	ИE				57.4173		
11 12 13 14 15	GROSS-UP FA AFTER-TA 199 DEDU UNCOLLEC Kentucky P		57.4173 5.6372 0.2400 0.1500						
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION	INCOME (ROU	NDE	D)	63.4445		
17 18 19 20	BLENDED FED FEDERAL STATE (LII BLENDED TAX	NE 4)		30.9171 5.6384 36.5555					
21	GROSS REVEN	NUE CONVERSION	FACTOR (100.0	0000 / Line 14)			1.5762		
1 2 3	STATE INCOM PRE-TAX F COLLECTI Kentucky P		100.0000 0.2400 0.1500						
4 5		XABLE PRODUCTI ATE 199 DEDUCTI	ION	99.6100 5.6372					
6 7		XABLE PRODUCTION COME TAX RATE	ON INCOME BE	FORE 199 DED	TOUC	ION	93.9728 6.0000		
8	STATE INC	COME TAX EXPEN	SE (LINE 5 X LIN	NE 6)			5.6384		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9.

Weighted Average Cost of Capital Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

ı.

For the Expense Month of July 2011

Total	(6)						Survey Survey				\$43,698
Rockport Plant Common	(8)		\$2,185,292 (\$167,760) \$12,320	\$2,029,852	0.8070%	\$16,381	\$6,410 \$0	\$6,410	\$22,791	\$6,837	
Total Units 1 & 2 (C5 + C6)	(7)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$8,619,982	0.8070%	409, 203	\$39,968 \$0	\$39,968	\$109,531	\$32,859	
Unit No. 2	(9)	\$8,353,084	(\$2,129,966) (\$889,239)	\$5,333,879			\$24,502 \$0				
Unit No. 1	(5)	\$5,272,657	(\$1,420,165) (\$566,389)	\$3,286,103			\$15,466 \$0				
Rockport Plant Common	.(4)	\$1,777,206	(\$886,777) (\$166,817)	\$723,612	0.8070%	40,840	\$5,212 \$15,625	\$20,837	\$26,677	\$4,002	
	(3)			702280	<u>% 1000.8</u>						
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOX Burners (LNB) Installed Cost	Fiyash Landfill Installed Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes	Total Rate Base Weinhted Averane Cost of Canital - ES EORM 3-21	Wonthly Weighted Avg. Cost of Capital - Ed. Charles 2:1 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monimy Neturin of Nate Dase (Line o Line o) Operating Expenses :	Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	reinucky rower's Fortion of Rockport Plants Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2
	-			تر. 	- 1	-		4	1 - 0	<u> </u>	

KPSC Case No. 2011-00401 UC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 507 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 7/31/2011							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	76,900,835 46,670,557	38.8010% 23.5481%	4.9271% 0.3141%		1.9118% 0.0740%			1.9118% 0.0740%
3	OFFSETS DEBT	0	0.0000%	3.1848%		0.0000%			0.0000%
4 5	C EQUITY	74,621,431	37.6509%	12.1600%	1/	4.5783%	1.681379	2/	7.6979%
6	TOTAL	198,192,823	100.0000%			6.5641% ========			9.6837% ========
1/	WACC = Weighted Cost Rates per the			ower Agreemer	nt	:			
2/	Gross Revenue Co	nversion Factor	(GRCF) Calculati	on:					
1	OPERATING REVE						100.00		
2 3 4	LESS: INDIANA ADJUSTED GROSS INCOME (LINE 1 X .085) INCOME BEFORE FED INC TAX LESS: FEDERAL INCOME TAX								
5 6 7 8	(LINE 4 X .35) OPERATING INCO GROSS REVENUE	ME PERCENTA		<u>32.025</u> 59.475					
9	FACTOR (100						<u>1.681379</u>		

For the Expense Month of July 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of July 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
-	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$46,534,433 \$530,987 \$8,031,761 \$13,076,250	68.3% 0.8% 11.8% 19.1%
5	Total Revenues for Surcharges Purposes	\$68,173,431	100.0%
6	Non-Physical Revenues for Month	\$1,036,488	
7	Total Revenues for Month	\$69,209,919	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for May 2011	3.8659%
2	Kentucky Retail Revenues for Current Expense Month	\$46,511,912
3	Surcharge Collected (1) * (2)	\$1,798,104
4	Surcharge Amount To Be Collected	\$1,562,795
5	Over / (Under) Recovery (3) - (4) = (5)	\$235,309

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 510 of 609

Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

KENTUGKY POWER° A unit of American Electric Power

September 16, 2011

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of August 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after September 28, 2011.

If there are any questions please contact me at 502-696-7010.

Lila D. Munsey

Lila P. Munsey Manager, Regulatory Services Enclosures

RECEIVED

SEP 1 6 2011 PUBLIC SERVICE COMMISSION



KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 1.00 Item No. 41 Attachment 1 Page 511 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of August 2011

	CALCULATION OF E(m)								
	E(m) = CRR - BRR								
LINE 1	CRR from ES FORM 3.00	\$4,236,648							
LINE 2	Brr from ES FORM 1.10	4,088,830	1						
LINE 3	E(m) (LINE 1 - LINE 2)	\$147,818							
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	76.2%							
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$112,638							
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$197,884)							
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	(\$85,246)							
	SURCHARGE FACTOR								
LINE 8	Net KY Retail E(m) (Line 7)	(\$85,246)							
LINE 9	KY Retail R(m) from ES FORM 3.30	\$47,519,210							
LINE 10	Environmental Surcharge Factor for Expense Month (Line 8 / LINE 9)	-0.1794%							

Effective Date for Billing:

September 28, 2011

Submitted By :

Title :

Manager Regulatory Services

Date Submitted :

September 16, 2011

1/ Case No. 2009-00459, dated June 28, 2010

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of August 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net Environmental
Billing Month	Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$3,991,163 3,590,810 3,651,374 3,647,040 3,922,590 3,627,274 3,805,325 4,088,830 3,740,010 3,260,302 2,786,040 4,074,321 \$44,185,079 =======

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of August 2011

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE		99999999999999999999999999999999999999	
NO.	COMPONENTS		n air dar cam a fhan aite air an Arlanda an Arlanda a' Taracha ann an Arlan ann ann air air an Arlanna.
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$4,191,331
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$45,317
	Third Component: Net Proceeds from Emission Allowances Sales		
	AS 1) SO2 - EPA Auction Proceeds received during Expense Month	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,236,648

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE NO.	COST COMPONENT		
NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Return on Rate Base : Utility Plant at Original Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes Net Utility Plant SO2 Emission Allowance Inventory from ES FORM 3.11 ECR & NOx Emission Allowance Inventory from ES FORM 3.12 Cash Working Capital Allowance from ES FORM 3.13, Line 13 Total Rate Base Weighted Average Cost of Capital - ES FORM 3.15 Monthly Weighted Avg. Cost of Capital (9) / 12 Monthly Return of Rate Base (8) * (10) Operating Expenses : Monthly Depreciation Expense Monthly Depreciation Expense Monthly Property Taxes Monthly Kentucky Air Emissions Fee Monthly Environmental AEP Pool Capacity Costs from ES FORM 3.14, Page 1 of 11, Column 5, Line 10	\$191,327,552 (\$65,991,686) (\$39,792,694)	\$85,543,172 \$5,949,084 \$33,083 \$124,174 \$91,649,513 0.89% \$815,681 \$577,252 \$46,030 \$14,017 \$31,699 \$2,177,305 \$262,520
17 18 19	Monthly SO2 Emission Allowance Consumption		\$363,530 \$165,817 <u>\$3,375,650</u>
17 18	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13		\$363,530 \$165,817
20	Total Revenue Requirement - Big Sandy Record on ES FORM 3.00, Line 1		\$4,191,331

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

99 galan cama 1999 ang kang bang bang kang kang kang kang bang bang bang bang bang bang bang b		(1) Allowance Activity in	(2) Cumulative	(3) Dollar Value	(4) Cumulative Dollar Balance	(5) Weighted
		Month	Balance	of Activity	Бајапсе	Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions - EPA Allowances		34,945	474,169	\$0	\$0	\$0.000
Gavin Reallocation		0-1,0-10	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	67,631	\$0	\$21,114,805	\$312.206
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance						
Adjustment		0	4,106	\$0	(\$1,700,982)	(\$414.267)
Withdrawals -		о	11,382	\$0	\$836,106	\$73.459
P & E Transfers Out		0	59,987	\$0 \$0	\$4,855,950	\$80.950
Intercompany Sales Off - System Sales		0	303,050	\$0 \$0	\$29,780,273	\$98.269
SO2 Emissions Allowance		Ŭ	000,000		+;·;	
Adjustment		0	0	\$0	\$0	\$0.000
3						
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1						
(Year 2009 & Prior)		0		\$0		
, ·						
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1						
(Years 2010 to 2014)		8,512	661,183	\$165,817	\$54,686,688	\$82.710
ENDING INVENTORY - Record	- WEISER			<u> 1999 source - a</u>		
Balance in Column (4) on						
ES FORM 3.10, Line 5			1,120,063		\$5,949,084	\$5.311
			-,,	U	59	
Expense Month Member Load Ratio f	or AEP/Ke	ntucky Power				0.06598

For the Expense Month of August 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	37,003	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	792	22,961	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in		40.697		\$0	\$0.000
Column (4) on ES FORM 3.10, Line 5		10,687		l îc	φυ.υυυ

For the Expense Month of August 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance	(2)	(3) Dollar Value of	(4) Cumulative	(5) Weighted
	Activity in Month	Cumulative Balance	Activity	Dollar Balance	
					<u> </u>
BEGINNING INVENTORY		0		\$0	\$0.000
Additions -					
EPA Allowances	0	44,729	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	980	\$0	\$1,060,590	\$1,082.235
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	794	22,318	\$23,164	\$1,027,507	\$46.039
ENDING INVENTORY - Record Balance in					
Column (4) on ES FORM 3.10, Line 5		23,391		\$33,083	\$1.414

For the Expense Month of August 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of August 2011

1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$31,699 \$432,345 <u>\$165,817</u>	\$629,861
5 6 7 8 9 10	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses Equipment - Associated Maintenance Expenses	\$0 \$327,425 \$0 \$23,164 \$7,686 <u>\$5,255</u>	
11 12	Total 2003 Plan O&M Expenses Total Monthly O&M Expenses		<u>\$363,530</u> <u>\$993,391</u>
13	Cash Working Capital Allowance(Line 12 X 1/8)		\$124,174

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

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Kentucky Power Company Environmental Equipment Operation and Maintenance Costs August 2011

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia on Demand (AOD)	\$3,389.54	\$0.00	\$0.00	\$3,389.54
Boiler Acoustic Horns	\$0.00	\$0.00	\$0.00	\$0.00
Hydrolyzer	\$1,881.36	\$3,893.18	\$0.00	\$5,774.54
SCR Booster Fan	\$0.00	\$0.00	\$0.00	\$0.00
SCR NOX Monitoring	\$0.00	\$0.00	\$0.00	\$0.00
Urea Solution Feed Pump	\$0.00	\$0.00	\$0.00	\$0.00
Total SCR August 2011 O & M Expense	\$5,270.90	\$3,893.18	\$0.00	\$9,164.08
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$7,685.83
Emission Testing Required Under Permit - Operation Maintenance	\$0.00 \$22,239.36	\$0.00 (\$26,148.00)	\$0.00 \$0.00	\$0.00 (\$3,908.64)
August 2011 O & M Expenses Filed				\$12,941.27

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> ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of August 2011

		Ohio Power Company's	Indiana Michigan Power Company's	
Line No. (1)	Cost Component (2)	Environmental Cost to KPCo (3)	Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$354,445		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$260,965		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$786,790		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$7,790		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$666,045		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$70,110		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,157,830	\$19,475	\$2,177,305

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of August 2011

Line		Ohio Power Company's (OPCo) Environmental	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo	Total
No. (1)	Cost Component (2)	Cost to KPCo (3)	(4)	(5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$877,455		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$1,247,393		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$7,152,845		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$1,501,562		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$355,074		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	·
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$11,163,226	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.32	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$1.11	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$432,345	\$0	\$432,345

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
4	Utility Plant at Original Cost	\$600,434,141
1	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2 3	Total Rate Base	\$8,225,948
3 4	Ohio Power Company's Percentage Ownership - Environmental Investment	<u>100.00%</u>
45	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
Э	Operations :	40 ,
6	Disposal (5010000)	\$60,510
7	Urea (5020002)	\$507,005
8	Trona (5020003)	\$195,962
9	Lime Stone (5020004)	\$351,645
10	Lime Hydrate (5020007)	\$0
11	Steam Exp (5020025)	(\$33)
12	Air Emission Fee	\$10,292
13	Total Operations (Lines 6 thru 10)	\$1,125,381
10	Maintenance :	
14	SCR Maintenance (5120000)	\$31,840
15	Scrubber (FGD) Maintenance (5120000)	<u>\$349,631</u>
16	Total Maintnenance (12) + (13)	\$381,471
17	1/2 of Maintenance (14) * 50%	\$190,736
18	Fixed $O&M(11) + (15)$	\$1,316,117
19	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
20	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$877,455</u>
20	Total Revenue Requirement,	
21	Cost Associated with Amos Unit No. 3 (5) + (18)	\$9,103,403
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.08
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.91
	Amos Unit No. 3 Costs to Kentucky Power :	
26	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.91
27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	
28	(ES FORM 3.14, Page 1 of 10, Line 1)	\$354,445

ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
		¢400.000.445
1	Utility Plant at Original Cost	\$400,962,145
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$5,493,181
	Operations :	¢00.007
4	Disposal (5010000)	\$29,227
5	Lime (5020001)	\$0 \$044.005
6	Urea (5020002)	\$344,285
7	Trona (5020003)	\$198,050 \$540,550
8	Lime Stone (5020004)	\$510,552
9	Polymer (5020005)	\$2,052
10	Lime Hydrate (5020007)	\$1,085
11	Steam Exp (5020025)	\$61,970
12	Air Emission Fee	<u>\$8,622</u>
13	Total Operations (Line 4 thru 8)	\$1,155,843
	Maintenance :	Ф7 440
14	SCR Maintenance (5120000)	\$7,440 \$175,050
15	Scrubber (FGD) Maintenance (5120000)	<u>\$175,659</u>
16	Total Maintenance (13) + (14)	\$183,099
17	1/2 Maintenance (15) * 50%	<u>\$91,550</u>
18	Fixed O&M (12) + (16)	<u>\$1,247,393</u>
	Total Revenue Requirement,	企 フィロ ビフィ
19	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$6,740,574</u>
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$6,740,574
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Cardinal Unit No. 1 (\$/kw)	\$0.80
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	¢0.07
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.67
	Cardinal Unit No. 1 Costs to Kentucky Power :	ФО О 7
26	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.67
27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	6000 005
28	(ES FORM 3.14, Page 1 of 10, Line 2)	\$260,965

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
4	Utility Plant at Original Cost	\$964,148,720
1 2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2	Total Rate Base	\$13,208,837
3	Operations :	φ10,200,007
4	Sludge Disposal (5010000)	\$993,380
5	Lime (5020001)	\$4,024,187
6	Urea (5020002)	\$957,409
7	Trona (5020003)	\$603,376
8	Lime Stone (5020004)	\$235
9	Polymer (5020005)	\$335,172
10	Steam Exp (5020025)	(\$36,272)
11	Air Emission Fee	\$34,947
12	Lease (5070005)	\$0
13	Total Operations (Lines 4 thru 10)	\$6,912,434
	Maintenance :	, , , , , , , , , , , , , , , , , , ,
14	SCR Maintenance (5120000)	\$69,604
15	Scrubber Maintenance (5120000)	\$411,217
16	Total Maintenance (12) + (13)	\$480,821
17	1/2 of Maintenance (13) * 50%	\$240,411
18	Fixed O&M (11) + (15)	\$7,152,845
	Total Revenue Requirement,	
19	Cost Associated with Gavin Plant (3) + (17)	\$20,361,682
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$20,361,682
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Gavin Plant (\$/kw)	\$2.41
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$2.02
	Gavin Plant Costs to Kentucky Power :	
26	Gavin Plant Portion (\$/kw) (23)	\$2.02
27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
28	(ES FORM 3.14, Page 1 of 10, Line 3)	\$786,790

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$8,451,624 <u>1.37%</u> \$115,787
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$15,690</u> \$15,690
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,690</u>
11 12 13	Cost Associated with Kammer Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	<u>\$131,477</u> 100.00% \$131,477
14 15 16	Ohio Power Company Steam Capacity (kw) Kammer Plant (\$/kw) Ohio Power Surplus Weighing	8,458,000 \$0.02 84.00%
17	Portion of Weighted Average Capacity Rate Attributed to Kammer Plant (\$/kw) (15) X (16) Kammer Plant Costs to Kentucky Power :	\$0.02
18 19	Kammer Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	\$0.02 <u>389,500</u>
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$7,790

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
1 2 3 4	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations : Disposal (5010000)	\$1,143,093,101 <u>1.37%</u> \$15,660,375 \$45,452
5 6	Urea (5020002) Trona (5020003)	\$537,383 \$112,775
7 8 9	Lime Stone (5020004) Polymer (5020005) Lime Hydrate (5020007)	\$694,811 \$1,318 \$0
10 11 12	Steam Exp (5020025) Air Emission Fee Total Operations (Lines 4 thru 8) Maintenance :	\$0 <u>\$12,128</u> \$1,403,867
13 14 15 16	SCR Maintenance (5120000) FDG (5120000) 1/2 of Maintenance (10 + 11) * 50% Fixed O&M (9) + (12) Total Revenue Requirement,	\$1,816 <u>\$193,574</u> <u>\$97,695</u> <u>\$1,501,562</u>
17 18 19 20 21 22 23	Cost Associated with Mitchell Plant (3) + (13) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Mitchell Plant (14) X (15) Ohio Power Company Steam Capacity (kw) Mitchell Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	<u>\$17,161,937</u> 100.00% \$17,161,937 8,458,000 \$2.03 84.00%
24 25 26	Attributed to Mitchell Plant (\$/kw) (18) X (19) Mitchell Plant Costs to Kentucky Power : Mitchell Plant Portion (\$/kw) (20) Kentucky Power Capacity Deficit (kw) Mitchell Plant Environmental Cost to Kentucky Power (21) * (22) (ES FORM 3.14, Page 1 of 10, Line 5)	\$1.71 \$1.71 <u>389,500</u> \$666,045

