

American Electric Power  
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Frankfort, KY 40602-5190  
www.aep.com



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

**RECEIVED**

JAN 21 2005

PUBLIC SERVICE  
COMMISSION

January 21, 2005

Re: Monthly Environmental Surcharge Report

Dear Ms. O'Donnell

Pursuant to KRS 278.183(3), Kentucky Power Company files herewith an original and five copies of its Environmental Surcharge Report for the month of December 2004. 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 Kentucky Power Company's Environmental Surcharge Factor that will be billed with service on and after January 31, 2005.

ES FORM 3.10 includes Monthly Environmental Equipment Operation and Maintenance Costs (See LINE NO 18) that pertain to the environmental facilities included in the environmental compliance plan per the Order dated April 16, 2004 in Case No. 2004-00081. Also, per the order, attached is an explanation of the December 2004 environmental equipment operation and maintenance costs.

Attached are two spreadsheets detailing adjustments to ES FORM 3.11 SO<sub>2</sub> Emissions Allowances for the month of December 2004. The adjustments pertain to EPA Allowances, Gavin Reallocations, P&E Transfers In, Intercompany Purchases, Other, P&E Transfers Out and Intercompany Sales. These adjustments were part of the year-end Gavin Reallocation of emission allowances for years 1999 to 2003 that were not available, except for the EPA Allowances. The EPA Allowances were not properly reported. The Cumulative Balance (1,115,308), Cumulative Dollar Balance (\$13,174,710) and Weighted Average Cost (\$11.813) did not change.

Sincerely,

A handwritten signature in black ink, appearing to read 'Errol K. Wagner', written in a cursive style.

Errol K. Wagner  
Director Regulatory Services

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

For the Expense Month of December 2004

	November 2004		December 2004		December 2004		December 2004		December 2004		December 2004	
	Cumulative Balance	Cumulative Dollar Balance	Weighted Average Cost	Allowance Activity in Month	Dollar Value of Activity	Allowance Activity in Month	Dollar Value of Activity	Allowance Activity in Month	Dollar Value of Activity	Cumulative Balance	Cumulative Dollar Balance	Weighted Average Cost
BEGINNING INVENTORY	754,608	\$4,685,726	\$6.209							754,608	\$4,685,726	\$6.209
Additions -												
EPA Allowances	228,405	\$0	\$0.000	0	\$0	130	\$0	130	\$0	228,535	\$0	\$0.000
Gavin Reallocation	3,853	\$0	\$0.000	5,932	\$0	31,691	\$0	31,691	\$0	41,476	\$0	\$0.000
P & E Transfers In	312,630	\$3,639,150	\$11.640	0	\$0	10,516	\$596,899	10,516	\$596,899	323,146	\$4,236,049	\$13.109
Intercompany Purchases	12,132	\$1,615,719	\$133.178	0	\$0	7,638	\$1,317,326	7,638	\$1,317,326	19,770	\$2,933,045	\$148.358
Other (List)	452,661	\$62,290,516	\$137.610	4,725	\$1,151,063	(49,975)	(\$1,914,225)	(49,975)	(\$1,914,225)	407,411	\$61,527,354	\$151.020
Withdrawals -												
P & E Transfers Out	2,415	\$272,099	\$112.670	1,313	\$94,553	5,310	\$408,601	5,310	\$408,601	9,038	\$775,253	\$85.777
Intercompany Sales	51,893	\$4,941,374	\$95.222	3,857	\$277,754	(5,310)	(\$408,601)	(5,310)	(\$408,601)	50,440	\$4,810,527	\$95.371
Off - System Sales	276,219	\$28,737,649	\$104.039	3,603	\$259,463	0	\$0	0	\$0	279,822	\$28,997,112	\$103.627
SO2 Emissions Allowances	34,941	\$0	\$0.000	0	\$0	0	\$0	0	\$0	34,941	\$0	\$0.000
Adjustment												
SO2 Emissions Allowances Consumed By Kentucky Power	280,344	\$25,261,281	\$90.108	5,053	\$363,291	0	\$0	0	\$0	285,397	\$25,624,572	\$89.786
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5	1,118,477	\$13,018,708	\$11.640	(3,169)	\$156,002	0	\$0	0	\$0	1,115,308	\$13,174,710	\$11.813

