American Electric Power 101A Enterprise Drive PO Box 5190 Frankfort, KY 40602-5190 www.aep.com



13AV 1 4 2003

Thomas M. Dorman, Executive Director

Attn.: Isaac S. Scott

Public Service Commission

P. O. Box 615

211 Sower Boulevard

Frankfort, KY 40602

November 14, 2003

Re: Monthly Environmental Surcharge Report

Dear Mr. Dorman:

Pursuant to KRS 278.183(3), American Electric Power files herewith an original and five copies of its Environmental Surcharge Report for the month of October 2003. The report is in compliance with the Commission's Order dated March 31, 2003 in Case No. 2002-00169. The report shows the calculation and supporting documentation of American Electric Power's Environmental Surcharge Factor that will be billed with service on and after November 26, 2003.

Sincerely,

Errol K. Wagner

Director Regulatory Services

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CALCULATION OF E(m) and SURCHARGE FACTOR For the Expense Month of October 2003

	CALCULATION OF E(m)					
	E(m) = CRR - BRR					
LINE	1	CRR from ES FORM 3.00	\$2,688,213			
LINE	2	Brr from ES FORM 2.00	\$15,785			
LINE	3	E(m) (LINE 1 - LINE 2)	\$2,672,428			
LINE	4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	68.0%			
LINE	5	KY Retail E(m) (LINE 3 * LINE 4)	\$1,817,251			
LINE	6	Over/(Under) Recovery Adjustment from ES FORM 3.30	\$285,836			
LINE	7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$2,103,087			
		SURCHARGE FACTOR				
LINE	8	Net KY Retail E(m) (Line 7)	\$2,103,087			
LINE	9	KY Retail R(m) from ES FORM 3.30	\$21,071,597			
LINE	10	Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)	9.9807%			

Effective Date for Billing:	December 2003
	2 n/2/1 12/
Submitted By :	CB Word
Title:	Director Regulatory Services
Date Submitted :	November 14, 2003

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT For the Expense Month of December 1990

CALCULATION OF BASE PERIOD REVENUE REQUIREMENT

NO.	COMPONENTS	
1	First Component - Associated with Big Sandy ((RB KP(B)) (ROR KP(B))/12)) ES FORM 2.10, Line 11	\$15,625
2	Second Component - Associated with Rockport [((RB IM(B)) (ROR IM(B))/12)) + OE IM (B)] (.15) ES FORM 2.11, Line 12	<u>\$160</u>
3	Total Base Period Revenue Requirement, BRR Record on ES FORM 1.00, Line 2	\$15,785

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT BASE PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

For the Month of December 1990

LINE NO.	COST COMPONENT		
	Return on Rate Base (Balances as of December 31, 1990):		
1 2 3 4 5 6 7 8 9 10	Utility Plant at Original Cost Less Accumulated Depreciation Less Acum. Def. Income Taxes Total Rate Base Weighted Average Cost of Capital - ES FORM 2.20 Monthly Weighted Avg. Cost of Capital (5)/12 December 1990 Return on Rate Base (4) * (6)	\$3,920,119 (\$2,995,865) (\$475,467) 12.8200%	\$448,787 1.0683% \$4,794 \$10,597 \$234 \$10,831 \$15,625

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Month of December 1990

LINE NO.	COST COMPONENT		
1 2 3 4 5 6 7 8 9 10	Return on Rate Base: Utility Plant at Oringinal Cost Less Accumulated Depreciation Less Accum. Def. Income Taxes Total Rate Base Weighted Average Cost of Capital - ES FORM 2.21 Monthly Weighted Avg. Cost of Capital (LINE 5/12) Monthly Return of Rate Base (4 * 6)	\$107,550 (\$22,554) (\$13,834) 12.6216%	\$71,162 1.0518% \$748 \$313 \$7 \$320
12	Rockport (7) + (10) Kentucky Power Portion of Rockport Total Revenue Requirement. Record on ES FORM 2.00, Line 2 (11 * 15%)		\$1,068 \$160

The Base Period Revenue Requirement information will only need to be filed once during the first 2-year period, as part of the first monthly surcharge filing. Attach a schedule similar to Exhibit EKW-2, page 11 of 11 (Wagner Direct Testimony in Case No. 96-489), showing the calculation of the Weighted Average Cost of Capital. These calculations should reflect the provisions of the Rockport Unit Power Agreement, and be as of December 1990.