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$108,672,817 <u>1.37%</u> \$1,488,818
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$310,686 \$0 <u>\$34,561</u> \$345,247
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$19,653 <u>\$9,827</u> <u>\$355,074</u>
11 12 13	Cost Associated with Muskingum Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	<u>\$1,843,892</u> 100.00% \$1,843,892
14 15 16	Ohio Power Company Steam Capacity (kw) Muskingum Plant (\$/kw) Ohio Power Surplus Weighing	8,458,000 \$0.22 84.00%
17 18	Portion of Weighted Average Capacity Rate Attributed to Muskingum Plant (\$/kw) (15) X (16) Muskingum Plant Costs to Kentucky Power : Muskingum Plant Portion (\$/kw) (17)	\$0.18 \$0.18
19 20	Kentucky Power Capacity Deficit (kw) Muskingum Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 6)	<u>389,500</u> \$70,110

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
		¢00.040.005
1	Utility Plant at Original Cost	\$20,310,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u> \$278,251
3	Total Rate Base	\$270,201
	Operations :	\$0
4	Urea (5020002)	\$0 \$0
5	Trona (5020003)	\$0 \$13,207
6	Air Emission Fee	\$13,207
1	Total Operations (4) + (5) + (6)	ψ10,207
	Maintenance :	\$0
8	SCR Maintenance (5120000)	\$0 \$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u> \$13,207
10	Fixed O&M (7) + (9) Total Revenue Requirement,	<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$291,458</u>
12	Ohio Power Company's Percentage Ownership	<u>4201,400</u> 100.00%
1∠ 13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$291,458
13	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Sporn Plant (\$/kw)	\$0.03
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	
11	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	389,500
,0	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685

ES FORM 3.14 Page 10 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of August 2011

Common		AMOUNTS	Plant Common	Total
(3)	(4)	(5)	(9)	(7)
	\$10,544,676	\$16,709,416	\$2,202,020	
\$24,496	\$144,462	\$228,919	\$30,168	
0,6	000	С С С С С С С С С С С С С С С С С С С	0	
\$15,625	0. A	2 S	A 8	
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<u></u>	<u></u>	9	ŝ	
\$15,625	3	\$	\$	
\$40.121	\$144,462	\$228,919	\$30,168	
50%	85.00% ¢122.702	65.08% #148.080	50.00% #15.084	
	\$122,130	\$ 140,300	4 10,004	
	ann an Anthan		4 7-	\$306,918
<u>k</u>				5,416,000
				\$0.06
				16.00%
			X37X78-0-2	č
				\$0.01
				\$0.01
				389,500
				\$3.895
		₩ ₩	\$10,544,676 \$10,544,676 \$14,462 \$14,462 \$14,462 \$14,462 \$14,462 \$14,462 \$14,462 \$15,00% \$12,793 \$122,793 \$1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,457,579
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$1,348,869
Ŭ	Operations :	, . je . e je e e
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	\$15,625
7	Total Operations (4) + (5) + (6)	\$15,625
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,494</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,494
14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	16.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.04
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of August 2011

LINE NO.		Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 4/30/2010							
1 2 3	L/T DEBT S/T DEBT ACCTS REC FINANCING	\$550,000,000 \$0 \$43,588,933	51.941% 0.000% 4.116%	6.48% 0.83% 1.22%		3.37% 0.00% 0.05%			3.37% 0.00% 0.05%
4	C EQUITY	\$465,314,088	43.943%	10.50%	1/	4.61%	1.5762	2/	7.27%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.69%
1/	Rate of Return	nted Average Cost o on Common Equity	per Case No. 20			.			
2/		e Conversion Factor - 00020 dated - Apr		uon:			•		
1 2 3	OPERATING R UNCOLLECTIB Kentucky Public		100.0000 0.2400 0.1500						
4 5	STATE TAXAB	LE PRODUCTION I E TAX EXPENSE, I	NCOME BEFOR NET OF 199 DEI	E 199 DEDUCT DUCTION (SEE	ION BEL	OW)	99.6100 5.6384		
6 7	FEDERAL TAX 199 DEDUCTIC	ABLE PRODUCTIO DN PHASE-IN	N INCOME BEF	ORE 199 DEDU	ICTI	NC	93.9716 5.6372		
8 9		ABLE PRODUCTIO OME TAX EXPENSI		EDUCTION (35%	%)		88.3344 30.9171		
10	AFTER-TAX PF	RODUCTION INCOM	ΛE				57.4173		
11 12 13 14 15	AFTER-TA 199 DEDU UNCOLLE	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNT Public Service Comm	ICOME S EXPENSE				57.4173 5.6372 0.2400 0.1500		
16	TOTAL GROSS	S-UP FACTOR FOR	PRODUCTION	INCOME (ROUI	NDE	D)	63.4445		
17 18 19 20	BLENDED FED FEDERAL STATE (LII BLENDED TAX	NE 4)	TAX RATE:				30.9171 5.6384 36.5555		
21	GROSS REVE	NUE CONVERSION	FACTOR (100.	0000 / Line 14)			1.5762		
1 2 3	STATE INCOME TAX CALCULATION: PRE-TAX PRODUCTION INCOME COLLECTIBLE ACCOUNTS EXPENSE (0.24%) Kentucky Public Service Commission Assessment (0.15%)								
4 5		XABLE PRODUCTI ATE 199 DEDUCTI		FORE 199 DED	UCT	ION	99.6100 5.6372		
6 7		XABLE PRODUCTION	ON INCOME BE	FORE 199 DED	UCT	ION	93.9728 <u>6.0000</u>		
8	STATE INC	COME TAX EXPEN	SE (LINE 5 X LIÌ	NE 6)			5.6384		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Capital Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010. ES FORM 3.20

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of August 2011

Total	(6)										\$45,317	× 1000000
Rockport Plant Common	(8)		\$2,185,292 (\$174,170) \$14,564	\$2,025,686	0.8585%	\$17,391	\$6,410 \$0	\$6,410	\$23,801	\$7,140		
Total Units 1 & 2 (C5 + C6)	(/)			\$8,594,003	0.8585%	\$73,780	\$39,968 \$0	\$39,968	\$113,748	\$34,124		
Unit No. 2	(9)	د میں 420 د	(\$2,154,468) (\$880,663)	\$5,317,953	167 - 1 72 - 21		\$24,502 \$0					
Unit No. 1	(5)	\$5 070 B57	(\$1,435,631) (\$560,076)	\$3,276,050		941449444 941	\$15,466 \$0					
Rockport Plant Common	(4)	\$1,777,206	(\$891,989) (\$164 992)	\$720,225	0.8585%	\$6,183	\$5,212 \$15,625	\$20,837	\$27,020	\$4,053		
	(3)				10.3016%							
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AFGCo.1 ow NOX Burners (LNR) Installed Cost	Flyash Landfill Installed Cost Less Accumulated Depreciation Less Accum Day Income Taxes	Total Rate Base	Weighted Average Cost of Capital ~ ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthly Return of Rate Base (Line 6 * Line 8) Operating Expenses :	Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kenrucky Power's Portion of Kockport Plants Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2	
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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 8/31/2011				200			
1 2	L/T DEBT S/T DEBT CAPITALIZATION	76,900,835 33,264,949	41.6159% 18.0018%	4.7476% 0.3857%		1.9758% 0.0694%			1.9758% 0.0694%
3	OFFSETS DEBT	0	0.0000%	3.4306%		0.0000%			0.0000%
4 5	C EQUITY	74,621,431	40.3823%	12.1600%	1/	4.9105%	1.681379	2/	8.2564%
6	TOTAL	184,787,215	100.0000%			6.9557%			10.3016%
				are that the way provide the second		and a superior of block and the superior and the			he mining the state of the stat
1/	WACC = Weighted Cost Rates per the			ower Agreeme	nt				
2/	Gross Revenue Co	nversion Factor	(GRCF) Calculati	on:					
1	OPERATING REVE						100.00		
2 3 4 5	LESS: INDIANA ADJUSTED GROSS INCOME (LINE 1 X .085) INCOME BEFORE FED INC TAX					<u>8.500</u> 91.500			
6 7 8	LESS: FEDERAL (LINE 4 X .35) OPERATING INCO GROSS REVENUE	ME PERCENTA	GE				<u>32.025</u> 59.475		
9	FACTOR (100						<u>1.681379</u>		

For the Expense Month of August 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of August 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$47,519,210 \$525,287 \$5,676,708 \$8,673,690	76.2% 0.8% 9.1% 13.9%
5	Total Revenues for Surcharges Purposes	\$62,394,895	100.0%
6	Non-Physical Revenues for Month	\$844,708	
7	Total Revenues for Month	\$63,239,603	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
140.		
1	Kentucky Retail Surcharge Factor for June 2011	2.9277%
2	Kentucky Retail Revenues for Current Expense Month	\$53,713,290
с.	Surcharge Collected (1) * (2)	\$1,572,564
4	Surcharge Amount To Be Collected	\$1,374,680
5	Over / (Under) Recovery (3) - (4) = (5)	\$197,884

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



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Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

October 17, 2011

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

RECEIVED OCT 17 2011 PUBLIC SERVICE COMMISSION

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of September 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after October 27, 2011.

If there are any questions please contact me at 502-696-7010.

Lila P. Mursey

Manager, Regulatory Services Enclosures

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of September 2011

	CALCULATION OF E(m)						
	E(m) = CRR - BRR						
LINE 1	CRR from ES FORM 3.00	\$4,019,669					
LINE 2	Brr from ES FORM 1.10	3,740,010	1/				
LINE 3	E(m) (LINE 1 - LINE 2)	\$279,659					
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	79.7%					
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$222,889					
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	\$5,290					
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$228,179					
	SURCHARGE FACTOR						
LINE 8	Net KY Retail E(m) (Line 7)	\$228,179					
LINE 9	KY Retail R(m) from ES FORM 3.30	\$44,097,032					
LINE 10	Environmental Surcharge Factor for Expense Month (Line 8 / LINE 9)	0.5174%					

Effective Date for Billing:

October 27, 2011

Submitted By :

Title :

Manager Regulatory Services

Date Submitted :

October 17, 2011

1/ Case No. 2009-00459, dated June 28, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of September 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Net Environmental Costs
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$3,991,163 3,590,810 3,651,374 3,647,040 3,922,590 3,627,274 3,805,325 4,088,830 3,740,010 3,260,302 2,786,040 4,074,321

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of September 2011

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		an a
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$3,970,695
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$48,974
	Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$4,019,669

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

For the Expense Month of September 2011

	COST COMPONENT		
NO.			
	Return on Rate Base :		
1	Utility Plant at Original Cost	\$191,327,552	
2	Less Accumulated Depreciation	(\$66,614,968)	
3	Less Accum. Def. Income Taxes	(\$39,574,544)	
4	Net Utility Plant		\$85,138,040
5	SO2 Emission Allowance Inventory from ES FORM 3.11		\$5,826,903
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12	66603503886535	\$11,932
7	Cash Working Capital Allowance from ES FORM 3.13, Line 13		\$97,721
8	Total Rate Base		\$91,074,596
9	Weighted Average Cost of Capital - ES FORM 3.15	10.69%	
10	Monthly Weighted Avg. Cost of Capital (9) / 12		0.89%
11	Monthly Return of Rate Base (8) * (10)		\$810,564
	Operating Expenses :		
12	Monthly Depreciation Expense		\$577,252
13	Monthly Catalyst Amortization Expense		\$46,030
	Monthly Property Taxes		\$14,017
	Monthly Kentucky Air Emissions Fee		\$31,699
	Monthly Environmental AEP Pool Capacity Costs		
16	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10		\$2,161,725
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13		\$207,227
18	Monthly SO2 Emission Allowance Consumption		\$122,181
19	Total Operating Expenses [Line 12 thru Line 18]		<u>\$3,160,131</u>
20	Total Revenue Requirement - Big Sandy		
	Record on ES FORM 3.00, Line 1		\$3,970,695

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of September 2011

na na na na handi da da ang kang na mang na		(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		<u></u>	754,608		\$4,685,726	\$6.209
EPA Allowances		34,945	474,169	\$0	\$0	\$0.000
Gavin Reallocation		0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	67,631	\$0	\$21,114,805	\$312.206
Other (List)		_ 0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance Adjustment		0	4,106	\$0	(\$1,700,982)	(\$414.267)
Withdrawals - P & E Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	59,987	\$0	\$4,855,950	\$80.950
Off - System Sales		Ō	303,050	\$0	\$29,780,273	\$98.269
Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)		0		\$0		
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)		6,272	667,455	\$122,181	\$54,808,869	\$82.116
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,113,791		\$5,826,903	\$5.232
Expense Month Member Load Ratio for AEP/Kentucky Power						0.06598

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of September 2011

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	37,003	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	724	23,685	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		9,963		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	44,729	\$0	\$0	\$0.000
P&E Transfers In	0	0	\$0	\$0	\$0.000
Intercompany Purchases	0	0	\$0	\$0	\$0.000
External Purchases	0	980	\$0	\$1,060,590	\$1,082.235
Other (List)	0	0	\$O	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	0	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	725	23,043	\$21,151	\$1,048,658	\$45.509
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		22,666		\$11,932	\$0.526

For the Expense Month of September 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of September 2011

1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$31,699 \$420,660 <u>\$122,181</u>	\$574,540
5 6 7 8 9	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses	\$0 \$178,837 \$0 \$21,151 \$5	
10 11	Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	<u>\$7,234</u>	<u>\$207,227</u>
12	Total Monthly O&M Expenses		<u>\$781,767</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$97,721

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs September 2011

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia on Demand (AOD)	\$916.25	\$1,049.20	\$0.00	\$1,965.45
Boiler Acoustic Horns	\$2,000.00	\$120.00	\$0.00	\$2,120.00
SCR Booster Fan	\$102.99	\$0.00	\$0.00	\$102.99
SCR NOX Monitoring	\$0.00	\$0.00	\$0.00	\$0.00
Urea Solution Feed Pump	\$0.00	\$0.00	\$0.00	\$0.00
Total SCR September 2011 O & M Expense	\$3,019.24	\$1,169.20	\$0.00	\$4,188.44
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$0.00
Emission Testing Required Under Permit -				
Operation Maintenance	\$0.00 \$2,515.96	\$0.00 \$530.00	\$5.00 \$0.00	\$5.00 \$3,045.96

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September 2011 O & M Expenses Filed

\$7,239.40

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of September 2011

		Ohio Power Company's	Indiana Michigan Power Company's	
Line No. (1)	Cost Component (2)	Environmental Cost to KPCo (3)	Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$346,655		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$233,700		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$806,265		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$7,790		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$673,835		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$62,320		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$11,685		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$3,895	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$15,580	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$2,142,250	\$19,475	\$2,161,725

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of September 2011

Line		Ohio Power Company's (OPCo) Environmental	Indiana Michigan Power Company's (I&M) Environmental	T -4 -
No. (1)	Cost Component (2)	Cost to KPCo (3)	Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$738,560		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$563,268		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$7,692,100		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$1,773,803		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$134,414		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$10,931,042	\$31,250	·
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,458,000	5,416,000	
13	Environmental Base (\$/kw)	\$1.29	\$0.01	
14	Company Surplus Weighting	84.00%	16.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$1.08	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	389,500	389,500	
17	Fixed O&M Environmental Cost to Kentucky Power	\$420,660	\$0	\$420,660

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$600,434,141
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>4000,404,141</u> <u>1.37%</u>
∠ 3	Total Rate Base	\$8,225,948
4	Ohio Power Company's Percentage Ownership - Environmental Investment	100,00%
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
	Operations :	\$0,220,010
6	Disposal (5010000)	\$73,723
7	Urea (5020002)	\$454,501
8	Trona (5020003)	\$152,761
9	Lime Stone (5020004)	\$284,020
	Lime Hydrate (5020007)	(\$201)
11	Steam Exp (5020025)	(\$16)
12	Air Emission Fee	\$10,292
13	Total Operations (Lines 6 thru 10)	\$975,080
	Maintenance :	
14	SCR Maintenance (5120000)	\$47,995
15	Scrubber (FGD) Maintenance (5120000)	<u>\$217,413</u>
16	Total Maintnenance (12) + (13)	<u>\$265,408</u>
17	1/2 of Maintenance (14) * 50%	<u>\$132,704</u>
18	Fixed O&M (11) + (15)	\$1,107,784
19	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
20	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$738,560</u>
	Total Revenue Requirement,	
21	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,964,508
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.06
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	¢0.00
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.89
	Amos Unit No. 3 Costs to Kentucky Power :	\$0.89
26 27	Amos Unit No. 3 Portion (\$/kw) (23) Kantuaku Bawar Canacity Deficit (kw)	8
21	Kentucky Power Capacity Deficit (kw) Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	<u>389,500</u>
28	(ES FORM 3.14, Page 1 of 10, Line 1)	\$346,655
20		φ340,000

ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$400,962,145
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$5,493,181
J	Operations :	<i>vvi</i> , 100, 101,
4	Disposal (5010000)	\$49,849
5	Lime (5020001)	\$0
6	Urea (5020002)	\$125,657
7	Trona (5020003)	\$57,436
8	Lime Stone (5020004)	\$212,750
9	Polymer (5020005)	\$184
10	Lime Hydrate (5020007)	\$754
11	Steam Exp (5020025)	\$45,723
12	Air Emission Fee	<u>\$8,622</u>
13	Total Operations (Line 4 thru 8)	\$500,975
	Maintenance :	
14	SCR Maintenance (5120000)	\$10,872
15	Scrubber (FGD) Maintenance (5120000)	<u>\$113,713</u>
16	Total Maintenance (13) + (14)	\$124,585
17	1/2 Maintenance (15) * 50%	<u>\$62,293</u>
18	Fixed O&M (12) + (16)	<u>\$563,268</u>
-	Total Revenue Requirement,	
19	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$6,056,449</u>
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$6,056,449
22	Ohio Power Company Steam Capacity (kw)	8,458,000
23	Cardinal Unit No. 1 (\$/kw)	\$0.72
24	Ohio Power Surplus Weighing	84.00%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.60
	Cardinal Unit No. 1 Costs to Kentucky Power :	
26	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.60
27	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	
28	(ES FORM 3.14, Page 1 of 10, Line 2)	\$233,700