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

ES FORM 3.11  
 Page 2 of 2

For the Expense Month of December 2004

Detail of December 2004 Emission Allowances Adjustments -	Allowance Activity	Dollar Value of Activity
<b>EPA Allowances</b>		
Month of May 2001	13	\$0
Month of June 2001	115	\$0
Month of January 2002	2	\$0
<b>Total</b>	<b>130</b>	<b>\$0</b>
<b>Gavin Reallocation</b>		
December 1999	4,169	\$0
December 2000	6,812	\$0
December 2001	8,546	\$0
December 2002	6,187	\$0
December 2003	5,977	\$0
<b>Total</b>	<b>31,691</b>	<b>\$0</b>
<b>P &amp; E Transfers In</b>		
December 2000	2,809	\$367,978
December 2001	6,686	\$352,458
December 2002	1,021	\$37,362
<b>Total</b>	<b>10,516</b>	<b>\$757,798</b>
<b>Intercompany Purchases</b>		
December 1999	7,638	\$1,317,326
<b>Total</b>	<b>7,638</b>	<b>\$1,317,326</b>
<b>Other</b>		
December 1999	(11,807)	(\$1,317,326)
December 2000	(9,621)	(\$367,978)
December 2001	(15,360)	(\$352,458)
December 2002	(7,210)	(\$37,262)
December 2003	(5,977)	\$0
<b>Total</b>	<b>(49,975)</b>	<b>(\$2,075,024)</b>
<b>P &amp; E Transfers Out</b>		
December 2003	5,310	\$408,601
<b>Total</b>	<b>5,310</b>	<b>\$408,601</b>
<b>Intercompany Sales</b>		
December 2003	(5,310)	(\$408,601)
<b>Total</b>	<b>(5,310)</b>	<b>(\$408,601)</b>

**American Electric Power  
Environmental Equipment Operation and Maintenance Costs  
December 2004**

Work Description	Material Costs	Outside Contract Labor	Misc Other Costs	Total Costs
Repair Expansion Joint SCR Inlet & Reactor	\$0.00	\$0.00	\$0.00	\$0.00
Installation of SCR Mixing Vanes	\$0.00	\$0.00	\$0.00	\$0.00
Installation of Turning Vanes in Booster Fans	\$0.00	\$0.00	\$0.00	\$0.00
SCR Outlet NOX Probe	\$0.00	\$0.00	\$0.00	\$0.00
Repair Booster Fans	\$789.86	\$0.00	\$0.00	\$789.86
Inspection and Maintenance of Ammonia On Demand (AOD) System	\$0.00	\$0.00	\$0.00	\$0.00
NOX Monitor Vacuum Pumps - SCR NOX Monitoring	\$0.00	\$0.00	\$0.00	\$0.00
Repair Expansion Joint 85' - 7"	\$0.00	\$0.00	\$0.00	\$0.00
Replace Experimental #21 Mill Burners	\$0.00	\$0.00	\$0.00	\$0.00
SCR Acoustic Sootblower Horns	\$270.70	\$0.00	\$0.00	\$270.70
SCR Boiler Boiler Outlet Ductwork - Casing Repair	\$83,917.22	\$2,191.41	\$168.16	\$86,276.79
Switchgear Breaker on SCR NOx Facility	\$4,129.58	\$0.00	\$0.00	\$4,129.58
<b>Total SCR December 2004 O &amp; M Expense</b>	<b>\$89,107.36</b>	<b>\$2,191.41</b>	<b>\$168.16</b>	<b>\$91,466.93</b>
Additional Operator Overtime During The Ozone Season	\$0.00	\$0.00	\$0.00	\$0.00
Emission Testing Required Under Permit -				
Operation	\$0.00	\$0.00	\$0.00	\$0.00
Maintenance	\$2,080.78	\$0.00	\$0.00	\$2,080.78
<b>December 2004 O &amp; M Expenses Filed</b>				<b>\$93,548</b>

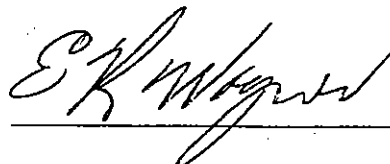
AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT  
 CALCULATION OF E(m) and SURCHARGE FACTOR  
 For the Expense Month of December 2004