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL For the Expense Month of December 1990

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
1 2 3 4	L/T DEBT S/T DEBT C EQUITY TOTAL	240,670,885 17,796,815 190,611,826 449,079,526	53.59% 3.96% 42.45% 100.00%	8.20% 9.16% 11.50%	1/	4.39% 0.36% 4.88% 9.63%	1.6545	2/	4.39% 0.36% 8.07% 12.82%
WACC = Weighted Average Cost of Capital 1/ Rate of Return on Common Equity per Case No. 2002 - 00169 2/ Gross Revenue Conversion Factor (GRCF) Calculation:							11.50%		
1 2 3 4 5	2 UNCOLLECTIBLE 3 INCOME BEFORE STATE TAXES 4 LESS: STATE INCOME TAX						100.00 0.20 99.80 8.23		
6 7 8 9 10	6 INCOME BEFORE FED INC TAX 7 LESS: FEDERAL INCOME TAX 8 (LINE 6 X .34) 9 OPERATING INC PERCENTAGE 10 GROSS REVENUE CONVERSION						91.57 31.13 60.44 1.6545		

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL For the Expense Month of December 1990

LINE NO.	DESC	CAP. BAL.	WEIGHTED CAP. BAL.	CAP. COST RATES		WAC (NET OF TAX)	GRCF		WAC (PRE - TAX)
1 2 3 4 5	L/T DEBT S/T DEBT S/T INV DEBT C EQUITY	.162,770,349 0 (26,356,261) 94,919,467 	70.3618% 0.0000% -11.3932% 41.0314% 	7.7961% 0.0000% 7.7961% 12.1600%	1/	5.4855% 0.0000% -0.8882% 4.9894%	1.608260	2/	4.5973% 8.0243%
1/	The result of th								
1 2 3 4 5 6 7 8 9	(LINE 1 X .0434) INCOME BEFORE FED INC TAX LESS: FEDERAL INCOME TAX (LINE 4 X .35) OPERATING INCOME PERCENTAGE GROSS REVENUE CONVERSION					100.00 <u>4.340</u> 95.660 <u>33.481</u> <u>62.179</u> 1.608260			

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT For the Expense Month of October 2003

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		\$2,684,449
2	Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 12	i	\$3,764
	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	
	NOx - EPA Auction 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.	·	\$2,688,213

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH BIG SANDY

For the Expense Month of October 2003

LINE	· · · · · · · · · · · · · · · · · · ·		1
LINE NO.	COCT COMPONENT		
140.	COST COMPONENT		
	Return on Rate Base ;		
1 1	Utility Plant at Original Cost	\$183,915,212	
2	Less Accumulated Depreciation	(\$7,788,129)	李林亭 美格里特
3	Less Accum. Def. Income Taxes	(\$17,480,125)	
4	Net Utility Plant		\$158,646,958
5	SO2 Emission Allowance Inventory from ES FORM 3.11		\$12,022,014
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12		\$12,022,014
7	Cash Working Capital Allowance from ES FORM 3.13, Line11		\$75,621
8	Total Rate Base		\$170,744,593
9	Weighted Average Cost of Capital - ES FORM 3.15	10.20%	NI HERIO PER NEW YORK
10	Monthly Weighted Avg. Cost of Capital (7)/12		0.85%
11	Monthly Return of Rate Base (6) * (8)		\$1,451,329
	Operating Expenses:		\$1,701,020
12	Monthly Depreciation Expense		\$571,632
13	Monthly Catalyst Amortization Expense		\$46,030
14	Monthly Property Taxes		\$10,490
15	Monthly Kentucky Air Emissions Fee		\$23,504
16	Monthly Gavin Scrubber Cost from ES FORM 3.14		\$184,592
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13		\$122,768
18	Monthly SO2 Emission Allowance Consumption		\$274,104
19	Monthly ERC & NOx Emission Allowance Consumption		\$0
20	Total Operating Expenses [Line 12 thru Line 18]		\$1,233,120
21	Total Revenue Requirement - Big Sandy		<u> </u>
	Record on ES FORM 3.00, Line 1		\$2,684,449
			ΨΕ,004,443
		or or second to the second states	·