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

NO.COST1Utility Plant at Original Cost2Member Primary Capacity Investment Rate (16.4)3Total Rate BaseOperations :4Sludge Disposal (5010000)5Lime (5020001)6Urea (5020002)7Trona (5020003)8Lime Stone (502004)9Polymer (502005)10Steam Exp (5020025)11Air Emission Fee12Lease (5070005)13Total Operations (Lines 4 thru 10)Maintenance :14SCR Maintenance (5120000)15Scrubber Maintenance (5120000)16Total Maintenance (12) + (13)171/2 of Maintenance (13) * 50%18Fixed O&M (11) + (15)Total Revenue Requirement,19Cost Associated with Gavin Plant (3) + (17)20Ohio Power Company's Percentage Ownership21OPCo's Share of Cost Associated with Gavin Plat22Ohio Power Company Steam Capacity (kw)23Gavin Plant (\$/kw)24Ohio Power Surplus Weighing25Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power :26Gavin Plant Portion (\$/kw) (23)27Kentucky Power Capacity Deficit (kw)	AMOUNTS
 Member Primary Capacity Investment Rate (16.4) Total Rate Base Operations : Sludge Disposal (5010000) Lime (5020001) Urea (5020002) Trona (5020003) Lime Stone (5020004) Polymer (5020005) Steam Exp (5020025) Air Emission Fee Lease (5070005) Total Operations (Lines 4 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber Maintenance (5120000) Scrubber Maintenance (12) + (13) Total Naintenance (13) * 50% Fixed O&M (11) + (15) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plat Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	
 Total Rate Base Operations : Sludge Disposal (5010000) Lime (5020001) Urea (5020002) Trona (5020003) Lime Stone (5020004) Polymer (5020005) Steam Exp (5020025) Air Emission Fee Lease (5070005) Total Operations (Lines 4 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber Maintenance (5120000) Scrubber Maintenance (12) + (13) T/2 of Maintenance (12) + (13) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plat OPCo's Share of Cost Associated with Gavin Plat Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	\$964,148,720
 Operations : Sludge Disposal (5010000) Lime (5020001) Urea (5020002) Trona (5020003) Lime Stone (5020004) Polymer (5020005) Steam Exp (5020025) Air Emission Fee Lease (5070005) Total Operations (Lines 4 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber Maintenance (5120000) Scrubber Maintenance (12) + (13) T/2 of Maintenance (12) + (13) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plat OPCo's Share of Cost Associated with Gavin Plat Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	
 Sludge Disposal (5010000) Lime (5020001) Urea (5020002) Trona (5020003) Lime Stone (5020004) Polymer (5020005) Steam Exp (5020025) Air Emission Fee Lease (5070005) Total Operations (Lines 4 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber Maintenance (5120000) Scrubber Maintenance (12) + (13) Total Maintenance (13) * 50% Fixed O&M (11) + (15) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plat OPCo's Share of Cost Associated with Gavin Plat Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	\$13,208,837
 Lime (5020001) Urea (5020002) Trona (5020003) Lime Stone (5020004) Polymer (5020005) Steam Exp (5020025) Air Emission Fee Lease (5070005) Total Operations (Lines 4 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber Maintenance (5120000) Scrubber Maintenance (12) + (13) Total Maintenance (12) + (13) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plant (3) + (17) Ohio Power Company Steam Capacity (kw) Gavin Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Portion (\$/kw) (23) 	
 G Urea (5020002) 7 Trona (5020003) 8 Lime Stone (5020004) 9 Polymer (5020005) 10 Steam Exp (5020025) 11 Air Emission Fee 12 Lease (5070005) 13 Total Operations (Lines 4 thru 10) Maintenance : 14 SCR Maintenance (5120000) 15 Scrubber Maintenance (5120000) 16 Total Maintenance (12) + (13) 17 1/2 of Maintenance (13) * 50% 18 Fixed O&M (11) + (15) Total Revenue Requirement, 19 Cost Associated with Gavin Plant (3) + (17) 20 Ohio Power Company's Percentage Ownership 21 OPCo's Share of Cost Associated with Gavin Plant (3) + (17) 20 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	\$863,037
 Trona (5020003) Lime Stone (5020004) Polymer (5020005) Steam Exp (5020025) Air Emission Fee Lease (5070005) Total Operations (Lines 4 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber Maintenance (5120000) Scrubber Maintenance (12) + (13) Total Maintenance (13) * 50% Fixed O&M (11) + (15) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plant Ohio Power Company Steam Capacity (kw) Gavin Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	\$4,329,963
 Lime Stone (5020004) Polymer (5020005) Steam Exp (5020025) Air Emission Fee Lease (5070005) Total Operations (Lines 4 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber Maintenance (5120000) Scrubber Maintenance (12) + (13) Total Maintenance (12) + (13) 17 1/2 of Maintenance (13) * 50% Fixed O&M (11) + (15) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plant OPCo's Share of Cost Associated with Gavin Plant Gavin Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	\$1,116,226
 9 Polymer (5020005) 10 Steam Exp (5020025) 11 Air Emission Fee 12 Lease (5070005) 13 Total Operations (Lines 4 thru 10) Maintenance : 14 SCR Maintenance (5120000) 15 Scrubber Maintenance (5120000) 16 Total Maintenance (12) + (13) 17 1/2 of Maintenance (13) * 50% 18 Fixed O&M (11) + (15) Total Revenue Requirement, 19 Cost Associated with Gavin Plant (3) + (17) 20 Ohio Power Company's Percentage Ownership 21 OPCo's Share of Cost Associated with Gavin Plant 22 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	\$624,589
 Steam Exp (5020025) Air Emission Fee Lease (5070005) Total Operations (Lines 4 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber Maintenance (5120000) Total Maintenance (12) + (13) Total Maintenance (13) * 50% Fixed O&M (11) + (15) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plat OPCo's Share of Cost Associated with Gavin Plat Ohio Power Company Steam Capacity (kw) Gavin Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	\$410
 Air Emission Fee Lease (5070005) Total Operations (Lines 4 thru 10) Maintenance : SCR Maintenance (5120000) Scrubber Maintenance (5120000) Total Maintenance (12) + (13) 17 1/2 of Maintenance (13) * 50% Fixed O&M (11) + (15) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plant OPCo's Share of Cost Associated with Gavin Plant Gavin Plant (\$/kw) Gavin Plant (\$/kw) Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	\$319,561
 12 Lease (5070005) 13 Total Operations (Lines 4 thru 10) Maintenance : 14 SCR Maintenance (5120000) 15 Scrubber Maintenance (5120000) 16 Total Maintenance (12) + (13) 17 1/2 of Maintenance (13) * 50% 18 Fixed O&M (11) + (15) Total Revenue Requirement, 19 Cost Associated with Gavin Plant (3) + (17) 20 Ohio Power Company's Percentage Ownership 21 OPCo's Share of Cost Associated with Gavin Plant 22 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	\$0
 13 Total Operations (Lines 4 thru 10) Maintenance : 14 SCR Maintenance (5120000) 15 Scrubber Maintenance (5120000) 16 Total Maintenance (12) + (13) 17 1/2 of Maintenance (13) * 50% 18 Fixed O&M (11) + (15) Total Revenue Requirement, 19 Cost Associated with Gavin Plant (3) + (17) 20 Ohio Power Company's Percentage Ownership 21 OPCo's Share of Cost Associated with Gavin Plant 22 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	\$34,947
 Maintenance : SCR Maintenance (5120000) Scrubber Maintenance (5120000) Total Maintenance (12) + (13) 1/2 of Maintenance (13) * 50% Fixed O&M (11) + (15) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plant OPCo's Share of Cost Associated with Gavin Plant Gavin Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	<u>\$0</u>
 SCR Maintenance (5120000) Scrubber Maintenance (5120000) Total Maintenance (12) + (13) 1/2 of Maintenance (13) * 50% Fixed O&M (11) + (15) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plant OPCo's Share of Cost Associated with Gavin Plant Gavin Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	\$7,288,733
 Scrubber Maintenance (5120000) Total Maintenance (12) + (13) 1/2 of Maintenance (13) * 50% Fixed O&M (11) + (15) Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plant OPCo's Share of Cost Associated with Gavin Plant Ohio Power Company Steam Capacity (kw) Gavin Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Portion (\$/kw) (23) 	
 16 Total Maintenance (12) + (13) 17 1/2 of Maintenance (13) * 50% 18 Fixed O&M (11) + (15) Total Revenue Requirement, 19 Cost Associated with Gavin Plant (3) + (17) 20 Ohio Power Company's Percentage Ownership 21 OPCo's Share of Cost Associated with Gavin Pla 22 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	\$93,341
 17 1/2 of Maintenance (13) * 50% 18 Fixed O&M (11) + (15) Total Revenue Requirement, 19 Cost Associated with Gavin Plant (3) + (17) 20 Ohio Power Company's Percentage Ownership 21 OPCo's Share of Cost Associated with Gavin Plant 22 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	<u>\$713,393</u>
 18 Fixed O&M (11) + (15) Total Revenue Requirement, 19 Cost Associated with Gavin Plant (3) + (17) 20 Ohio Power Company's Percentage Ownership 21 OPCo's Share of Cost Associated with Gavin Plant 22 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	\$806,734
 Total Revenue Requirement, Cost Associated with Gavin Plant (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Gavin Plant Ohio Power Company Steam Capacity (kw) Gavin Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : Gavin Plant Portion (\$/kw) (23) 	\$403,367
 19 Cost Associated with Gavin Plant (3) + (17) 20 Ohio Power Company's Percentage Ownership 21 OPCo's Share of Cost Associated with Gavin Pla 22 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate 26 Attributed to Gavin Plant (\$/kw) (23) 	<u>\$7,692,100</u>
 20 Ohio Power Company's Percentage Ownership 21 OPCo's Share of Cost Associated with Gavin Pla 22 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	
 21 OPCo's Share of Cost Associated with Gavin Pla 22 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate 26 Attributed to Gavin Plant (\$/kw) (21) X (22) 26 Gavin Plant Portion (\$/kw) (23) 	\$20,900,937
 22 Ohio Power Company Steam Capacity (kw) 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	100.00%
 23 Gavin Plant (\$/kw) 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	
 24 Ohio Power Surplus Weighing 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	8,458,000
 25 Portion of Weighted Average Capacity Rate Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23) 	\$2.47
Attributed to Gavin Plant (\$/kw) (21) X (22) Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23)	84.00%
Gavin Plant Costs to Kentucky Power : 26 Gavin Plant Portion (\$/kw) (23)	
26 Gavin Plant Portion (\$/kw) (23)	\$2.07
1 27 Nontucky Power Canacity Deficit (bu)	\$2.07
	<u>389,500</u>
Gavin Plant Environmental Cost to Kentucky Po	
28 (ES FORM 3.14, Page 1 of 10, Line 3)	\$806,265

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$8,451,624 <u>1.37%</u> \$115,787
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$15,690</u> \$15,690
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,690</u>
11 12	Cost Associated with Kammer Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	<u>\$131,477</u> 100.00% \$131,477
13 14 15	Ohio Power Company Steam Capacity (kw) Kammer Plant (\$/kw)	8,458,000 \$0.02 84,00%
16 17	Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Kammer Plant (\$/kw) (15) X (16) Kammer Plant Costs to Kentucky Power :	\$0.02
18 19	Kammer Plant Costs to Kentucky Power . Kammer Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	\$0.02 <u>389,500</u>
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$7,790

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

LINE NO,	COST	AMOUNTS
110.		
4	Litility Plant at Original Cost	\$1,143,093,101
1 2	Utility Plant at Original Cost	3
∠ 3	Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	<u>1.37%</u> \$15,660,375
3		\$10,000,370
л	Operations :	<u> </u>
4	Disposal (5010000)	\$26,051
5	Urea (5020002)	\$667,963
6 7	Trona (5020003)	\$56,503
6 8	Lime Stone (5020004)	\$933,479 \$1,409
8 9	Polymer (5020005)	\$1,498 \$4,572
1 R	Lime Hydrate (5020007)	\$4,573
10 11	Steam Exp (5020025) Air Emission Fee	\$0 ¢10,100
12		<u>\$12,128</u>
12	Total Operations (Lines 4 thru 8) Maintenance :	\$1,702,195
13	SCR Maintenance (5120000)	\$5,358
13 14	FDG (5120000)	
14	1/2 of Maintenance (10 + 11) * 50%	<u>\$137,858</u> <u>\$71,608</u>
15	Fixed $O&M$ (9) + (12)	<u>\$71,808</u> \$1,773,803
10	Total Revenue Requirement,	<u>\$1,773,003</u>
17	Cost Associated with Mitchell Plant (3) + (13)	¢17 494 170
18	Ohio Power Company's Percentage Ownership	<u>\$17,434,178</u> 100.00%
10 19	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	\$17,434,178
20	Ohio Power Company Steam Capacity (kw)	\$17,434,178 8,458,000
20	Mitchell Plant (\$/kw)	\$2.06
22	Ohio Power Surplus Weighing	\$2.00 84.00%
23	Portion of Weighted Average Capacity Rate	04.0070
20	Attributed to Mitchell Plant (\$/kw) (18) X (19)	\$1.73
	Mitchell Plant Costs to Kentucky Power :	φ1.73
24	Mitchell Plant Portion (\$/kw) (20)	\$1.73
24	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	<u>509,500</u>
26	(ES FORM 3.14, Page 1 of 10, Line 5)	\$673,835
20		ψυτυ,ουυ

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$108,672,817
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,488,818
	Operations :	
4	Urea (5020002)	\$50,562
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$34,561</u>
7	Total Operations $(4) + (5) + (6)$	\$85,123
	Maintenance :	
8	SCR Maintenance (5120000)	\$98,581
9	1/2 of Maintenance (8) * 50%	<u>\$49,291</u>
10	Fixed O&M (7) + (9)	<u>\$134,414</u>
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,623,232</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,623,232
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Muskingum Plant (\$/kw)	\$0.19
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	<u> </u>
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.16
40	Muskingum Plant Costs to Kentucky Power :	\$0.16
18 10	Muskingum Plant Portion (\$/kw) (17)	389,500
19	Kentucky Power Capacity Deficit (kw) Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	<u>508,500</u>
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$62,320
20	(,,,,,,,	· ·

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$20,310,295
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$278,251
	Operations :	
4	Urea (5020002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$13,207</u>
7	Total Operations (4) $+$ (5) $+$ (6)	\$13,207
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$13,207</u>
	Total Revenue Requirement,	
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$291,458</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$291,458
14	Ohio Power Company Steam Capacity (kw)	8,458,000
15	Sporn Plant (\$/kw)	\$0.03
16	Ohio Power Surplus Weighing	84.00%
17	Portion of Weighted Average Capacity Rate	6 0.00
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.03
	Sporn Plant Costs to Kentucky Power :	\$0.00
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.03
19	Kentucky Power Capacity Deficit (kw)	<u>389,500</u>
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	₫44 00F
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$11,685

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (1&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of September 2011

		Plant	UNIT 1	UNIT 2	Plant	
	COST	Common	AMOUNTS	AMOUNTS	Common	Total
	(2)	(3)	(4)	(5)	(9)	(1)
Utili	Utility Plant at Original Cost	\$1,787,996	\$10,544,676	\$16,709,416	\$2,202,020	
Men	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%	1.37%	1.37%	1.37%	
l ota One	Lotal Rate Base Dnerations ·	\$24,496	\$144,462	9728,919	\$30,168	
Ľě,	Jrea (5020002)	0\$	\$0	\$0	\$0	
Tror	Trona (5020003)	\$0	0\$	\$0	8 0	
Air I Tot	Air Emission Fee Total Onemtions (4) + (5) + (6)	<u>\$15,625</u> ¢1£ ¢7E	G) 5	କ୍ଷା ଜ	<u>ଖ</u>	
Mai	Maintenance :		⊃ ⊋	2)	
SCI	SCR Maintenance (5120000)	\$0	\$0	\$0	64	
12	1/2 of Maintenance (8) * 50%	80	<u>0</u>	80	<u>8</u>	
БX	Fixed O&M (7) + (9)	<u>\$15,625</u>	ся	였	얾	
Loti	Total Revenue Requirement,				0 7 0 0 0 0 0	
indis	Cost Associated With Rockport Plant (3) + (1U) Indiana Michidan Power Company's Percentage Ownership	\$40,121 50%	\$144,462 85.00%	\$228,919 65.08%	\$30,158 50.00%	
I&M	&M's Share of Cost Associated with Rockport Plant (11) X (12)	\$20,061	\$122,793	ί Ω	\$15,084	
Tot	Total Rockport Plant Common and Units 1 & 2					\$306,918
Indi	Indiana Michigan Power Company Steam Capacity (kw)					5,416,000
N N N	Rockport Plant (5/kw) (14) / (15) Kentucky Dower Dortion of Pocknort Diant /		<u></u>	***		\$0.06
p d	indiana Michigan Power Surplus Weighing		a iné sa tara n			16.00%
Рог	Portion of Weighted Average Capacity Rate		a an fait a sum			
Attr Roc	Attributed to Rockport Plant (\$/kw) (17) X (18) Rockport Plant Costs to Kentucky Power :		<u></u>			\$0.01
В В	Rockport Plant Portion (\$/kw) (18)	224634			entra voldani	\$0.01
Ze Peroversion	Kentucky Power Capacity Deficit (kw)		rnisebX:*5			389,500
2 U	Apoli Units 1 & Z. Environni Jenica to Nentucky Power (13) (20) FORM 3.14 Page 1 of 10 Tine 8)		********			\$3.895