<u>CALCULATION OF E(m)</u>		
E(m) = CRR - BRR		
LINE 1	CRR from ES FORM 3.00	\$1,256,487
LINE 2	Brr from ES FORM 2.00	\$15,785
LINE 3	E(m) (LINE 1 - LINE 2)	\$1,240,702
LINE 4	Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1	71.5%
LINE 5	KY Retail E(m) (LINE 3 * LINE 4)	\$887,102
LINE 6	Over/(Under) Recovery Adjustment from ES FORM 3.30	(\$600,614)
LINE 7	Net KY Retail E(m) (LINE 5 + LINE 6)	\$286,488
<u>SURCHARGE FACTOR</u>		
LINE 8	Net KY Retail E(m) (Line 7)	\$286,488
LINE 9	KY Retail R(m) from ES FORM 3.30	\$32,351,686
LINE 10	Environmental Surcharge Factor for Expense Month (Line 8 / LINE 9)	0.8855%

Effective Date for Billing:

February 2005

Submitted By :



Title :

Director Regulatory Services

Date Submitted :

January 21, 2005

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

CALCULATION OF BASE PERIOD REVENUE REQUIREMENT

LINE 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	Utility Plant at Original Cost	\$3,920,119	
2	Less Accumulated Depreciation	(\$2,995,865)	
3	Less Acum. Def. Income Taxes	(\$475,467)	
4	Total Rate Base		\$448,787
5	Weighted Average Cost of Capital - ES FORM 2.20	12.8200%	
6	Monthly Weighted Avg. Cost of Capital (5)/12		1.0683%
7	December 1990 Return on Rate Base (4) * (6)		\$4,794
	Operating Expenses:		
8	December 1990 Depreciation Expense		\$10,597
9	December 1990 Property Tax		\$234
10	Total Operating Expenses (8) + (9)		<u>\$10,831</u>
11	Total Revenue Requirement, Costs Associated with Big Sandy (7) + (10) Record on ES FORM 2.00, Line1		\$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		
	Return on Rate Base :		
1	Utility Plant at Original Cost	\$107,550	
2	Less Accumulated Depreciation	(\$22,554)	
3	Less Accum. Def. Income Taxes	(\$13,834)	
4	Total Rate Base		\$71,162
5	Weighted Average Cost of Capital - ES FORM 2.21	12.6216%	
6	Monthly Weighted Avg. Cost of Capital (LINE 5/12)		1.0518%
7	Monthly Return of Rate Base (4 * 6)		\$748
	Operating Expenses :		
8	Monthly Depreciation Expense		\$313
9	Monthly Indiana Air Emissions Fee		\$7
10	Total Operating Expenses (8 + 9)		<u>\$320</u>
11	Total Revenue Requirement, Cost Associated with Rockport (7) + (10)		\$1,068
12	Kentucky Power Portion of Rockport Total Revenue Requirement. Record on ES FORM 2.00, Line 2 (11 * 15%)		\$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	L/T DEBT	240,670,885	53.59%	8.20%		4.39%			4.39%
2	S/T DEBT	17,796,815	3.96%	9.16%		0.36%			0.36%
3	C EQUITY	190,611,826	42.45%	11.50%	1/	4.88%	1.6545	2/	8.07%
4	TOTAL	449,079,526	100.00%			9.63%			12.82%
WACC = Weighted Average Cost of Capital 1/ Rate of Return on Common Equity per Case No. 2002 - 00169							11.50%		
2/ Gross Revenue Conversion Factor (GRCF) Calculation:									
1	OPERATING REVENUE						100.00		
2	UNCOLLECTIBLE						<u>0.20</u>		
3	INCOME BEFORE STATE TAXES						99.80		
4	LESS : STATE INCOME TAX								
5	(LINE 3 X .0825)						<u>8.23</u>		
6	INCOME BEFORE FED INC TAX						91.57		
7	LESS : FEDERAL INCOME TAX								
8	(LINE 6 X .34)						<u>31.13</u>		
9	OPERATING INC PERCENTAGE						<u>60.44</u>		
10	GROSS REVENUE CONVERSION								
11	FACTOR (100%/LINE 9)						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	L/T DEBT	162,770,349	70.3618%	7.7961%	5.4855%		
2	S/T DEBT	0	0.0000%	0.0000%	0.0000%		
3	S/T INV	(26,356,261)	-11.3932%	7.7961%	-0.8882%		
4	DEBT						4.5973%
5	C EQUITY	94,919,467	41.0314%	12.1600%	4.9894%	1.608260	8.0243%
6	TOTAL	231,333,555	100.0000%				12.6216%
WACC = Weighted Average Cost of Capital 1/ Cost Rates per the Provisions of the Rockport Unit Power Agreement							12.16%
2/ Gross Revenue Conversion Factor (GRCF) Calculation:							
1	OPERATING REVENUE					100.00	
2	LESS: INDIANA AJUSTED GROSS INCOME						
3	(LINE 1 X .0434)					<u>4.340</u>	
4	INCOME BEFORE FED INC TAX					95.660	
5	LESS: FEDERAL INCOME TAX						
6	(LINE 4 X .35)					<u>33.481</u>	
7	OPERATING INCOME PERCENTAGE					<u>62.179</u>	
8	GROSS REVENUE CONVERSION						
9	FACTOR (100% / LINE 7)					1.608260	