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT SO2 EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of October 2003

	(1) Allowance	(2)	(3)	(4)	(5)
	Activity in	Cumulative	Dollar Value of	Cumulative	Weighted
	Month	Balance	Activity	Dollar Balance	Average Cost
BEGINNING INVENTORY Additions -		754,608		\$4,685,726	6.209
EPA Allowances	0	88,625	\$0	\$0	
Gavin Reallocation	0	3,853	, -	\$0	
P & E Transfers In	0	312,630	\$0	\$3,639,150	11.640
Intercompany Purchases		12,132		\$1,615,719	133.178
Other (List)	0	488,551	\$7	\$56,333,520	115.307
Withdrawals -	_	_		·	
P & E Transfers Out	. 0	2,415	\$0	\$272,099	112.670
Intercompany Sales	0	42,264	\$0	\$4,200,428	99.385
Off - System Sales SO2 Emissions Allowances	0	274,812	\$0	\$28,638,456	104.211
Consumed By Kentucky Power ENDING INVENTORY - Record	3,423	219,494	\$274,104	\$21,141,118	96.318
Balance in Column (4) on ES FORM					
3.10, Line 5		1,121,414		\$12,022,014	10.720
Evpoppe Month Member Leed Datie to	A E D // Z				
Expense Month Member Load Ratio for	or AEP/Kentucky	Power	<u></u>		0.07217

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.

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ECR and NOx EMISSIONS ALLOWANCE INVENTORY

For the Expense Month of October 2003

	(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	ï	\$0	0.000
EPA Allowances	0	0	\$0	\$0	
P&E Transfers In	0	0		\$0	
Intercompany Purchases	0	0	\$0	\$0	0.000
Other (List) Withdrawals -	0 :	0 :	\$0	\$0	0.000
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
ECR Consumed By Kentucky Power	0	0	\$0	\$0	0.000
NOx Consumed By Kentucky Power	0	0	\$0	\$0	0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		0		\$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.

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT CASH WORKING CAPITAL ALLOWANCE

For the Expense Month of October 2003

LINE NO.	O&M Expenses		
1 2 3 4	1997 Plan: Monthly Kentucky Air Emissions Fee Monthly Gavin Scrubber Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses	\$23,504 \$184,592 <u>\$274,104</u>	\$482,200
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 Total 2003 Plan O&M Expenses	\$0 \$122,768 \$0 <u>\$0</u>	<u>\$122,768</u>
10	Total Monthly O&M Expenses		<u>\$604,968</u>
11	Cash Working Capital Allowance (Line 10 X 1/8)		\$75,621

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

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT GAVIN SCRUBBER COSTS

For the Expense Month of October 2003

MOUNTS
\$367,259
\$2,853,086
\$5,272,200
\$8,492,545
7-,,-
\$180,827
\$90,414
\$8,582,959
Ψ0,002,000
8,472,000
\$1.01
82.00%
0.00
\$0.83

\$0.83
<u>222,400</u>
\$184,592

Total Cost at Line 14 is to be recorded on ES FORM 3.10, Line 15.

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT BIG SANDY PLANT COST OF CAPITAL

For the Expense Month of October 2003

LINE			Сар.	Cost		WACC		Ι	WACC
NO.	Component	Balances	Structure	Rates		(Net of Tax)	GRCF		(PRE-TAX)
		As of 12/31/2002						,	
1 2 3 4 5	L/T DEBT S/T DEBT ACCTS REC FINANCING C EQUITY TOTAL	\$466,631,680 \$23,386,094 \$27,214,021 \$298,018,017 \$815,249,812	57.24% 2.87% 3.34% 36.56% 100.00%	5.752% 2.062% 2.804% 11.000%		3.29% 0.06% 0.09% 4.02% 7.46%	1.6801	2/	3.29% 0.06% 0.09% 6.76% 10.20 %
1/ 2/ 1 2 3 4 5 6 7 8 9 10	UNCOLLECTIBLE INCOME BEFORE STATE TAXES LESS: STATE INCOME TAX (LINE 3 X .0825) INCOME BEFORE FED INC TAX LESS: FEDERAL INC TAX (LINE 6 X .35) OPERATING INC PERCENTAGE GROSS REVENUE CONVERSION					100.00 0.20 99.80 8.23 91.57 32.05 59.52 1.6801			

The WACC (PRE - TAX) value on Line 6 is to be recorded on ES FORM 3.10, Line 9.