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

3Total Rate Base Operations : $$1,348,869$ 4Urea (5020002)\$05Trona (5020003)\$06Air Emission Fee $$15,625$ 7Total Operations (4) + (5) + (6)\$15,625Maintenance :\$08SCR Maintenance (5120000)\$091/2 of Maintenance (8) * 50%\$010Fixed O&M (7) + (9)\$15,625Total Revenue Requirement,\$1\$1,364,49411Cost Associated with Tanners Creek Plant (3) + (10)\$1,364,49412Indiana Michigan Power Company's Percentage Ownership100.00913I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$0.2516Indiana Michigan Power Surplus Weighing16.00917Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16)\$0.0418Tanners Creek Plant Costs to Kentucky Power :\$0.0418Tanners Creek Plant Portion (\$/kw) (17)\$0.0419Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	LINE NO.	COST	AMOUNTS
2Member Primary Capacity Investment Rate (16.44% / 12) 1.379 3Total Rate Base Operations :\$1,348,8694Urea (5020002)\$05Trona (5020003)\$06Air Emission Fee $$15,625$ 7Total Operations (4) + (5) + (6) Maintenance :\$15,6258SCR Maintenance (5120000)\$091/2 of Maintenance (5120000)\$091/2 of Maintenance (8) * 50%\$15,6257Total Revenue Requirement,\$15,62511Cost Associated with Tanners Creek Plant (3) + (10)\$1,364,49412Indiana Michigan Power Company's Percentage Ownership100.00913I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$,416,00015Tanners Creek Plant (\$/kw)\$0.2516Indiana Michigan Power Surplus Weighing16.00917Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16) 	1	Utility Plant at Original Cost	\$98.457.579
3Total Rate Base Operations :\$1,348,869 Operations :4Urea (5020002)\$05Trona (5020003)\$06Air Emission Fee\$15,6257Total Operations (4) + (5) + (6)\$15,625Maintenance :\$08SCR Maintenance (5120000)\$091/2 of Maintenance (8) * 50%\$010Fixed O&M (7) + (9)\$15,625Total Revenue Requirement,\$111Cost Associated with Tanners Creek Plant (3) + (10)\$1,364,49412Indiana Michigan Power Company's Percentage Ownership100.00913I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$0,2516Indiana Michigan Power Surplus Weighing16.00917Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16)\$0.0418Tanners Creek Plant Costs to Kentucky Power :\$0.0418Tanners Creek Plant Portion (\$/kw) (17)\$0.0419Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)			1.37%
Operations :Solution4Urea (5020002)\$05Trona (5020003)\$06Air Emission Fee\$15,6257Total Operations (4) + (5) + (6)\$15,625Maintenance :\$\$08SCR Maintenance (5120000)\$091/2 of Maintenance (8) * 50%\$010Fixed O&M (7) + (9)\$15,625Total Revenue Requirement,\$15,62511Cost Associated with Tanners Creek Plant (3) + (10)\$1,364,49412Indiana Michigan Power Company's Percentage Ownership100.00913I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$1,364,49415Tanners Creek Plant (\$/kw)\$0.2516Indiana Michigan Power Surplus Weighing16.00917Portion of Weighted Average Capacity Rate\$0.04Attributed to Rockport Plant (\$/kw) (15) X (16)\$0.0418Tanners Creek Plant Costs to Kentucky Power :\$0.0418Tanners Creek Plant Portion (\$/kw) (17)\$0.0419Kentucky Power Capacity Deficit (kw)389,50013Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)\$139,500			\$1,348,869
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6Air Emission Fee\$15,6257Total Operations (4) + (5) + (6) Maintenance :\$15,6258SCR Maintenance (5120000)\$0091/2 of Maintenance (8) * 50%\$0010Fixed O&M (7) + (9) Total Revenue Requirement,\$15,62511Cost Associated with Tanners Creek Plant (3) + (10)\$1,364,49412Indiana Michigan Power Company's Percentage Ownership 100.009100.00913I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$,416,00015Tanners Creek Plant (\$/kw)\$0.2516Indiana Michigan Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16) Tanners Creek Plant Costs to Kentucky Power :\$0.0418Tanners Creek Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)\$0.04	8 8		\$0
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Maintenance :8SCR Maintenance (5120000)\$091/2 of Maintenance (8) * 50%\$010Fixed O&M (7) + (9)\$15,62511Cost Associated with Tanners Creek Plant (3) + (10)\$1,364,49412Indiana Michigan Power Company's Percentage Ownership100.00%13I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$,416,00015Tanners Creek Plant (\$/kw)\$0.2516Indiana Michigan Power Surplus Weighing16.00%17Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16) Tanners Creek Plant Costs to Kentucky Power :\$0.0418Tanners Creek Plant Portion (\$/kw) (17)\$0.0419Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)\$1.389,500		Total Operations (4) + (5) + (6)	\$15,625
91/2 of Maintenance (8) * 50%\$010Fixed O&M (7) + (9) Total Revenue Requirement,\$15,62511Cost Associated with Tanners Creek Plant (3) + (10)\$1,364,49412Indiana Michigan Power Company's Percentage Ownership100,00913I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$0,2516Indiana Michigan Power Surplus Weighing16,00917Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16) Tanners Creek Plant Costs to Kentucky Power :\$0,0418Tanners Creek Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)\$389,500			
10Fixed O&M (7) + (9) Total Revenue Requirement,\$15,62511Cost Associated with Tanners Creek Plant (3) + (10)\$1,364,49412Indiana Michigan Power Company's Percentage Ownership100.00%13I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$0,2516Indiana Michigan Power Surplus Weighing16.00%17Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16) Tanners Creek Plant Costs to Kentucky Power :\$0,0418Tanners Creek Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)\$0,04	8	SCR Maintenance (5120000)	\$0
Total Revenue Requirement,11Cost Associated with Tanners Creek Plant (3) + (10)\$1,364,49412Indiana Michigan Power Company's Percentage Ownership100.00%13I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$1,364,60015Tanners Creek Plant (\$/kw)\$0.2516Indiana Michigan Power Surplus Weighing16.00%17Portion of Weighted Average Capacity Rate\$0.0418Tanners Creek Plant Costs to Kentucky Power :\$0.0419Kentucky Power Capacity Deficit (kw)\$0.0419Kentucky Power Capacity Deficit (kw)389,500	9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
11Cost Associated with Tanners Creek Plant (3) + (10)\$1,364,49412Indiana Michigan Power Company's Percentage Ownership100.00%13I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$0,2516Indiana Michigan Power Surplus Weighing16.00%17Portion of Weighted Average Capacity Rate\$0,0418Tanners Creek Plant Costs to Kentucky Power :\$0,0419Kentucky Power Capacity Deficit (kw)\$0,0419Kentucky Power Capacity Deficit (kw)389,500	10	Fixed O&M (7) + (9)	<u>\$15,625</u>
12Indiana Michigan Power Company's Percentage Ownership100.00%13I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)\$1,364,49415Tanners Creek Plant (\$/kw)\$0.2516Indiana Michigan Power Surplus Weighing16.00%17Portion of Weighted Average Capacity Rate\$0.04Attributed to Rockport Plant (\$/kw) (15) X (16)\$0.04Tanners Creek Plant Costs to Kentucky Power :\$0.0418Tanners Creek Plant Portion (\$/kw) (17)\$0.0419Kentucky Power Capacity Deficit (kw)389,50010Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)\$100.00%		Total Revenue Requirement,	
13I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)\$1,364,49414Indiana Michigan Power Company Steam Capacity (kw)5,416,00015Tanners Creek Plant (\$/kw)\$0.2516Indiana Michigan Power Surplus Weighing16.00917Portion of Weighted Average Capacity Rate\$0.04Attributed to Rockport Plant (\$/kw) (15) X (16)\$0.04Tanners Creek Plant Costs to Kentucky Power :\$0.0418Tanners Creek Plant Portion (\$/kw) (17)\$0.0419Kentucky Power Capacity Deficit (kw)389,500Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)\$1,364,494	11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,494</u>
14Indiana Michigan Power Company Steam Capacity (kw)5,416,00015Tanners Creek Plant (\$/kw)\$0.2516Indiana Michigan Power Surplus Weighing16.00%17Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16)\$0.0418Tanners Creek Plant Costs to Kentucky Power :\$0.0419Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)389,500	12	Indiana Michigan Power Company's Percentage Ownership	100.00%
15Tanners Creek Plant (\$/kw)\$0.2516Indiana Michigan Power Surplus Weighing16.00917Portion of Weighted Average Capacity Rate\$0.0418Attributed to Rockport Plant (\$/kw) (15) X (16)\$0.0419Kentucky Power Capacity Deficit (kw)\$0.0419Kentucky Power Capacity Deficit (kw)389,50010Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)\$10	13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,494
16Indiana Michigan Power Surplus Weighing16.00%17Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16)\$0.0418Tanners Creek Plant Costs to Kentucky Power :\$0.0419Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)\$389,500	14	Indiana Michigan Power Company Steam Capacity (kw)	5,416,000
 Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16) Tanners Creek Plant Costs to Kentucky Power : Tanners Creek Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19) 	15		\$0.25
Attributed to Rockport Plant (\$/kw) (15) X (16)\$0.04Tanners Creek Plant Costs to Kentucky Power :\$0.0418Tanners Creek Plant Portion (\$/kw) (17)\$0.0419Kentucky Power Capacity Deficit (kw)\$389,500Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)\$19	16	Indiana Michigan Power Surplus Weighing	16.00%
Tanners Creek Plant Costs to Kentucky Power :18Tanners Creek Plant Portion (\$/kw) (17)\$0.0419Kentucky Power Capacity Deficit (kw)389,500Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)389,500	17		
18Tanners Creek Plant Portion (\$/kw) (17)\$0.0419Kentucky Power Capacity Deficit (kw)389,500Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)389,500			\$0.04
19 Kentucky Power Capacity Deficit (kw) 389,500 Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19) 389,500		•	
Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	18		\$0.04
	19		<u>389,500</u>
20 (ES FORM 3.14, Page 1 of 10, Line 9) \$15,580			
	20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$15,580

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of September 2011

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
	21-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	As of 4/30/2010							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	51.941% 0.000%	6.48% 0.83%		3,37% 0.00%			3.37% 0.00%
3 4	FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%	1.22% 10.50%		0.05% 4.61%	1.5762	2/	0.05% 7.27%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.69%
1/		nted Average Cost o on Common Equity		10 - 00020					
2/		Conversion Factor - 00020 dated - Apr		tion:					
1 2 3		EVENUE LE ACCOUNTS EX c Service Commissi					100.0000 0.2400 0.1500		
4 5		LE PRODUCTION I E TAX EXPENSE, N					99.6100 5.6384		1
6 7	FEDERAL TAX 199 DEDUCTIC	ABLE PRODUCTIO NN PHASE-IN	N INCOME BEF	ORE 199 DEDL	JCTI	NC	93.9716 5.6372		
8 9		ABLE PRODUCTIO OME TAX EXPENSI		EDUCTION (359	%)		88.3344 30.9171		
10	AFTER-TAX PF	RODUCTION INCOM	ΛĒ				57.4173		
11 12 13 14 15	AFTER-TA 199 DEDU UNCOLLE	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS Public Service Comm	COME S EXPENSE				57.4173 5.6372 0.2400 0.1500		
16	TÖTAL GROSS	-UP FACTOR FOR	PRODUCTION	INCOME (ROU	NDE	D)	63.4445		
17 18 19 20	BLENDED FED FEDERAL STATE (LII BLENDED TAX	NE 4)	TAX RATE:				30.9171 5.6384 36.5555		
21	GROSS REVE	NUE CONVERSION	FACTOR (100.	0000 / Line 14)			1.5762		
1 2 3	PRE-TAX F COLLECTI	E TAX CALCULATIO PRODUCTION INCO BLE ACCOUNTS E Public Service Comm	DME XPENSE (0.24%				100.0000 0.2400 0.1500		
4 5		XABLE PRODUCTION TATE 199 DEDUCTION		FORE 199 DED	UCT	ION	99.6100 5.6372		
6 7		XABLE PRODUCTIO	ON INCOME BE	FORE 199 DED	UCT	ION	93.9728 6.0000		
8	STATE INC	COME TAX EXPENS	SE (LINE 5 X LIN	NE 6)			5.6384		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of September 2011

	ľ				ARK CONTRACT					a an			s
Total	(6)											\$48,974	
Rockport Plant Common	(8)		\$2,185,292 (\$180,580) \$16,807	\$2,021,519	0.9723%	\$19,655	\$6,410 \$0	\$6,410	\$26,065	\$7,820			
Total Units 1 & 2 (C5 + C6)	(2)			\$8,568,023	0.9723%	\$83,307	\$39,968 \$0	\$39,968	\$123,275	\$36,983			
Unit No. 2	(9)	\$8,353,084	(\$2,178,970) (\$872,088)	\$5,302,026		998)	\$24,502 \$0		nan na				
N Unit O, J	(ç)	\$5,272,657	(\$1,451,097) (\$555,563)	\$3,265,997		aren of Animater	\$15,466 \$0		tat an Line and have do	,			
Rockport Plant Common	(4)	\$1,777,206	(\$897,201) (\$163,167)	\$716,838	0.9723%	\$6,970	\$5,212 \$15,625	\$20,837	\$27,807	\$4,171			
	(3)				11.6676%								
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost AEGCo Low NOX Burners (LNB) Installed Cost	Flyash Landfill Installed Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes	Total Rate Base	Weighted Average Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthiy Return of Rate Base (Line 6 * Line 8) Operating Expenses :	Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kentucky Power's Portion of Rockport Plants' Total Revenue Requirement.(C 4, Ln 14 + C 7, Ln 15 + C 8, L 15) Note: Cost in Column 8-1 ine 16 is to be Recorded on	ES FORM 3.00 Line 2	
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KPSC Case No. 2011-00401 IUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 557 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 9/30/2011							
1 2	L/T DEBT S/T DEBT	66,900,835 20,451,684	41.2800% 12.6194%	5.3097% 0.3983%		2.1918% 0.0503%			2.1918% 0.0503%
3	CAPITALIZATION OFFSETS DEBT	0	0.0000%	4.1598%		0.0000%			0.0000%
5	C EQUITY	74,713,431	46.1006%	12.1600%	1/	5.6058%	1.681379	2/	9.4255%
6	TOTAL	162,065,950	100.0000%			 7.8479% ========			11.6676%
1/ 2/ 1 2 3	WACC = Weighted Cost Rates per the Gross Revenue Co OPERATING REVE LESS: INDIANA A (LINE 1 X .085 INCOME BEFORE	Provisions of the nversion Factor ENUE DJUSTED GRO	Rockport Unit P (GRCF) Calculati		nt		100.00 <u>8.500</u> 91.500		
4 5 6 7 8 9	INCOME BEFORE LESS: FEDERAL (LINE 4 X .35) OPERATING INCO GROSS REVENUE FACTOR (100	INCOME TAX ME PERCENTA CONVERSION	GE				<u>32.025</u> 59.475 <u>1.681379</u>		

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For the Expense Month of September 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of September 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
2 3	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$44,097,032 \$438,222 \$4,158,869 \$6,653,495	79.7% 0.8% 7.5% 12.0%
5	Total Revenues for Surcharges Purposes	\$55,347,618	100.0%
6	Non-Physical Revenues for Month	\$308,585	
7	Total Revenues for Month	\$55,656,203	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for July 2011	0.3272%
2	Kentucky Retail Revenues for Current Expense Month	\$44,922,066
3	Surcharge Collected (1) * (2)	\$146,985
4	Surcharge Amount To Be Collected	\$152,275
5	Over / (Under) Recovery (3) - (4) ≕ (5)	(\$5,290)

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 560 of 609

Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

November 18, 2011

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

RECEIVED

NOV 1 8 2011 PUBLIC SERVICE COMMISSION

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of October 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after November 29, 2011.

If there are any questions please contact me at 502-696-7010.

Lila P. Munsey

Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 1.00 Item No. 41 Attachment 1 Page 561 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of October 2011

	CALCULATION OF E(m)		and the state of the
	E(m) = CRR - BRR		
LINE 1	CRR from ES FORM 3.00	\$3,806,605	
LINE 2	Brr from ES FORM 1.10	3,260,302	
LINE 3	E(m) (LINE 1 - LINE 2)	\$546,303	
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	78.0%	
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$426,116	
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	(\$27,561)	and the first of t
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$398,555	
	SURCHARGE FACTOR		
LINE 8	Net KY Retail E(m) (Line 7)	\$398,555	
LINE 9	KY Retail R(m) from ES FORM 3.30	\$38,287,502	
LINE 10	Environmental Surcharge Factor for Expense Month (Line 8 / LINE 9)	1.0410%	

Effective Date for Billing:

November 29, 2011

Submitted By :

Title :

Manager Regulatory Services

Date Submitted :

November 18, 2011

1/ Case No. 2009-00459, dated June 28, 2010

ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of October 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net
	Environmental
	81
Billing Month	Costs
JANUARY	\$3,991,163
FEBRUARY	3,590,810
MARCH	3,651,374
APRIL	3,647,040
ΜΑΥ	3,922,590
JUNE	3,627,274
JULY	3,805,325
AUGUST	4,088,830
SEPTEMBER	3,740,010
OCTOBER	3,260,302
NOVEMBER	2,786,040
DECEMBER	4,074,321
TOTAL	\$44,185,079
	=========

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of October 2011

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$3,765,064
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 16		\$41,541
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$3,806,605

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE	COST COMPONENT		
NO.	CO3T COMFONENT		
	Return on Rate Base :	,	
1	Utility Plant at Original Cost	\$191,327,552	
2	Less Accumulated Depreciation	(\$67,238,250)	
3	Less Accum. Def. Income Taxes	(\$39,356,398)	
4	Net Utility Plant		\$84,732,904
5	SO2 Emission Allowance Inventory from ES FORM 3.11		\$5,680,294
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12		\$636,332
7	Cash Working Capital Allowance from ES FORM 3.13, Line 13		\$126,974
8	Total Rate Base		\$91,176,504
9	Weighted Average Cost of Capital - ES FORM 3.15	10.69%	
10	Monthly Weighted Avg. Cost of Capital (9) / 12		0.89%
11	Monthly Return of Rate Base (8) * (10)		\$811,471
	Operating Expenses :		
12	Monthly Depreciation Expense		\$577,252
13	Monthly Catalyst Amortization Expense		\$46,030
14	Monthly Property Taxes		\$14,017
15	Monthly Kentucky Air Emissions Fee		\$31,699
	Monthly Environmental AEP Pool Capacity Costs		
16	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10		\$1,542,750
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13		\$595,236
18	Monthly SO2 Emission Allowance Consumption		\$146,609
19	Total Operating Expenses [Line 12 thru Line 18]		<u>\$2,953,593</u>
20	Total Revenue Requirement - Big Sandy		
	Record on ES FORM 3.00, Line 1		\$3,765,064