AMERICAN ELECTRIC POWER - ENVIRONMENTAL SURCHARGE REPORT  
 CURRENT PERIOD REVENUE REQUIREMENT  
 For the Expense Month of December 2004

CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

LINE NO.	COMPONENTS		
1	<b>First Component:</b> Associated with Big Sandy Plant ((RB KP(C)) (ROR KP(C)/12)) + OE KP(C) ES FORM 3.10, Line 20		\$2,632,231
2	<b>Second Component:</b> Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C)] ES FORM 3.20, Line 12		\$3,779
	<b>Third Component:</b> Net Proceeds from Emission Allowances Sales AS 1) SO <sub>2</sub> - EPA Auction Proceeds received during Expense Month 2) SO <sub>2</sub> - Net Gain or (Loss) from Allowance Sales, in compliance with the AEP Interim Allowance Agreement, received during Expense Month Total Net Proceeds from SO <sub>2</sub> Allowances 1) NO <sub>x</sub> - EPA Auction Proceeds received during Expense Month 2) NO <sub>x</sub> - EPA Auction Proceeds, received during Expense Month 3) NO <sub>x</sub> - Net Gain or Loss from NO <sub>x</sub> Allowances Sales, received during Expense Month Total Net Proceeds from NO <sub>x</sub> Allowances	\$0  \$1,379,523  \$1,379,523  \$0  \$0  \$0  \$0	\$0  \$1,379,523  \$0  \$0
3	Total Net Gain or (Loss) from Emission Allowance Sales	-----	\$1,379,523
4	Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.	-----	\$1,256,487

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

For the Expense Month of December 2004

LINE NO.	COST COMPONENT		
	Return on Rate Base :		
1	Utility Plant at Original Cost	\$187,496,762	
2	Less Accumulated Depreciation	(\$16,330,037)	
3	Less Accum. Def. Income Taxes	(\$24,637,376)	
4	Net Utility Plant		\$146,529,349
5	SO2 Emission Allowance Inventory from ES FORM 3.11		\$13,174,710
6	ECR & NOx Emission Allowance Inventory from ES FORM 3.12		\$0
7	Cash Working Capital Allowance from ES FORM 3.13, Line11		\$81,905
8	Total Rate Base		\$159,785,964
9	Weighted Average Cost of Capital - ES FORM 3.15	10.20%	
10	Monthly Weighted Avg. Cost of Capital (7)/12		0.85%
11	Monthly Return of Rate Base (6) * (8)		\$1,358,181
	Operating Expenses :		
12	Monthly Depreciation Expense		\$564,951
13	Monthly Catalyst Amortization Expense		\$46,029
14	Monthly Property Taxes		\$7,829
15	Monthly Kentucky Air Emissions Fee		\$30,057
16	Monthly Gavin Scrubber Cost from ES FORM 3.14		\$160,673
17	Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13		\$101,220
18	Monthly SO2 Emission Allowance Consumption		\$363,291
19	Monthly ERC & NOx Emission Allowance Consumption		\$0
20	Total Operating Expenses [Line 12 thru Line 18]		\$1,274,050
21	Total Revenue Requirement - Big Sandy Record on ES FORM 3.00, Line 1		\$2,632,231