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT COSTS ASSOCIATED WITH ROCKPORT

For the Expense Month of October 2003

LINE NO.	COST COMPONENT		
	Return on Rate Base :		
1	Utility Plant at Oringinal Cost	\$1,380,823	
2	Less Accumulated Depreciation	(\$408,606)	
3	Less Accum. Def. Income Taxes	(\$101,621)	
4	Total Rate Base		\$870,596
5	Weighted Average Cost of Capital - ES FORM 3.21	12.0186%	
6	Monthly Weighted Avg. Cost of Capital (LINE 5/12)	Contract	1.0016%
7	Monthly Return of Rate Base (4 * 6)		\$8,719
l	Operating Expenses:		ψο,. το
8	Monthly Depreciation Expense		\$3,872
9	Monthly Indiana Air Emissions Fee		<u>\$12,500</u>
10	Total Operating Expenses (8 + 9)		\$16,372
			<u> </u>
11	Total Revenue Requirement, Cost Associated with		
1	Rockport (7) + (10)		\$25,091
12	Kentucky Power Portion of Rockport Total		\$20,00 1
l i	Revenue Requirement. Record on ES FORM 3.00, Line 2		
	(11 * 15%)		\$3,764
			ψο,,, ο ι

With each monthly filing, attach a schedule similar to Exhibit EKW-2, page 11 of 11 (Wagner Direct Testimony in Case No. 96-489), showing the calculation of the Weighted Average Cost of Capital. These calculations should reflect the provisions of the Rockport Unit Power Agreement, and be as of the Current Expense Month.

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT CURRENT PERIOD REVENUE REQUIREMENT ROCKPORT UNIT POWER AGREEMENT COST OF CAPITAL

For the Expense Month of October 2003

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 09/30/2003							
1 2 3 4 5	L/T DEBT S/T DEBT S/T INV DEBT C EQUITY TOTAL	44,808,675 6,878,973 0 48,181,836 99,869,484	44.8672% 6.8880% 0.0000% 48.2448% 100.0000%	4.6620% 0.9126% 4.1631% 12.1600%	1/	2.0917% 0.0629% 0.0000% 5.8666% 	1.681379	2/	2.0917% 0.0629% 0.0000% 9.8640% 12.0186%
1/ 2/ 1 2 3 4 5 6 7 8	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 LESS: INDIANA ADJUSTED GROSS INCOME 3 (LINE 1 X .085) 4 INCOME BEFORE FED INC TAX 5 LESS: FEDERAL INCOME TAX 6 (LINE 4 X .35) 7 OPERATING INCOME PERCENTAGE 8 GROSS REVENUE CONVERSION					100.00 <u>8.500</u> 91.500 <u>32.025</u> 59.475 1.681379			

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

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

For the Expense Month of October 2003

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
1 2 3 4 5	Kentucky Retail Revenues FERC Wholesale Revenues Associated Utilities Revenues Non-Assoc. Utilities Revenues Total Revenues for Surcharges Purposes	\$21,071,597 \$194,306 \$2,974,850 \$6,753,352 \$30,994,105	68.0% 0.6% 9.6% 21.8%
6 7	Non-Physical Revenues for Month Total Revenues for Month	(<u>\$264,889)</u> \$30,729,216	

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 2003	7.4672%
2	Kentucky Retail Revenues for Current Expense	\$19,688,384
3	Surcharge Collected (1) * (2)	\$1,470,171
4	Surcharge Amount To Be Collected	\$1,756,007
6	Over/(Under) Recovery (3) - (4) - (5)	(\$285,836)

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.