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

aan da mada maa ka ay		(1) Allowance	(2)	(3)	(4) Cumulative	(5)
		Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions - EPA Allowances		34,945	474,169	\$0	\$0	\$0.000
Gavin Reallocation		0	94,744	\$0	\$0	\$0.000
P & E Transfers In		0	327,201	\$0	\$4,855,695	\$14.840
Intercompany Purchases		0	67,631	\$0	\$21,114,805	\$312.206
Other (List)		0	433,206	\$0	\$67,152,857	\$155.014
SO2 Emissions Allowance Adjustment		0	4,106	\$0	(\$1,700,982)	(\$414.267)
Withdrawals - P & E Transfers Out		0	11,382	\$0	\$836,106	\$73,459
Intercompany Sales		0	59,987	\$0	\$4,855,950	\$80.950
Off - System Sales SO2 Emissions Allowance		0	303,050	\$0	\$29,780,273	\$98.269
Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances Consumed By Kentucky Power - 1:1 (Year 2009 & Prior)		0		\$0		
SO2 Emissions Allowances Consumed By Kentucky Power - 2:1 (Years 2010 to 2014)		7,526	674,981	\$146,609	\$54,955,478	\$81.418
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5			1,106,265		\$5,680,294	\$5.135
Expense Month Member Load Ratio for AEP/Kentucky Power						0.06598

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of October 2011

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	37,003	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$0	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	\$0.000
NOx Consumed By Kentucky Power	2	23,687	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in		0.004		*••	#0.000
Column (4) on ES FORM 3.10, Line 5		9,961		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

0 44,729		\$0	\$0.000
0 0 3,080 0	\$0 \$0 \$0 \$940,100 \$0	\$0 \$0 \$0 \$2,000,690 \$0	\$0.000 \$0.000 \$0.000 \$649.575 \$0.000
0 0 - 0 23,875	\$0 \$0 \$0 \$315,700	\$0 \$0 \$0 \$1,364,358	\$0.000 \$0.000 \$57.146 \$26.587
		0 \$0 0 \$0 . 0 \$0	0 \$0 \$0 0 \$0 \$0 0 \$0 \$0 0 \$0 \$0 23,875 \$315,700 \$1,364,358

For the Expense Month of October 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 ES FORM 3.13 Item No. 41 Attachment 1 Page 568 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of October 2011

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1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$31,699 \$242,250 <u>\$146,609</u>	\$420,558
5 6 7 8 9	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses	\$0 \$251,855 \$0 \$315,700 \$24	
10 11	Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	<u>\$27,657</u>	<u>\$595,236</u>
12	Total Monthly O&M Expenses		<u>\$1,015,794</u>
13	Cash Working Capital Allowance(Line 12 X 1/8)		\$126,974

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs October 2011

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia on Demand (AOD)	\$17,021.00	\$2,118.61	\$0.00	\$19,139.61
Boiler Acoustic Horns	\$185.75	\$0.00	\$0.00	\$185.75
SCR Acoustic Horns	\$3,408.84	\$550.94	\$0.00	\$3,959.78
SCR Booster Fan	\$193.51	\$0.00	\$0.00	\$193.51
SCR NOX Monitoring	\$593.89	\$0.00	\$0.00	\$593.89
Total SCR October 2011 O & M Expense	\$21,402.99	\$2,669.55	\$0.00	\$24,072.54
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$24.00
Emission Testing Required Under Permit - Operation Maintenance	\$0.00 \$3,584.42	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$3,584.42

October 2011 O & M Expenses Filed

\$27,680.96

ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of October 2011

		Ohio Power Company's Environmental	Indiana Michigan Power Company's Environmental	
Line No. (1)	Cost Component (2)	Cost to KPCo (3)	Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$244,800		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$160,650		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$581,400		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$5,100		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$487,050		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$45,900		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$10,200		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$2,550	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$5,100	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$1,535,100	\$7,650	\$1,542,750

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of October 2011

Line No. (1)	Cost Component (2)	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$196,284		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$30,386		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$6,794,923		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$1,168,945		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$105,639		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$8,325,074	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,003,000	5,414,000	
13	Environmental Base (\$/kw)	\$1.04	\$0.01	
14	Company Surplus Weighting	91.19%	8.81%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.95	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	255,000	255,000	
17	Fixed O&M Environmental Cost to Kentucky Power	\$242,250	\$0	\$242,250

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$600,434,141
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$8,225,948
4	Ohio Power Company's Percentage Ownership - Environmental Investment	100.00%
5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
, v	Operations :	+ - j
6	Disposal (5010000)	\$45,707
7	Urea (5020002)	\$0
8	Trona (5020003)	\$0
9	Lime Stone (5020004)	\$10,394
10	Lime Hydrate (5020007)	\$1,123
11	Steam Exp (5020025)	\$15
12	Air Emission Fee	<u>\$10,292</u>
13	Total Operations (Lines 6 thru 10)	\$67,531
	Maintenance :	
14	SCR Maintenance (5120000)	\$112,995
15	Scrubber (FGD) Maintenance (5120000)	<u>\$340,765</u>
16	Total Maintnenance (12) + (13)	<u>\$453,760</u>
17	1/2 of Maintenance (14) * 50%	<u>\$226,880</u>
18	Fixed O&M (11) + (15)	\$294,411
19	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
20	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	<u>\$196,284</u>
	Total Revenue Requirement,	
21	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,422,232
22	Ohio Power Company Steam Capacity (kw)	8,003,000
23	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.05
24	Ohio Power Surplus Weighing	91.19%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.96
	Amos Unit No. 3 Costs to Kentucky Power :	\$5.55
26	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.96
27	Kentucky Power Capacity Deficit (kw)	<u>255,000</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	0044.000
28	(ES FORM 3.14, Page 1 of 10, Line 1)	\$244,800

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 573 of 609

ES FORM 3.14 Page 4 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$400,962,145
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
3	Total Rate Base	\$5,493,181
	Operations :	Ţ-,,
4	Disposal (5010000)	(\$16,739)
5	Lime (5020001)	\$0
6	Urea (5020002)	(\$26,195)
7	Trona (5020003)	(\$15,311)
8	Lime Stone (5020004)	(\$27,989)
9	Polymer (5020005)	(\$361)
10	Lime Hydrate (5020007)	\$4
11	Steam Exp (5020025)	\$70,095
12	Air Emission Fee	\$8,622
13	Total Operations (Line 4 thru 8)	(\$7,874)
	Maintenance :	
14	SCR Maintenance (5120000)	\$8,705
15	Scrubber (FGD) Maintenance (5120000)	<u>\$67,814</u>
16	Total Maintenance (13) + (14)	\$76,519
17	1/2 Maintenance (15) * 50%	\$38,260
18	Fixed O&M (12) + (16)	<u>\$30,386</u>
	Total Revenue Requirement,	
19	Cost Associated with Cardinal Unit No. 3 (3) + (17)	<u>\$5,523,567</u>
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19)	\$5,523,567
22	Ohio Power Company Steam Capacity (kw)	8,003,000
23	Cardinal Unit No. 1 (\$/kw)	\$0.69
24	Ohio Power Surplus Weighing	91.19%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23)	\$0.63
	Cardinal Unit No. 1 Costs to Kentucky Power :	
26	Cardinal Unit No. 1 Portion (\$/kw) (24)	\$0.63
27	Kentucky Power Capacity Deficit (kw)	<u>255,000</u>
	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26)	
28	(ES FORM 3.14, Page 1 of 10, Line 2)	\$160,650
		and a second

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE		
NO.	COST	AMOUNTS
		\$964,148,720
1	Utility Plant at Original Cost	8
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u> \$13,208,837
3	Total Rate Base	ৢ ।১,∠∪0,037
	Operations :	¢047.050
4	Sludge Disposal (5010000)	\$947,653
5	Lime (5020001)	\$2,992,283
6	Urea (5020002)	\$1,267,790
7	Trona (5020003)	\$684,201
8	Lime Stone (5020004)	\$552
9	Polymer (5020005)	\$357,554
10	Steam Exp (5020025)	\$0
11	Air Emission Fee	\$34,947
12	Lease (5070005)	<u>\$0</u>
13	Total Operations (Lines 4 thru 10)	\$6,284,980
	Maintenance :	
14	SCR Maintenance (5120000)	\$81,226
15	Scrubber Maintenance (5120000)	<u>\$938,659</u>
16	Total Maintenance (12) + (13)	\$1,019,885
17	1/2 of Maintenance (13) * 50%	<u>\$509,943</u>
18	Fixed O&M (11) + (15)	<u>\$6,794,923</u>
	Total Revenue Requirement,	
19	Cost Associated with Gavin Plant (3) + (17)	\$20,003,760
20	Ohio Power Company's Percentage Ownership	100.00%
21	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$20,003,760
22	Ohio Power Company Steam Capacity (kw)	8,003,000
23	Gavin Plant (\$/kw)	\$2.50
24	Ohio Power Surplus Weighing	91.19%
25	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$2.28
	Gavin Plant Costs to Kentucky Power :	
26	Gavin Plant Portion (\$/kw) (23)	\$2.28
27	Kentucky Power Capacity Deficit (kw)	<u>255,000</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
28	(ES FORM 3.14, Page 1 of 10, Line 3)	\$581,400

ES FORM 3.14 Page 6 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$8,451,624 <u>1.37%</u> \$115,787
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$15,690</u> \$15,690
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,690</u>
11 12 13	Cost Associated with Kammer Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	<u>\$131,477</u> 100.00% \$131,477
14 15 16 17	Ohio Power Company Steam Capacity (kw) Kammer Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate	8,003,000 \$0.02 91.19%
17	Attributed to Kammer Plant (\$/kw) (15) X (16) Kammer Plant Costs to Kentucky Power : Kammer Plant Portion (\$/kw) (17)	\$0.02 \$0.02
19 20	Kentucky Power Capacity Deficit (kw) Kammer Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 4)	<u>255,000</u> \$5,100

ES FORM 3.14 Page 7 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

NO.	COST	AMOUNTS
	With Direct at Original Coast	¢4 442 002 404
1	Utility Plant at Original Cost	\$1,143,093,101
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$15,660,375
	Operations :	(ጵඉስ ይታን)
4	Disposal (5010000)	(\$80,518)
5	Urea (5020002)	\$504,654
6	Trona (5020003)	\$77,002
7	Lime Stone (5020004)	\$555,015
8	Polymer (5020005)	\$780
9	Lime Hydrate (5020007)	\$4,702
10	Steam Exp (5020025)	\$0 #40.400
11	Air Emission Fee	<u>\$12,128</u>
12	Total Operations (Lines 4 thru 8)	\$1,073,763
40		\$800
13	SCR Maintenance (5120000)	
14	FDG (512000)	\$189,563 \$05,182
15	1/2 of Maintenance (10 + 11) * 50%	<u>\$95,182</u>
16	Fixed O&M (9) + (12)	<u>\$1,168,945</u>
4-7	Total Revenue Requirement,	¢40,000,000
17	Cost Associated with Mitchell Plant (3) + (13)	<u>\$16,829,320</u> 100.00%
18	Ohio Power Company's Percentage Ownership	\$16,829,320
19	OPCo's Share of Cost Associated with Mitchell Plant (14) X (15)	
20	Ohio Power Company Steam Capacity (kw)	8,003,000 \$2.10
21	Mitchell Plant (\$/kw) Obia Dawar Sumlua Waighing	پ۲۵،10 91,19%
22	Ohio Power Surplus Weighing	91.1970
23	Portion of Weighted Average Capacity Rate	\$1.91
	Attributed to Mitchell Plant (\$/kw) (18) X (19)	ψ ι .ອ ι
1 1	Mitchell Plant Costs to Kentucky Power :	\$1.91
24 25	Mitchell Plant Portion (\$/kw) (20) Kentucky Power Capacity Deficit (kw)	۹۱.91 255,000
20	Mitchell Plant Environmental Cost to Kentucky Power (21) * (22)	200,000
26	(ES FORM 3.14, Page 1 of 10, Line 5)	\$487,050
20	$(\Box \cup I \cup $	φ-τ07,000
l		

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ES FORM 3.14 Page 8 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

For the Expense Month of October 2011

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base Operations :	\$108,672,817 <u>1.37%</u> \$1,488,818
4 5 6 7	Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6) Maintenance :	\$1,338 \$0 <u>\$34,561</u> \$35,899
8 9 10	SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$139,480 <u>\$69,740</u> <u>\$105,639</u>
11 12 13	Cost Associated with Muskingum Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	<u>\$1,594,457</u> 100.00% \$1,594,457
14 15 16	Ohio Power Company Steam Capacity (kw) Muskingum Plant (\$/kw) Ohio Power Surplus Weighing	8,003,000 \$0.20 91.19%
17	Portion of Weighted Average Capacity Rate Attributed to Muskingum Plant (\$/kw) (15) X (16) Muskingum Plant Costs to Kentucky Power :	\$0.18
18 19	Muskingum Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	\$0.18 <u>255,000</u>
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$45,900

ES FORM 3.14 Page 9 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

For the Expense Month of October 2011

Utility Plant at Original Cost	\$20,310,295
Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
Total Rate Base	\$278,251
Operations :	
	\$0
	\$0
	<u>\$13,207</u>
	\$13,207
	\$0
	<u>\$0</u>
	<u>\$13,207</u>
•	
	<u>\$291,458</u> 100.00%
	\$291,458
	\$291,458 8,003,000
	\$0.04
	91.19%
	31.1370
	\$0.04
	φυ.υ-τ
•	\$0.04
	255,000
(ES FORM 3.14, Page 1 of 10, Line 7)	\$10,200
	Total Rate Base Operations : Jrea (5020002) Frona (5020003) Air Emission Fee Fotal Operations (4) + (5) + (6) Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Fotal Revenue Requirement, Cost Associated with Sporn Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Sporn Plant (11) X (12) Ohio Power Company Steam Capacity (kw) Sporn Plant (\$/kw) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Sporn Plant (\$/kw) (15) X (16) Sporn Plant Costs to Kentucky Power : SpornGavin Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Sporn Plant Environmental Cost to Kentucky Power (18) * (19)

ES FORM 3.14 Page 10 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of October 2011