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

For the Expense Month of December 2004

	(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
Additions -					
EPA Allowances	130	228,535	\$0	\$0	\$0.000
Gavin Reallocation	37,623	41,476	\$0	\$0	\$0.000
P & E Transfers In	10,516	323,146	\$596,899	\$4,236,049	\$13.109
Intercompany Purchases	7,638	19,770	\$1,317,326	\$2,933,045	\$148.358
Other (List)	(45,250)	407,411	(\$763,162)	\$61,527,354	\$151.020
Withdrawals -					
P & E Transfers Out	6,623	9,038	\$503,154	\$775,253	\$85.777
Intercompany Sales	(1,453)	50,440	(\$130,847)	\$4,810,527	\$95.371
Off - System Sales	3,603	279,822	\$259,463	\$28,997,112	\$103.627
SO2 Emissions Allowances					
Adjustments	0	34,941	\$0	\$0	\$0.000
SO2 Emissions Allowances					
Consumed By Kentucky Power	5,053	285,397	\$363,291	\$25,624,572	\$89.786
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		1,115,308		\$13,174,710	\$11.813
Expense Month Member Load Ratio for AEP/Kentucky Power					0.07207

**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 December 2004

	(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	13,943	\$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	450	\$0	\$0	0.000
ERC Consumed By Kentucky Power	0	930	\$0	\$0	0.000
NOx Consumed By Kentucky Power	0	1,083	\$0	\$0	0.000
ENDING INVENTORY - Record Balance in Column (4) on ES FORM 3.10, Line 5		11,480		\$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	420
July 2004	510
Total Consumed	930
Remaining Early Reduction Credits (ERC)	0

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

For the Expense Month of December 2004

LINE NO.	O&M Expenses		
	<b>1997 Plan :</b>		
1	Monthly Kentucky Air Emissions Fee	\$30,057	
2	Monthly Gavin Scrubber Costs	\$160,673	
3	Monthly SO2 Allowance Consumption	<u>\$363,291</u>	
4	Total 1997 Plan O&M Expenses		\$554,021
	<b>2003 Plan :</b>		
5	Monthly Variable Cladding at Big Sandy Unit 1	\$0	
6	Monthly Urea Consumption at Big Sandy Unit 2	\$7,672	
7	Monthly Catalyst Replacement at Big Sandy Unit 2	\$0	
8	Monthly ERC & NOx Allowance Consumption	\$0	
9	Equipment - Associated Operating Expenses	\$0	
10	Equipment - Associated Maintenance Expenses	<u>\$93,548</u>	
11	Total 2003 Plan O&M Expenses		<u>\$101,220</u>
12	Total Monthly O&M Expenses		<u>\$655,241</u>
13	Cash Working Capital Allowance ( Line 10 X 1/8 )		\$81,905

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 December 2004

LINE NO.	COST	AMOUNTS
	Operations :	
1	Disposal (5010000)	\$442,021
2	Lime (5020000)	\$2,464,195
3	Lease (5070000)	<u>\$4,447,114</u>
4	Total Operations (1) + (2) + (3)	\$7,353,330
	Maintenance :	
5	Scrubbers (5120000)	\$309,948
6	1/2 of Maintenance (5) * 50%	<u>\$154,974</u>
7	Fixed O&M (4) + (6)	\$7,508,304
	Impact on Weighted Average Capacity Rate :	
8	Ohio Power Steam Capacity (kw)	8,472,000
9	Gavin Scrubber Rate (\$/kw) (7) / (8)	\$0.89
10	Ohio Power Surplus Weighing	82.00%
11	Portion of Weighted Average Capacity Rate Attributed to Gavin Scrubber (\$/kw) (9) * (10)	\$0.73
	Gavin Costs to Kentucky Power :	
12	Gavin Scrubber Portion (\$/kw) (11)	\$0.73
13	Kentucky Power Capacity Deficit (kw)	<u>220,100</u>
14	Scrubber Cost to Kentucky Power (12) * (13)	\$160,673

Total Cost at Line 14 is to be recorded on ES FORM 3.10, Line 16.