COST COST COST MOUNTS MOUNTS (2) (3) (4) (5)	ACCOUNT OF						
Common AMOUNTS AMOUNTS 44% / 12) (3) (4) (5) 31,787,996 \$10,544,676 \$16,709,416 \$1,787,996 \$10,544,676 \$16,709,416 \$1,787,996 \$10,544,676 \$16,709,416 \$1,37% \$24,496 \$14,462 \$228,919 \$50 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$15,625 \$0 \$0 \$0 \$10,1(1) X (12) \$240,121 \$144,462 \$228,919 \$10,1(1) X (12) \$20,061 \$122,793 \$148,980 \$10,1(1) X (12) \$20,061 \$122,793 \$148,980 \$10,1(1) X (10) * (20) \$10,10 \$122,793 \$14	LINE		Kockport Plant	UNIT 1	UNIT 2	Rockport Plant	
(2) (3) (4) (5) Utility Plant at Original Cost $31,787,996$ $510,544,576$ $515,787,996$ $510,544,576$ $515,794,566$ $516,779,416$ $515,776$ $525,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $522,8,919$ $526,2023$ $526,2023$ $526,2023$ $526,2023$ $526,2023$ $522,8,919$ $526,2023$	<u>o</u>	COST	Common	AMOUNTS	AMOUNTS	Common	Total
Utility Plant at Original Cost $$1,776$ $$16,703,416$ $$16,703,600$ $$200,601$ $$16,703,600$ $$200,601$ $$16,703,600$ $$200,601$ $$16,703,600$ $$200,601$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,704,600$ $$16,$	 	(2)	(3)	(4)	(5)	(6)	(2)
Member Printary UgendorMember Printary Ugendor 1.37% 3.0 50 <	~	11titity Diant at Original Cost	\$1 787 006	\$10 544 676	\$16 709 416	\$2 202 020	
Total Rate Base \$24,496 \$14,452 \$22 Operations : \$26 \$14,452 \$25 Trona (502003) \$50 \$0 \$0 Trona (502003) \$15,625 \$0 \$0 \$0 Air Emission Fee \$15,625 \$0 \$0 \$0 \$0 Total Operations (4) + (5) + (6) \$15,625 \$0	- N	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%	1.37%	1.37%	1.37%	
Operations : Solutions : \$	ო	Total Rate Base	\$24,496	\$144,462	\$228,919	\$30,168	
Urea (502002) \$0 <td></td> <td>Operations :</td> <td></td> <td></td> <td>****</td> <td></td> <td></td>		Operations :			****		
Trona (522003) Air Emission Fee Air Emission Fee Total Operations (4) + (5) + (5) Maintenance (512000) 1/2 of Maintenance (512,793 \$1 200% \$122,793 \$1 200%	ব	Urea (5020002)	Q	000	0\$	\$0	
Air Emission Fee \$15,625 \$0 Total Operations (4) + (5) + (6) \$0 \$0 Total Operations (4) + (5) + (6) \$0 \$0 SCR Maintenance: \$0 \$0 SCR Maintenance (8) * 50% \$12,0000) \$0 1/2 of Maintenance (8) * 50% \$12,0000) \$0 1/2 of Maintenance (8) * 50% \$12,0000) \$20 Fixed O&M (7) + (9) \$20,001 \$20,001 Total Revenue Requirement, \$40,121 \$144,462 Cost Associated with Rockport Plant (11) X (12) \$20,061 \$122,793 Indiana Michigan Power Company's Percentage Ownership \$20,061 \$122,793 Rockport Plant Common and Units 1 & 2 \$20,061 \$122,793 Indiana Michigan Power Company Steam Capacity (kw) \$20,061 \$122,793 Rockport Plant (711) X (12) \$20,061 \$122,793 Rockport Plant (5/kw) (14) / (15) \$20,061 \$122,793 Rockport Plant (6/kw) (17) X (13) \$100 \$20,061 \$122,793 Rockport Plant (6/kw) (17) X (15) \$20,061 \$122,793 \$1 Rockport Plant (7/1) X (12) \$10 \$10 \$10	in	Trona (5020003)	000	05	0	\$0	
Total Operations (4) + (5) + (6) \$15,625 \$0 Maintenance: \$0 \$0 \$0 SCR Maintenance (8) * 50% \$15,625 \$0 \$0 1/2 of Maintenance (8) * 50% \$12,625 \$0 \$0 1/2 of Maintenance (8) * 50% \$12,625 \$0 \$0 1/2 of Maintenance (8) * 50% \$12,14,462 \$0 \$0 Total Revenue Requirement, \$40,121 \$14,462 \$2 Cost Associated with Rockport Plant (11) X (12) \$20,061 \$122,733 \$1 Indiana Michigan Power Company's Percentage Ownership \$20,061 \$122,733 \$1 Total Reckport Plant (71) X (12) \$20,061 \$122,733 \$1 Indiana Michigan Power Company Steam Capacity (kw) \$20,061 \$122,733 \$1 Rockport Plant (5/kw) (14) / (15) Kentucky Power Surplus Weighing \$20,061 \$122,733 \$1 Rockport Plant (5/kw) (17) X (18) Kentucky Power Surplus Weighing \$10,110 \$10,100 \$10,100 \$10,100 \$10,100 \$10,100 \$10,100 \$10,100 \$10,100 \$10,100 \$10,100 \$10,100 \$10,100 \$10,100 \$10,100	'n	Air Emission Fee	<u>\$15,625</u>	<u>S</u>	8	S	
Maintenance : \$0 <td>$\sim$</td> <td>Total Operations $(4) \div (5) \div (6)$</td> <td>\$15,625</td> <td>\$0</td> <td>- 0\$</td> <td>0\$</td> <td></td>	\sim	Total Operations $(4) \div (5) \div (6)$	\$15,625	\$0	- 0\$	0\$	
SCR Maintenance (5120000) 1/2 of Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement, Cost Associated with Rockport Plant (3) + (10) Indiana Michigan Power Company's Percentage Ownership I&M's Share of Cost Associated with Rockport Plant (11) X (12) S20,061 8500% 8500% 8500% 920,061 8144,462 522,793 \$1 Total Rockport Plant Common and Units 1 & 2 Total Rockport Plant Common and Units 1 & 2 Total Rockport Plant (11) X (12) Rockport Plant (5/kw) (14) / (15) Rockport Plant (5/kw) (14) / (15) Rockport Plant (5/kw) (17) X (18) Rockport Plant Costs to Kentucky Power (19) * (20) Rockport Plant Capacity Deficit (kw) Rockport Units 1 & 2 Environmental to Kentucky Power (19) * (20) (ES FORM 3.14, Page 1 of 10, Line 8)		Maintenance :			6.MU2.2		
1/2 of Maintenance (8) * 50% \$20 \$20 \$20 \$20 Fixed O&M (7) + (9) Total Revenue Requirement, \$40,121 \$14,482 \$2 Total Revenue Requirement, \$40,121 \$14,482 \$2 Cost Associated with Rockport Plant (11) X (12) \$40,121 \$144,482 \$2 Indiana Michigan Power Company's Percentage Ownership \$20,061 \$122,793 \$1 Indiana Michigan Power Company Steam Capacity (kw) \$20,061 \$122,793 \$1 Indiana Michigan Power Company Steam Capacity (kw) \$20,061 \$122,793 \$1 Rockport Plant (\$kw) (14) / (15) \$20,061 \$12,793 \$1 Rockport Plant (\$kw) (14) / (15) \$20,061 \$12,793 \$1 Rockport Plant (\$kw) (14) / (15) \$12,793 \$1 \$12,773 Rockport Plant (\$kw) (14) / (15) \$10,10 \$20,061 \$12,733 \$1 Rockport Plant (\$kw) (14) / (15) \$12,793 \$1 \$122,793 \$1 Rockport Plant (\$kw) (14) / (15) \$1,1 \$1,2 \$1 \$1,2 \$1 \$1,2 \$1 \$1 \$2 \$2 \$2 \$2 \$2 \$2 <td>m</td> <td>SCR Maintenance (5120000)</td> <td>9</td> <td>0\$</td> <td>\$0</td> <td>0\$</td> <td></td>	m	SCR Maintenance (5120000)	9	0\$	\$0	0\$	
Fixed O&M (7) + (9) \$15.625 \$20 Total Revenue Requirement, \$40,121 \$144,462 \$2 Indiana Michigan Power Company's Percentage Ownership \$40,121 \$144,462 \$2 Indiana Michigan Power Company's Percentage Ownership \$20,061 \$144,462 \$5 Indiana Michigan Power Company's Percentage Ownership \$20,061 \$122,793 \$12 Indiana Michigan Power Company Steam Capacity (kw) \$20,061 \$122,793 \$122,793 \$12 Total Rockport Plant (\$14) / (15) Kentucky Power Company Steam Capacity (kw) \$20,061 \$122,793 \$12 Rockport Plant (\$Nw) (14) / (15) Kentucky Power Surplus Weighing \$12 \$12 \$122,793 \$12 Rockport Plant (\$Nw) (14) / (15) Kentucky Power Surplus Weighing \$12	m	1/2 of Maintenance (8) * 50%	80	0	<u>S</u>	<u>0</u>	
Total Revenue Requirement, \$40,121 \$144,462 \$5 Cost Associated with Rockport Plant (1) \$40,121 \$144,462 \$5 Indiana Michigan Power Company's Percentage Ownership \$20,061 \$122,793 \$1 IkM's Share of Cost Associated with Rockport Plant (11) X (12) \$20,061 \$122,793 \$1 Total Rockport Plant Common and Units 1 & 2 \$20,061 \$122,793 \$1 Indiana Michigan Power Company Steam Capacity (kw) \$20,061 \$122,793 \$1 Rockport Plant (\$/kw) (14) / (15) Kentucky Power Company Steam Capacity (kw) \$20,061 \$122,793 \$1 Rockport Plant (\$/kw) (14) / (15) Kentucky Power Company Steam Capacity (kw) \$20,061 \$122,793 \$1 Rockport Plant (\$/kw) (14) / (15) Kentucky Power Company Steam Capacity (kw) \$20,061 \$122,793 \$1 Rockport Plant (\$/kw) (14) / (15) Kentucky Power Capacity Rate \$20,061 \$122,793 \$1 Atributed to Rockport Plant (\$/kw) (17) X (18) Rockport Plant (\$/kw) (17) X (18) \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2	0	Fixed O&M (7) + (9)	\$15,625	\$0	05	융	
Cost Associated with Rockport Plant (3) + (10) \$40,121 \$144,462 \$5 Indiana Michigan Power Company's Percentage Ownership [&M's Share of Cost Associated with Rockport Plant (11) X (12) \$20,061 \$122,793 \$1 Total Rockport Plant Common and Units 1 & 2 Indiana Michigan Power Company Stearn Capacity (kw) Rockport Plant (\$1/15) \$20,061 \$122,793 \$1 Kentucky Power Company Stearn Capacity (kw) Rockport Plant (\$1/15) Kentucky Power Portion of Rockport Plant (15) Rockport Plant (\$1/15) Kentucky Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$1/17) X (18) Rockport Plant Costs to Kentucky Power (19) * (20) (ES FORM 3.14, Page 1 of 10, Line 8)		Total Revenue Requirement,				TO CONTRACTOR	
Indiana Michigan Power Company's Percentage Ownership I&M's Share of Cost Associated with Rockport Plant (11) X (12) \$20,061 \$122,793 \$1 Total Rockport Plant Common and Units 1 & 2 Indiana Michigan Power Company Stearn Capacity (kw) Rockport Plant (\$/kw) (14) / (15) Kentucky Power Portion of Rockport Plant / Indiana Michigan Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (17) X (18) Rockport Plant (\$/kw) (17) X (18) Rockport Plant Costs to Kentucky Power (19) * (20) (ES FORM 3.14, Page 1 of 10, Line 8)	~	Cost Associated with Rockport Plant (3) + (10)	\$40,121	\$144,462	8	\$30,168	
 [&Mi's Share of Cost Associated with Rockport Plant (11) X (12) \$20,061 \$122,793 Total Rockport Plant Common and Units 1 & 2 Indiana Michigan Power Company Stearn Capacity (kw) Rockport Plant (\$/kw) (14) / (15) Kentucky Power Portion of Rockport Plant / Indiana Michigan Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (17) X (18) Rockport Plant Costs to Kentucky Power : Rockport Plant Costs to Kentucky Power (19) Kentucky Power Capacity Rate Attributed to Rockport Plant (\$/kw) (17) X (18) Rockport Plant Portion (\$/kw) (18) Kentucky Power Capacity Rate Kentucky Power Capacity Power : Rockport Plant Portion (\$/kw) (18) Kentucky Power (19) * (20) (ES FORM 3.14, Page 1 of 10, Line 8) 	\sim	Indiana Michigan Power Company's Percentage Ownership	50%	85.00%		50.00%	
	ന	I&N's Share of Cost Associated with Rockport Plant (11) X (12)	\$20,061	\$122,793		\$15,084	
an a	5	Total Bootroot Baat Common and Claits 1 & 0					\$306.918
a an	t				C FORTHUR Z	******	
a kana wana aliyo ana kana kana na kana kana kana kana k	ഹ	Indiana Michigan Power Company Steam Capacity (kw)	*****				5,414,000
	ω					aire e cata	\$0.06
na za pomo pro care e e en e		Kentucky Power Portion of Rockport Plant /		GROUPAZ		1	
a yay ang kanang ka	~	Indiana Michigan Power Surplus Weighing	<u>42</u> 471081182		*****		8.81%
	20	Portion of Weighted Average Capacity Kate					000
		Attributed to Kockbort Plant (\$KW) (17) A (18) Docknow Blant Conte to Kentucky Device 1			C. WTHERE		- 0.0¢
aya yang baha taka	თ						\$0.01
	្ល	Kentucky Power Capacity Deficit (kw)				<u> </u>	255,000
		Rockport Units 1 & 2 Environmental to Kentucky Power (19) * (20)					
		(ES FORM 3.14, Page 1 of 10, Line 8)					000,28

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

For the Expense Month of October 2011

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$98,457,579
2	Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
2	Total Rate Base	\$1,348,869
	Operations :	· · · · · · · · · · · · · · · · · · ·
4	Urea (502002)	\$0
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$15,625</u>
7	Total Operations $(4) + (5) + (6)$	\$15,625
	Maintenance :	
8	SCR Maintenance (5120000)	\$0
9	1/2 of Maintenance (8) * 50%	<u>\$0</u>
10	Fixed O&M (7) + (9)	<u>\$15,625</u>
	Total Revenue Requirement,	
11	Cost Associated with Tanners Creek Plant (3) + (10)	<u>\$1,364,494</u>
12	Indiana Michigan Power Company's Percentage Ownership	100.00%
13	I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	\$1,364,494
14	Indiana Michigan Power Company Steam Capacity (kw)	5,414,000
15	Tanners Creek Plant (\$/kw)	\$0.25
16	Indiana Michigan Power Surplus Weighing	8.81%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Rockport Plant (\$/kw) (15) X (16)	\$0.02
	Tanners Creek Plant Costs to Kentucky Power :	
18	Tanners Creek Plant Portion (\$/kw) (17)	\$0.02
19	Kentucky Power Capacity Deficit (kw)	<u>255,000</u>
	Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 9)	\$5,100

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of October 2011

LINE NO.		Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 4/30/2010							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	51.941% 0.000%	6.48% 0.83%		3.37% 0.00%			3.37% 0.00%
3 4	FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%	1.22% 10.50%	8 1	0.05% 4.61%	1.5762	2/	0.05% 7.27%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.69%
1/		nted Average Cost o on Common Equity		10 - 00020					
2/		Conversion Factor - 00020 dated - Apr		tion:					
1 2 3	OPERATING R UNCOLLECTIB Kentucky Public	EVENUE LE ACCOUNTS EX Service Commissio		100.0000 0.2400 0.1500					
4 5	+	LE PRODUCTION I E TAX EXPENSE, N					99.6100 5.6384		
6 7	FEDERAL TAX 199 DEDUCTIC	ABLE PRODUCTIO DN PHASE-IN	N INCOME BEF	ORE 199 DEDL	JCTI	NC	93.9716 5.6372		
8 9		ABLE PRODUCTIO DME TAX EXPENSI		EDUCTION (359	%)		88.3344 30.9171		
10	AFTER-TAX PF	RODUCTION INCOM	ΛE				57.4173	:	
11 12 13 14 15	AFTER-TA 199 DEDU UNCOLLE	CTOR FOR PRODU X PRODUCTION IN CTION PHASE-IN CTIBLE ACCOUNTS Public Service Comm	COME S EXPENSE				57.4173 5.6372 0.2400 0.1500		
16	TOTAL GROSS	-UP FACTOR FOR	PRODUCTION	INCOME (ROU	NDE	D)	63.4445		
17 18 19 20		,	TAX RATE:				30.9171 5.6384 36.5555		
21	GROSS REVEN	VUE CONVERSION	FACTOR (100.0	0000 / Line 14)			1.5762		
1 2 3	PRE-TAX F	E TAX CALCULATIO PRODUCTION INCO BLE ACCOUNTS E Public Service Comm	OME XPENSE (0.24%				100.0000 0.2400 0.1500		
4 5		XABLE PRODUCTION ATE 199 DEDUCTION		FORE 199 DED	UCT	ION	99.6100 5.6372		
6 7		XABLE PRODUCTIO COME TAX RATE	ON INCOME BE	FORE 199 DED	UCT	ION	93.9728 6.0000		
8	STATE INC	COME TAX EXPENS	SE (LINE 5 X LIN	NE 6)			5.6384		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Captial Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of October 2011

Rockport Plant Common Total	(8) (9)			\$2,185,292	(\$186,990)	\$19,051	\$2,017,353	0.7482%	\$15,094	\$6,410	\$0	\$6,410		\$71,304	\$6,451			\$41,541	
Total Units Rock 1 & 2 Pla (C5 + C6) Com	3) [(7)		NJ 20-20 AUXM12-1	\$2,1	- ()		\$8,542,044	0.7482%	\$63,912	\$39,968	\$0	\$39,968		\$100,000	\$31,164				
Unit No. 2	(9)			\$8,353,084	⊛		\$5,286,100			\$24,502									
Unit No. 1	(5)		-	\$5,272,657	(\$1,466,563)	(\$550,150)	\$3,255,944	2000		\$15,466	\$0		No.						
Rockport Plant Common	(†)		\$1,777,206		(\$902,413)	(\$161,343)	\$/13,450	0.7482%	\$5,338	\$5,212	\$15,625	\$20,837		\$3.926	-				
	(3)						8 0770%	× 5 - 7 5 - 0											
DNENT		Base : Monitorino Sustem (CEMIS)		Cost			EORM 3 91	OLUN 0.21 NE 7 / 12)	e 8)	lises .		(11)	tted with Rockport Plant	EMS (Line 13 * 15%)	and Landfill (Line 13 * 30%)	rs - C 7, Ln 15 + C 8, L 15)	Recorded on		
COST COMPONENT	(2)	Return on Rate Base : Docknort Diant Continuous Environmental Manitorina Svetam (CEMS)	Utility Plant at Original Cost	AEGCo Low NOx Burners (LNB) Installed Cost Flyash Landfill installed Cost	Less Accumulated Depreciation	Less Accum. Det. Income Taxes	Total Rate Base Weinhted Average Cost of Canital → ES EORM 3 21	Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthly Return of Rate Base (Line 6 * Lin	. Wonthly Depreciation Expenses	Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant	CEWS and LNB (Line 9 + Line 12) Kentucky Power's Portion of Rockport's CE	Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Total Revenue Requirement. (C 4, Ln 14 + C 7, Ln 15 + C 8, L 15)	Note: Cost in Column 8, Line 16 is to be Recorded on	ES FORM 3.00 Line 2	

KPSC Case No. 2011-00401 IUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 Attachment 1 Page 582 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 10/31/2011							
1 2	L/T DEBT S/T DEBT CAPITALIZATION	66,487,612 73,995,813	30.8962% 34.3852%	5.6212% 0.4153%		1.7367% 0.1428%			1.7367% 0.1428%
3 4	OFFSETS DFBT	0	0.0000%	2.8791%		0.0000%			0.0000%
4 5	C EQUITY	74,713,441	34.7186%	12.1600%	1/	4.2218%	1.681379	2/	7.0984%
6	TOTAL	215,196,866	100.0000%			6.1013%			8.9779%
an ann an tao an Dùth à Maillean an Tàmh				na na antana mana ang si kanèn kasa kana kang sana na papang		ana ana amin'ny faritr'o dia 1970.		(3 11 /3814)	let 24 Den 19 fer DAR History - aufer and a start and
1/	WACC = Weighted Cost Rates per the			ower Agreemer	nt				
2/	Gross Revenue Co	nversion Factor	(GRCF) Calculati	on:					
1	OPERATING REVE						100.00		
2 3 4 5	LESS: INDIANA A (LINE 1 X .085) INCOME BEFORE LESS: FEDERAL) FED INC TAX					<u>8.500</u> 91.500		
6 7 8	(LINE 4 X .35) OPERATING INCO GROSS REVENUE	ME PERCENTA	GE				<u>32.025</u> 59.475		
9	FACTOR (100						<u>1.681379</u>		

For the Expense Month of October 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of October 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$38,287,502 \$394,110 \$6,275,626 \$4,110,816	78.0% 0.8% 12.8% 8.4%
5	Total Revenues for Surcharges Purposes	\$49,068,054	100.0%
6	Non-Physical Revenues for Month	\$89,285	
7	Total Revenues for Month	\$49,157,339	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line		
No.	Description	Amounts
1	Kentucky Retail Surcharge Factor for August 2011	-0.1794%
2	Kentucky Retail Revenues for Current Expense Month	\$32,154,404
3	Surcharge Collected (1) * (2)	(\$57,685)
4	Surcharge Amount To Be Collected	(\$85,246)
5	Over / (Under) Recovery (3) - (4) = (5)	\$27,561

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.



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Kentucky Power 101A Enterprise Drive P 0 Box 5190 Frankfort, KY 40602-5190 KentuckyPower.com

December 19, 2011

Jeff R. Derouen, Executive Director Public Service Commission P. O. Box 615 211 Sower Boulevard Frankfort, Kentucky 40602

RECEIVED

DEC 19 2011

PUBLIC SERVICE COMMISSION

Attention: Jeff Shaw

RE: Monthly Environmental Surcharge Report

Dear Mr. Shaw,

Pursuant to KRS 278.183(3), Kentucky Power Company (Kentucky Power or KPCo) files the original and two copies of its Environmental Surcharge Reports for the month of November 2011. In accordance with the Commission's Orders in the Environmental Surcharge cases, Kentucky Power has included the calculation and supporting documentation of the Environmental Surcharge Factor that will be billed for service on and after December 30, 2011.

If there are any questions please contact me at 502-696-7010.

Lila P. Munsey Manager

Manager, Regulatory Services Enclosures

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 ES FORM 1.00 Attachment 1 Page 586 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of November 2011

	CALCULATION OF E(m)	an a	
、 、	E(m) = CRR - BRR		
LINE 1	CRR from ES FORM 3.00	\$3,632,110	
LINE. 2	Brr from ES FORM 1.10	2,786,040	1
LINE 3	E(m) (LINE 1 - LINE 2)	\$846,070	
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	83.3%	
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$704,776	
LINE 6	(Over) / Under Recovery Adjustment from ES FORM 3.30	\$15,676	
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$720,452	
	SURCHARGE FACTOR		
LINE 8	Net KY Retail E(m) (Line 7)	\$720,452	
LINE 9	KY Retail R(m) from ES FORM 3.30	\$42,852,396	
LINE 10	Environmental Surcharge Factor for Expense Month (Line 8 / LINE 9)	1.6812%	

Effective Date for Billing:

December 30, 2011

Submitted By :

Title :

inso

Manager Regulatory Services

Date Submitted :

December 19, 2011

1/ Case No. 2009-00459, dated June 28, 2010

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ES FORM 1.10

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of November 2011

MONTHLY BASE PERIOD REVENUE REQUIREMENT

	Base Net Environmental Costs
Billing Month	
JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER TOTAL	\$3,991,163 3,590,810 3,651,374 3,647,040 3,922,590 3,627,274 3,805,325 4,088,830 3,740,010 3,260,302 2,786,040 4,074,321

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of November 2011

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CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		
1	First Component: Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$3,582,990
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) ↔ OE IM(C) ES FORM 3.20, Line 16		\$49,120
	 Third Component: Net Proceeds from Emission Allowances Sales AS 1) SO2 - EPA Auction Proceeds received during Expense Month 	\$0	
	 SO2 - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month 	\$0	
	Total Net Proceeds from SO2 Allowances	\$0	
	1) NOx - ERC Sales Proceeds, received during Expense Month	\$0	
	2) NOx - EPA Auction Proceeds, received during Expense Month	\$0	
	 NOx - Net Gain or Loss from NOx Allowances Sales, received during Expense Month 	\$0	
	Total Net Proceeds from NOx Allowances	\$0	
3	Total Net Gain or (Loss) from Emission Allowance Sales		\$0
4.	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.		\$3,632,110

KPSC Case No. 2011-00401 KIUC's First Set of Data Requests Dated January 13, 2012 Item No. 41 SFORM 3. Attachment 1 Page 589 of 609

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

LINE			
NO.	COST COMPONENT		annan mensi kedelik tahung (01-annan mensikan mensikan mensikan
	Return on Rate Base :	\$404 007 FF0	
	Utility Plant at Original Cost	\$191,327,552	
	Less Accumulated Depreciation	(\$67,861,532)	
3	Less Accum. Def. Income Taxes	(\$39,138,251)	
	Net Utility Plant		\$84,327,769
	SO2 Emission Allowance Inventory from ES FORM 3.11		\$5,541,321
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12		\$420,614
7	Cash Working Capital Allowance from ES FORM 3.13, Line 13		\$105,085
8	Total Rate Base		\$90,394,789
9	Weighted Average Cost of Capital - ES FORM 3.15	10.69%	
10	Monthly Weighted Avg. Cost of Capital (9) / 12		0.89%
11	Monthly Return of Rate Base (8) * (10)		\$804,514
	Operating Expenses :		
12	Monthly Depreciation Expense		\$577,252
13	Monthly Catalyst Amortization Expense		\$46,030
	Monthly Property Taxes		\$14,017
	Monthly Kentucky Air Emissions Fee		\$31,699
	Monthly Environmental AEP Pool Capacity Costs		
16	from ES FORM 3.14, Page 1 of 11, Column 5, Line 10		\$1,530,000
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13		\$440,505
	Monthly SO2 Emission Allowance Consumption		\$138,973
10 19	Total Operating Expenses [Line 12 thru Line 18]		\$2,778,476
20	Total Revenue Requirement - Big Sandy		<u></u>
20	Record on ES FORM 3.00, Line 1		\$3,582,990
			\$0,00-,000

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

		(1)	(2)	(3)	(4) Cumulative	(5)
		Allowance Activity in Month	Cumulative Balance	Dollar Value of Activity	Dollar Balance	Weighted Average Cost
		MOUTU	Datatice		Duidritoo	
BEGINNING INVENTORY			754,608		\$4,685,726	\$6.209
Additions -						
EPA Allowances		34,945	474,169	\$0	\$0 \$0	\$0.000
Gavin Reallocation		0	94,744	\$O	\$0	\$0.000
P & E Transfers In		0	327,201	\$0 \$0	\$4,855,695	\$14.840 \$312.206
Intercompany Purchases		0	67,631	\$0 \$0	\$21,114,805 \$67,152,857	\$155.014
Other (List)		0	433,206	ψυ	φ07,102,007	ψ100.014
SO2 Emissions Allowance		0	4,106	\$0	(\$1,700,982)	(\$414.267)
Adjustment		U		ψ0	(\$1,100,002)	(+
Withdrawals -						
P & F Transfers Out		0	11,382	\$0	\$836,106	\$73.459
Intercompany Sales		0	59,987	\$0	\$4,855,950	\$80.950
Off - System Sales		0	303,050	\$0	\$29,780,273	\$98.269
SO2 Emissions Allowance						** • • • • • • • • • • • • • • • • • • •
Adjustment		0	0	\$0	\$0	\$0.000
SO2 Emissions Allowances						
Consumed By Kentucky Power - 1:1						
(Year 2009 & Prior)		0		\$0		
SO2 Emissions Allowances						
Consumed By Kentucky Power - 2:1						400 770
(Years 2010 to 2014)		7,134	682,115	\$138,973	\$55,094,451	\$80.770
ENDING INVENTORY - Record						
Balance in Column (4) on						1
ES FORM 3.10, Line 5			1,099,131		\$5,541,321	\$5.042
						0.00509
Expense Month Member Load Ratio	or AEP/Ke	ntucky Power	and the second			0.06598

For the Expense Month of November 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SEASONAL NOX EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of November 2011

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions -		0		\$0	\$0.000
EPA Allowances	0	37,003	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	\$0.000
Other (List)	0	0	\$0	\$0	\$0.000
Withdrawals -					40.000
P & E Transfers Out	0	0	\$0	\$0	\$0.000
Intercompany Sales	0	0	\$0	\$0	\$0.000
Off - System Sales	0	2,425	\$0	\$O	\$0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0 \$0	\$0.000
NOx Consumed By Kentucky Power	6	23,693	\$0	\$0	\$0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		9,955		\$0	\$0.000

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

Note : For any sale or transfer of ERCs or NOx emission allowances, attach to this report documentation showing the currently available market prices for similar ERC or NOx allowances.

Total Early Reduction Credits (ERC)	930
Consumed: June 2004 July 2004	420 510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ANNUAL NOX EMISSIONS ALLOWANCE INVENTORY

	(1) Allowance Activity in Month	(2) Cumulative Balance	(3) Dollar Value of Activity	(4) Cumulative Dollar Balance	(5) Weighted Average Cost
BEGINNING INVENTORY Additions - EPA Allowances P&E Transfers In Intercompany Purchases External Purchases Other (List)	- 0 0 400 0	0 44,729 0 0 3,480 0	\$0 \$0 \$23,000 \$0	\$0 \$0 \$0 \$2,023,690 \$0	\$0.000 \$0.000 \$0.000 \$0.000 \$581.520 \$0.000
Withdrawals - P & E Transfers Out Intercompany Sales Off - System Sales NOx Consumed By Kentucky Power ENDING INVENTORY - Record Balance in	0 0 0 752	0 0 0 24,627	\$0 \$0 \$0 \$238,71 8	\$0 \$0 \$0 \$1,603,076	\$0.000 \$0.000 \$0.000 \$65.094
Column (4) on ES FORM 3.10, Line 5		23,582		\$420,614	\$17.836

For the Expense Month of November 2011

Columns 1 and 2 -

Record the number of allowances in any transaction (purchase, sale, transfer) which occurred during the Expense Month. Multiple transactions for a given category are to be shown as the total activity for that category during the Expense Month. For each transaction shown in Column 1, update the cumulative balance in Column 2.

Columns 3 and 4 -

For each transaction reflected in Column 1, record the total dollars of the transaction. Multiple transaction for a given category are to be shown as the total dollar amount for that category during the Expense Month. For each transaction shown in Column 3, update the cumulative dollar balance in Column 4. Include transactions that total zero dollars. Record amounts in whole dollars.

Column 5 -

Compute the Weighted Average Cost by dividing the Cumulative Dollar Balance (Co. 4) by the corresponding Cumulative Balance (Col. 2). Perform this calculation for the Beginning Inventory, Ending Inventory and all additions and withdrawals made during the Expense Month. The Weighted Average Cost should be carried out to 3 decimal places.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT

For the Expense Month of November 2011

1 2 3 4	1997 Plan : Monthly Kentucky Air Emissions Fee Total Monthly AEP Pool Environmental Capacity Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$31,699 \$229,500 <u>\$138,973</u>	\$400,172
7 8 9	2003 Plan : Monthly Varible Cladding at Big Sandy Unit 1 Monthly Urea Consumption at Big Sandy Unit 2 Monthly Catalyst Replacement at Big Sandy Unit 2 Monthly ERC & NOx Allowance Consumption Equipment - Associated Operating Expenses	\$0 \$186,028 \$0 \$238,718 \$1,630 \$14,129	
10 11	Equipment - Associated Maintenance Expenses Total 2003 Plan O&M Expenses	<u>\$14,129</u>	<u>\$440,505</u>
12	Total Monthly O&M Expenses		<u>\$840,677</u>
13	Cash Working Capital Allowance (Line 12 X 1/8)		\$105,085

Total Cost at Line 11 is to be recorded on ES FORM 3.10, Line 7.

Kentucky Power Company Environmental Equipment Operation and Maintenance Costs November 2011

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Ammonia on Demand (AOD)	\$702.50	\$0.00	\$0.00	\$702.50
Boiler Acoustic Horns	\$38.29	\$0.00	\$0.00	\$38.29
SCR Boiler Outlet Ductwork	\$5,146.08	\$100.58	\$0.00	\$5,246.66
SCR Acoustic Horns	(\$3,256.00)	\$0.00	\$204.18	(\$3,051.82)
SCR NOX Monitoring	\$3,510.56	\$0.00	\$0.00	\$3,510.56
Urea Solution Feed Pump	\$438.00	\$0.00	\$0.00	\$438.00
Total SCR November 2011 O & M Expense	\$6,579.43	\$100.58	\$204.18	\$6,884.19
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$1,541.00
Emission Testing Required Under Permit -				
Operation Maintenance	\$0.00 \$7,245.07	\$0.00 \$0.00	\$88.80 \$0.00	\$88.80 \$7,245.07
November 2011				

O & M Expenses Filed

,

\$15,759.06

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> ES FORM 3.14 Page 1 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS

For the Expense Month of November 2011

		Ohio Power	Indiana Michigan Power Company's	
Line No. (1)	Cost Component (2)	Company's Environmental Cost to KPCo (3)	Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 26)	\$244,800		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 24)	\$165,750		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 26)	\$566,100		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 20)	\$5,100		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 23)	\$484,500		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 20)	\$45,900		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 20)	\$10,200		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Column 5, Line 21)		\$2,550	
9	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 20)		\$5,100	
10	Total AEP Pool Monthly Environmental Capacity Costs to Kentucky Power	\$1,522,350	\$7,650	\$1,530,000

Note: Cost in Column 5, Line 10 is to be recorded on ES FORM 3.10, Line 16.

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT AEP POOL MONTHLY ENVIRONMENTAL CAPACITY COSTS WORKING CAPITAL ONLY

For the Expense Month of November 2011

Line No. (1)	Cost Component {2}	Ohio Power Company's (OPCo) Environmental Cost to KPCo (3)	Indiana Michigan Power Company's (I&M) Environmental Cost to KPCo (4)	Total (5)
1	Amos Unit No. 3 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 3 of 11, Line 19)	\$289,585		
2	Cardinal Unit No. 1 Environmental Cost to Kentucky Power (ES FORM 3.14, Page 4 of 11, Line 17)	\$153,691		
3	Gavin Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 5 of 11, Line 17)	\$6,286,711		
4	Kammer Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 6 of 11, Line 10)	\$15,690		
5	Mitchell Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 7 of 11, Line 16)	\$1,063,600		
6	Muskingum River Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 8 of 11, Line 10)	\$115,602		
7	Sporn Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 9 of 11, Line 10)	\$13,207		
8	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 3 & 6, Line 10)		\$15,625	
9	Rockport Plant Environmental to Kentucky Power (ES FORM 3.14, Page 10 of 11, Columns 4 & 5, Line 10)		\$0	
10	Tanners Creek Plant Environmental Cost to Kentucky Power (ES FORM 3.14, Page 11 of 11, Line 10)		\$15,625	
11	Subtotal	\$7,938,086	\$31,250	
12	Steam Capacity By Company - OPCo (Column 3) / I&M (Column 4) (kw)	8,003,000	5,414,000	
13	Environmental Base (\$/kw)	\$0.99	\$0.01	
14	Company Surplus Weighting	91.00%	9.00%	
15	Portion of Weighted Average Capacity Rate Attributed to Environmental Fixed O&M Costs	\$0.90	\$0.00	
16	Kentucky Power Capacity Deficit (kw)	255,000	255,000	
17	Fixed O&M Environmental Cost to Kentucky Power	\$229,500	\$0	\$229,500

Note: Cost in Column 5, Line 17 is to be recorded on ES FORM 3.13, Line 2.

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ES FORM 3.14 Page 3 of 11

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - AMOS PLANT UNIT NO. 3

LINE NO.	COST	AMOUNTS
4	Utility Plant at Original Cost	\$600,434,141
1	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
2 3	Total Rate Base	\$8,225,948
19 19 19 19 19 19 19 19 19 19 19 19 19 1	Ohio Power Company's Percentage Ownership - Environmental Investment	100.00%
4 5	OPCo's Share of Cost Associated with Amos Unit No. 3 (3) X (4)	\$8,225,948
Э	Operations :	+012201010
6	Disposal (5010000)	\$82,329
0 7	Urea (5020002)	\$0
8	Trona (5020003)	\$0
9	Lime Stone (5020004)	\$0
10	Air Emission Fee	\$10,292
11	Total Operations (Lines 6 thru 10)	\$92,621
	Maintenance :	
12	SCR Maintenance (5120000)	\$365,281
13	Scrubber (FGD) Maintenance (5120000)	\$318,188
14	Total Maintnenance (12) + (13)	\$683,469
	1/2 of Maintenance (14) * 50%	\$341,735
n s	Fixed $O&M(11) + (15)$	\$434,356
17	Ohio Power Company's Percentage Ownership - O&M Cost	<u>66.67%</u>
18	OPCo's Share of O&M Cost Associated with Amos Unit No. 3 (16) X (17)	\$289,585
	Total Revenue Requirement,	
19	Cost Associated with Amos Unit No. 3 (5) + (18)	\$8,515,533
20	Ohio Power Company Steam Capacity (kw)	8,003,000
21	Amos Unit No. 3 Environmental Rate (\$/kw)	\$1.06
22	Ohio Power Surplus Weighing	91.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Amos Unit No. 3 SCR (\$/kw) (21) * (22)	\$0.96
	Amos Unit No. 3 Costs to Kentucky Power :	
24	Amos Unit No. 3 Portion (\$/kw) (23)	\$0.96
25	Kentucky Power Capacity Deficit (kw)	<u>255,000</u>
	Amos Unit No. 3 Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 1)	\$244,800

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - CARDINAL UNIT 1

LINE		
NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$400,962,145 <u>1.37%</u> \$5,493,181
4 5 6 7	Operations : Disposal (5010000) Lime (5020001) Urea (5020002) Trona (5020003)	\$19,899 \$0 \$28,639 \$18,081
8 9 10	Lime Stone (5020004) Air Emission Fee Total Operations (Line 4 thru 8) Maintenance :	\$44,772 <u>\$8,622</u> \$120,013
11 12 13 14 15	SCR Maintenance (5120000) Scrubber (FGD) Maintenance (5120000) Total Maintenance (13) + (14) 1/2 Maintenance (15) * 50% Fixed O&M (12) + (16) Total Revenue Requirement,	\$2,774 <u>\$64,582</u> \$67,356 <u>\$33,678</u> <u>\$153,691</u>
16 17 18 19 20 21 22	Cost Associated with Cardinal Unit No. 3 (3) + (17) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Cardinal Unit No. 1 (18) X (19) Ohio Power Company Steam Capacity (kw) Cardinal Unit No. 1 (\$/kw) Ohio Power Surplus Weighing	\$5,646,872 100.00% \$5,646,872 8,003,000 \$0.71 91.00%
22 23 24 25	Portion of Weighted Average Capacity Rate Attributed to Cardinal Unit No. 1 (\$/kw) (22) X (23) Cardinal Unit No. 1 Costs to Kentucky Power : Cardinal Unit No. 1 Portion (\$/kw) (24) Kentucky Power Capacity Deficit (kw) Cardinal Unit No. 1 Environmental Cost to Kentucky Power (25) * (26) (ES FORM 3.14, Page 1 of 10, Line 2)	\$0.65 \$0.65 <u>255,000</u> \$165,750

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - GAVIN PLANT (UNITS 1 & 2)