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

For the Expense Month of December 2004

LINE NO.	Component	Balances	Cap. Structure	Cost Rates		WACC (Net of Tax)	GRCF		WACC (PRE-TAX)	
		<b>As of 12/31/2002</b>								
1	L/T DEBT	\$466,631,680	57.24%	5.752%		3.29%			3.29%	
2	S/T DEBT	\$23,386,094	2.87%	2.062%		0.06%			0.06%	
3	ACCTS REC									
3	FINANCING	\$27,214,021	3.34%	2.804%		0.09%			0.09%	
4	C EQUITY	\$298,018,017	36.56%	11.000%	1/	4.02%	1.6801	2/	6.76%	
5	TOTAL	\$815,249,812	100.00%			7.46%			10.20%	
1/	WACC = Weighted Average Cost of Capital Rate of Return on Common Equity per Case No. 2002 - 00169									
2/	Gross Revenue Conversion Factor (GRCF) Calculation:									
1	OPERATING REVENUE						100.00			
2	UNCOLLECTIBLE						<u>0.20</u>			
3	INCOME BEFORE STATE TAXES						99.80			
4	LESS : STATE INCOME TAX									
5	(LINE 3 X .0825)						<u>8.23</u>			
6	INCOME BEFORE FED INC TAX						91.57			
7	LESS : FEDERAL INC TAX									
8	(LINE 6 X .35)						<u>32.05</u>			
9	OPERATING INC PERCENTAGE						<u>59.52</u>			
10	GROSS REVENUE CONVERSION									
11	FACTOR (100%/LINE 9)						1.6801			

The WACC (PRE - TAX) value on Line 5 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 December 2004

LINE NO.	COST COMPONENT		
	Return on Rate Base :		
1	Utility Plant at Original Cost	\$1,380,823	
2	Less Accumulated Depreciation	(\$463,709)	
3	Less Accum. Def. Income Taxes	(\$107,502)	
4	Total Rate Base		\$809,612
5	Weighted Average Cost of Capital - ES FORM 3.21	12.8049%	
6	Monthly Weighted Avg. Cost of Capital (LINE 5/12)		1.0671%
7	Monthly Return of Rate Base (4 * 6)		\$8,639
	Operating Expenses :		
8	Monthly Depreciation Expense		\$4,051
9	Monthly Indiana Air Emissions Fee		\$12,500
10	Total Operating Expenses (8 + 9)		\$16,551
11	Total Revenue Requirement, Cost Associated with Rockport (7) + (10)		\$25,190
12	Kentucky Power Portion of Rockport Total Revenue Requirement. Record on ES FORM 3.00, Line 2 (11 * 15%)		\$3,779

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 December 2004

LINE NO.	Component	Balances	Cap. Structures	Cost Rates		WACC (NET OF TAX)	GRCF		WACC (PRE - TAX)
		As of 12/31/2004							
1	L/T DEBT	44,818,899	48.0780%	4.6610%		2.2409%			2.2409%
2	S/T DEBT	263,272	0.2824%	2.1127%		0.0060%			0.0060%
3	S/T INV	0	0.0000%	4.6460%		0.0000%			0.0000%
4	DEBT								
5	C EQUITY	48,139,041	51.6397%	12.1600%	1/	6.2794%	1.681379	2/	10.5580%
6	TOTAL	93,221,212	100.0001%			8.5263%			12.8049%
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						100.00		
2	LESS: INDIANA ADJUSTED GROSS INCOME								
3	(LINE 1 X .085)						8.500		
4	INCOME BEFORE FED INC TAX						91.500		
5	LESS: FEDERAL INCOME TAX								
6	(LINE 4 X .35)						32.025		
7	OPERATING INCOME PERCENTAGE						59.475		
8	GROSS REVENUE CONVERSION								
9	FACTOR (100% / LINE 7)						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 December 2004

SCHEDULE OF MONTHLY REVENUES

Line No.	Description	Monthly Revenues	Percentage of Total Revenues
1	Kentucky Retail Revenues	\$32,351,686	71.5%
2	FERC Wholesale Revenues	\$349,129	0.8%
3	Associated Utilities Revenues	\$3,401,981	7.5%
4	Non-Assoc. Utilities Revenues	\$9,137,543	20.2%
5	Total Revenues for Surcharges Purposes	\$45,240,339	100.0%
6	Non-Physical Revenues for Month	(\$389,445)	
7	Total Revenues for Month	\$44,850,894	

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 2004	7.4456%
2	Kentucky Retail Revenues for Current Expense	\$30,184,780
3	Surcharge Collected (1) * (2)	\$2,247,438
4	Surcharge Amount To Be Collected	\$1,646,824
6	Over/(Under) Recovery (3) - (4) - (5)	\$600,614

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.