LINE NO.	COST	AMOUNTS
		\$964,148,720
1	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	1.37%
23	Total Rate Base	\$13,208,837
3	Operations :	φ10,200,001
	Sludge Disposal (5010000)	\$843,035
4 5	Lime (5020001)	\$3,410,761
5 6	Urea (5020002)	\$952,800
7	Trona (5020003)	\$529,231
8	Lime Stone (5020004)	\$324
9	Air Emission Fee	\$34,947
10	Lease (5070005)	\$0
10	Total Operations (Lines 4 thru 10)	\$5,771,098
	Maintenance :	
12	SCR Maintenance (5120000)	\$110,282
13	Scrubber Maintenance (5120000)	\$920,944
14	Total Maintenance (12) + (13)	\$1,031,226
15	1/2 of Maintenance (13) * 50%	\$515,613
16	Fixed O&M (11) + (15)	\$6,286,711
. Ŭ	Total Revenue Requirement,	
17	Cost Associated with Gavin Plant (3) + (17)	\$19,495,548
18	Ohio Power Company's Percentage Ownership	100.00%
19	OPCo's Share of Cost Associated with Gavin Plant (17) X (18)	\$19,495,548
20	Ohio Power Company Steam Capacity (kw)	8,003,000
21	Gavin Plant (\$/kw)	\$2.44
22	Ohio Power Surplus Weighing	91.00%
23	Portion of Weighted Average Capacity Rate	
	Attributed to Gavin Plant (\$/kw) (21) X (22)	\$2.22
	Gavin Plant Costs to Kentucky Power :	
24	Gavin Plant Portion (\$/kw) (23)	\$2.22
25	Kentucky Power Capacity Deficit (kw)	<u>255,000</u>
	Gavin Plant Environmental Cost to Kentucky Power (24) * (25)	
26	(ES FORM 3.14, Page 1 of 10, Line 3)	\$566,100

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - KAMMER PLANT (UNITS 1, 2 & 3)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$8,451,624 <u>1.37%</u> \$115,787
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$15,690</u> \$15,690
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,690</u>
11 12 13	Cost Associated with Kammer Plant (3) + (10) Ohio Power Company's Percentage Ownership OPCo's Share of Cost Associated with Kammer Plant (11) X (12)	<u>\$131,477</u> 100.00% \$131,477
14 15	Ohio Power Company Steam Capacity (kw) Kammer Plant (\$/kw)	8,003,000 \$0.02 91.00%
16 17	Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Kammer Plant (\$/kw) (15) X (16) Kammer Plant Costs to Kentucky Power :	\$0.02
18 19	Kammer Plant Portion (\$/kw) (17) Kentucky Power Capacity Deficit (kw) Kammer Plant Environmental Cost to Kentucky Power (18) * (19)	\$0.02 <u>255,000</u>
20	(ES FORM 3.14, Page 1 of 10, Line 4)	\$5,100

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MITCHELL PLANT (UNITS 1 & 2)

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - MUSKINGUM RIVER PLANT (UNITS 1, 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
1	Utility Plant at Original Cost	\$108,672,817
2	Member Primary Capacity Investment Rate (16.44% / 12)	<u>1.37%</u>
3	Total Rate Base	\$1,488,818
	Operations :	
4	Urea (5020002)	\$76,152
5	Trona (5020003)	\$0
6	Air Emission Fee	<u>\$34,561</u>
7	Total Operations (4) $+$ (5) $+$ (6)	\$110,713
	Maintenance :	
8	SCR Maintenance (5120000)	\$9,777
9	1/2 of Maintenance (8) * 50%	<u>\$4,889</u>
10	Fixed O&M (7) + (9)	<u>\$115,602</u>
	Total Revenue Requirement,	
11	Cost Associated with Muskingum Plant (3) + (10)	<u>\$1,604,420</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Muskingum Plant (11) X (12)	\$1,604,420
14	Ohio Power Company Steam Capacity (kw)	8,003,000
15	Muskingum Plant (\$/kw)	\$0.20
16	Ohio Power Surplus Weighing	91.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Muskingum Plant (\$/kw) (15) X (16)	\$0.18
	Muskingum Plant Costs to Kentucky Power :	
18	Muskingum Plant Portion (\$/kw) (17)	\$0.18
19	Kentucky Power Capacity Deficit (kw)	<u>255,000</u>
	Muskingum Plant Environmental Cost to Kentucky Power (18) * (19)	
20	(ES FORM 3.14, Page 1 of 10, Line 6)	\$45,900

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT OHIO POWER COMPANY (OPCo) - SPORN PLANT (UNITS 2, 3, 4 & 5)

LINE NO.	COST	AMOUNTS
		¢00.040.005
	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12)	\$20,310,295 1.37%
2 3	Total Rate Base	<u>1.3776</u> \$278,251
J	Operations :	φ210,201
4	Urea (502002)	\$0
5	Trona (5020003)	\$0 \$0
6	Air Emission Fee	\$13,207
7	Total Operations $(4) + (5) + (6)$	\$13,207
	Maintenance :	· · · · · ·
8	SCR Maintenance (5120000)	\$0
	1/2 of Maintenance (8) * 50%	\$0
10	Fixed O&M (7) + (9)	<u>\$13,207</u>
	Total Revenue Requirement,	
11	Cost Associated with Sporn Plant (3) + (10)	<u>\$291,458</u>
12	Ohio Power Company's Percentage Ownership	100.00%
13	OPCo's Share of Cost Associated with Sporn Plant (11) X (12)	\$291,458
14	Ohio Power Company Steam Capacity (kw)	8,003,000
15	Sporn Plant (\$/kw)	\$0.04
16	Ohio Power Surplus Weighing	91.00%
17	Portion of Weighted Average Capacity Rate	
	Attributed to Sporn Plant (\$/kw) (15) X (16)	\$0.04
	Sporn Plant Costs to Kentucky Power :	
18	SpornGavin Plant Portion (\$/kw) (17)	\$0.04
19	Kentucky Power Capacity Deficit (kw)	<u>255,000</u>
	Sporn Plant Environmental Cost to Kentucky Power (18) * (19)	040.000
20	(ES FORM 3.14, Page 1 of 10, Line 7)	\$10,200

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (18M) - ROCKPORT PLANT (UNITS 1 & 2)

For the Expense Month of November 2011

		Rockport Plant	UNIT 1	UNIT 2	Rockport Plant	
COST		Common	AMOUNTS	AMOUNTS	Common	Total
(2)		(3)	(4)	(5)	(9)	(7)
Utility Plant at Original Cost		\$1,787,996	\$10,544,676	\$16,709,416	\$2,20	
Member Frimary Capacity investment Rate (10.447% / 12) Total Rate Base		<u>\$24,496</u>	<u>1.37%</u> \$144.462	\$228,919	\$30,168	
Operations :		- -	-	-		
Urea (5020002)		00	9 9 9		000	
rrona (ouzuuuo) Air Emission Fee		\$15,625	D QS	ç A G	2 Q	
Total Operations (4) + (5) + (6)		\$15,625	\$0	O\$	0 \$	
		Ċ	Ç	C4	Ğ	
oon maintenance (012000) 1/2 of Maintenance (8) * 50%		2 Q)))))))))))))))))))	Ç 	99	
Fixed O&M (7) + (9)		\$15,625	8	9	S.	
Total Revenue Requirement,		7 () 7 () 7 ()			00 7 00 4	
Lost Associated with Proceeding Flaure (19) 7 (10) Indiana Michigan Power Company's Percentage Ownership	d	440, 16 1 50%	\$144,402 85.00%	\$220,313 65.08%		
&M's Share of Cost Associated with Rockport Plant (11) X (((12)	\$20,061	\$122,793	\$148,980		
Total Rockport Plant Common and Units 1 & 2		******	and the souther			\$306,918
Indiana Michigan Power Company Steam Capacity (kw)						5,414,000
Rockport Plant (\$/kw) (14) / (15) Kontroky Bower Bortion of Bookroot Blant /						\$0.06
Indiana Michigan Power Surplus Weighing						3.00%
Portion of Weighted Average Capacity Rate						
■Attributed to Rockport Plant (\$/kw) (17) X (18) B Rockbort Plant Costs to Kentucky Power:						\$0.01
rt Plant Portion (\$/kw) (18)						\$0.01
y Power Capacity Deficit (kw)	(() ;	******				255,000
rockport units 1 & z Environmental to Nentucky Fower (18) - (zu) (ES FORM 3.14, Page 1 of 10, Line 8)	(ny) (8)				- -	\$2,550

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT INDIANA MICHGAN POWER COMPANY (I&M) - TANNERS CREEK (UNITS 1, 2, 3 & 4)

LINE NO.	COST	AMOUNTS
1 2 3	Utility Plant at Original Cost Member Primary Capacity Investment Rate (16.44% / 12) Total Rate Base	\$98,457,579 <u>1.37%</u> \$1,348,869
4 5 6 7	Operations : Urea (5020002) Trona (5020003) Air Emission Fee Total Operations (4) + (5) + (6)	\$0 \$0 <u>\$15,625</u> \$15,625
8 9 10	Maintenance : SCR Maintenance (5120000) 1/2 of Maintenance (8) * 50% Fixed O&M (7) + (9) Total Revenue Requirement,	\$0 <u>\$0</u> <u>\$15,625</u>
11 12 13	Cost Associated with Tanners Creek Plant (3) ÷ (10) Indiana Michigan Power Company's Percentage Ownership I&M's Share of Cost Associated with Tanners Creek Plant (11) X (12)	<u>\$1,364,494</u> 100.00% \$1,364,494
14 15 16	Indiana Michigan Power Company Steam Capacity (kw) Tanners Creek Plant (\$/kw) Indiana Michigan Power Surplus Weighing Partien of Meighted Average Capacity Pate	5,414,000 \$0.25 9.00%
17 18	Portion of Weighted Average Capacity Rate Attributed to Rockport Plant (\$/kw) (15) X (16) Tanners Creek Plant Costs to Kentucky Power : Tanners Creek Plant Portion (\$/kw) (17)	\$0.02 \$0.02
19 20	Kentucky Power Capacity Deficit (kw) Tanners Creek Plant Environmental Cost to Kentucky Power (18) * (19) (ES FORM 3.14, Page 1 of 10, Line 9)	<u>255,000</u> \$5,100

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of November 2011	For the	Expense	Month	of November	2011
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LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)
		As of 4/30/2010							
1 2	L/T DEBT S/T DEBT ACCTS REC	\$550,000,000 \$0	51.941% 0.000%	6.48% 0.83%		3.37% 0.00%			3.37% 0.00%
3 4	FINANCING C EQUITY	\$43,588,933 \$465,314,088	4.116% 43.943%	1.22% 1 0.50%	1/	0.05% 4.61%	1.5762	2/	0.05% 7.27%
5	TOTAL	\$1,058,903,021	100.000%			8.03%			10.69%
1/		nted Average Cost o on Common Equity		10 - 00020					
2/		Conversion Factor - 00020 dated - Apr		tion:					
1 2 3		EVENUE LE ACCOUNTS EX Service Commissio					100.0000 0.2400 0.1500		
4 5		LE PRODUCTION II E TAX EXPENSE, N				OW)	99.6100 5.6384		
6 7	FEDERAL TAX 199 DEDUCTIC	NC	93.9716 5.6372						
8 9		ABLE PRODUCTIO DME TAX EXPENSI		EDUCTION (35%	6)		88.3344 30.9171		
10	AFTER-TAX PF	RODUCTION INCON	ΛE				57.4173		
11 12 13 14 15	GROSS-UP FA AFTER-TA 199 DEDU UNCOLLEC Kentucky F		57.4173 5.6372 0.2400 0.1500	-					
16	TOTAL GROSS	UP FACTOR FOR	PRODUCTION	INCOME (ROUI	NDEI)	63.4445		
17 18 19 20	BLENDED FEDERAL AND STATE TAX RATE: FEDERAL (LINE 8) STATE (LINE 4) BLENDED TAX RATE								
21	GROSS REVEN	UE CONVERSION	FACTOR (100.0	0000 / Line 14)			1.5762	-	
1 2 3	STATE INCOM PRE-TAX F COLLECTI Kentucky P		100.0000 0.2400 0.1500						
4 5		KABLE PRODUCTION ATE 199 DEDUCTION		FORE 199 DED	UCT	ION	99.6100 5.6372		
6 7	STATE TAX STATE INC	ION	93.9728 6.0000						
8	STATE INC	OME TAX EXPENS	SE (LINE 5 X LIN	IE 6)			5.6384		

The WACC (PRE - TAX) value on Line 5 is to be recorded on ES FORM 3.10, Line 9. Weighted Average Cost of Capital Balances As of 4/30/2010 based on Case No. 2010-00318, dated September 7, 2010.

ES FORM 3.20

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of November 2011

		an and a second s							oine a					K
Total	(6)												\$49,120	
Rockport Plant Common	(8)		\$2,185,292	(\$193,400)	\$2,013,186	0.9825%	\$19,780	\$6,410 \$0	\$6,410	\$26,190	\$7,857			
Total Units 1 & 2 (C5 + C6)	(/)			comenciotastation	\$8,516,065	0.9825%	\$83,670	\$39,968 \$0	\$39,968	\$123,638	\$37,091			
Unit No. 2	(9)	unang di kang kang kang kang kang kang kang kang	\$8,353,084	(\$2,227,974) (\$864,036)	\$5,270,174		Lamor.	\$24,502 \$0 \$0		<u></u>				
Unit No. 1	(ç)	<u>Arssart, ya u sheken di Anton</u>	\$5,272,657	(\$1,482,029)	\$3,245,891			\$15,466 \$0			2			
Rockport Plant Common	(4)	\$1.777.206		(\$907,625) (\$150,518)	\$710,063	0.9825%	\$6,976	\$5,212 \$15,625	\$20,837	\$27,813	\$4,172			
	(3)					11.7897%								
COST COMPONENT	(2)	Rockport Plant Continuous Environmental Monitoring System (CEMS) Utility Plant at Original Cost	AEGCo Low Nor Burners (LNB) Installed Cost Fivash Landfill Installed Cost	Less Accumulated Depreciation	Total Rate Base	Weighted Average Cost of Capital - ES FORM 3.21 Monthly Weighted Avg. Cost of Capital (LINE 7 / 12)	Monthly Return of Rate Base (Line 6 * Line 8)	Operating Expenses : Monthly Depreciation Expense Monthly Indiana Air Emissions Fee	Total Operating Expenses (Line 10 + Line 11))	Total Revenue Requirement, Cost Associated with Rockport Plant CEMS and LNB (Line 9 + Line 12)	Kentucky Power's Portion of Rockport's CEMS (Line 13 * 15%) Kentucky Power's Portion of AEGCo's LNB and Landfill (Line 13 * 30%)	Kentucky Power's Portion of Rockport Plants' Total Revenue Requirement.(C 4, Ln 14 + C 7, Ln 15 + C 8, L 15)	Note: Cost in Column 8, Line 16 is to be Recorded on ES FORM 3.00 Line 2	
NO LINE	í	{			610	,		<u>5</u> 5			4 r 2		16	

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KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

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	and the second								₩-₩-₩-₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩
LINE			Cap.	Cost		WACC	0005		WACC
NO.	Component	Balances	Structures	Rates		(NET OF TAX)	GRCF	-	(PRE - TAX)
		As of							
10-10-00-00-00-00-00-00-00-00-00-00-00-0		11/30/2011						Section 2	
1	L/T DEBT	66,487,612	41.4400%	5.3515%		2,2177%			2.2177%
2	S/T DEBT	19,241,852	11.9930%	0.4272%		0.0512%			0.0512%
	CAPITALIZATION								
3	OFFSETS	0	0.0000%	4.2463%		0.0000%			0.0000%
4 5	DEBT	74 749 494	46.5670%	12.1600%	17	5.6625%	1.681379	2/	9.5208%
5	C EQUITY	74,713,431	40.007070	12.1000 %	L/	5,002378	1.001378	21	9,520070
6	TOTAL	160,442,895	100.0000%			7.9314%			11.7897%
		========	==========						=========
				and the second					
	WACC = Weighted	Average Cost of	Conital						
1/	Cost Rates per the			ower Aareemei	าร์				
17	ouor nation por the								
2/	Gross Revenue Co) 					
-			100.00						
1	OPERATING REVEL						100.00		
2 3	(LINE 1 X .085)						8.500		
4	INCOME BEFORE						91.500		
5	LESS: FEDERAL INCOME TAX								
6	(LINE 4 X .35)								
7	OPERATING INCO		GE				59.475		
8 9	GROSS REVENUE FACTOR (100						1.681379		
J	TACION (IM	707 EUNE 7)					1.001010		

For the Expense Month of November 2011

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.20, Line 5.

KENTUCKY POWER COMPANY - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT MONTHLY REVENUES, JURISDICTIONAL ALLOCATION FACTOR, and OVER/(UNDER) RECOVERY ADJUSTMENT

For the Expense Month of November 2011

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
K	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues	\$42,852,396 \$437,049 \$4,682,074 \$3,475,489	83.3% 0.8% 9.1% 6.8%
5	Total Revenues for Surcharges Purposes	 \$51,447,008	100.0%
6	Non-Physical Revenues for Month	(\$109,958)	
7	Total Revenues for Month	\$51,337,050	

The Kentucky Retail Monthly Revenues and Percentage of Total Revenues (Line 1) are to be recorded on ES FORM 1.00, Lines 9 and 4. The Percentage of Kentucky Retail Revenues to the Total Revenues for the Expense Month will be the Kentucky Retail Jurisdictional Allocation Factor.

OVER/(UNDER) RECOVERY ADJUSTMENT

Line No.	Description	Amounts
	Kentucky Retail Surcharge Factor for September 2011	
		\$41,071,318
	Kentucky Retail Revenues for Current Expense Month	
	Surcharge Collected (1) * (2)	\$212,503
4	Surcharge Amount To Be Collected	\$228,179
5	Over / (Under) Recovery (3) - (4) = (5)	(\$15,676)

The Over/(Under) Recovery amount is to be recorded on ES FORM 1.00, LINE 6.

NOTE : The sign on LINE 5 of ES FORM 3.30 will be changed on LINE 6 of ES FORM 1.00 in order to properly adjust the collection of the current month's expense.