American Electric Power 101A Enterprise Drive PO Box 5190 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

AFF AMERICAN' RECEIVELECTRIC POWER

JUL 1 9 2004

PUBLIC GERVICE COMMISSION

July 19, 2004

Re: Monthly Environmental Surcharge Report

Dear Ms. O'Donnell

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 June 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 American Electric Power's Environmental Surcharge Factor that will be billed with service on and after July 29, 2004.

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 June 2004 environmental equipment operation and maintenance costs.

On ES FORM 3.00, LINE NO. 2, SO2 – Net Gain or (Loss) from Allowances Sales there is a (\$144,605) Credit amount for the month of June 2004. The (\$144,605) includes a correction of (\$145,048) from the prior month of May 2004. The Net Gain from Allowances Sales for June 2004 is \$443. The Net Gain from Allowance Sales for the month of May 2004 were overstated by \$145,048.

Also, on ES FORM 3.12 – ECR and NOx Emissions Allowance Inventory is the June 2004 activity for NOx allowances. The 10,094 EPA Allowances includes 930 Early Reduction Credits (ERC). The 420 NOx Allowances Consumed in June 2004 are ERC. There is no cost related to the NOx allowances consumed or ending inventory balance of NOx allowances.

Sincerely,

Errol K. Wagner

Director Regulatory Services

## American Electric P[ower Environmental Equipment Operation and Maintenance Costs June 2004

| Work<br>Description   | Material<br>Costs | Outside<br>Contract<br>Labor | Misc<br>Other<br>Costs | Total<br>Costs |
|---|-------------------|------------------------------|------------------------|----------------|
| Repair Expansion Joint<br>SCR Inlet & Reactor                   | \$19.62           | \$6,612.32                   | \$653.96               | \$7,285.90     |
| Installation of<br>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  | \$324.54          | \$0.00                       | \$0.00                 | \$324.54       |
| Repair Booster Fans   | (\$70.35)         | \$0.00                       | \$0.00                 | (\$70.35)      |
| Inspection and Maintenance of<br>Ammonia On Demand (AOD) System | \$5,128.80        | \$0.00                       | \$0.00                 | \$5,128.80     |
| NOX Monitor Vacuum Pumps -<br>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<br>#21 Mill Burners                        | \$0.00            | \$0.00                       | \$0.00                 | \$0.00         |
| Total SCR<br>June 2004<br>O & M Expense                         | \$5,402.61        | \$6,612.32                   | \$653.96               | \$12,668.89    |
| Additional Operator Overtime During The Ozone Season            | \$0.00            | \$0.00                       | \$22,444.24            | \$22,444.24    |
| Emission Testing Required Under Permit                          | \$5,226.34        | \$0.00                       | \$0.00                 | \$5,226.34     |
| June 2004<br>O & M Expenses Filed                               |                   | ·                            |                        | \$40,339       |

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

|      | CALCULATION OF E(m) |   |              |  |  |  |
|------|---------------------|---|--------------|--|--|--|
|      | E(m) = CRR - BRR    |   |              |  |  |  |
| LINE | 1                   | CRR from ES FORM 3.00   | \$2,904,217  |  |  |  |
| LINE | 2                   | Brr from ES FORM 2.00   | \$15,785     |  |  |  |
| LINE | . 3                 | E(m) (LINE 1 - LINE 2)  | \$2,888,432  |  |  |  |
| LINE | 4                   | Kentucky Retail Jurisdictional Allocation Factor, from ES FORM 3.30, Schedule of Revenues, LINE 1 | 62.7%        |  |  |  |
| LINE | 5                   | KY Retail E(m) (LINE 3 * LINE 4)  | \$1,811,047  |  |  |  |
| LINE | 6                   | Over/(Under) Recovery Adjustment from ES FORM 3.30  | \$54,408     |  |  |  |
| LINE | 7                   | Net KY Retail E(m) (LINE 5 + LINE 6)  | \$1,865,455  |  |  |  |
|      |                     | SURCHARGE FACTOR  | ·            |  |  |  |
| LINE | 8                   | Net KY Retail E(m) (Line 7)   | \$1,865,455  |  |  |  |
| LINE | 9                   | KY Retail R(m) from ES FORM 3.30  | \$24,636,706 |  |  |  |
| LINE | 10                  | Environmental Surchage Factor for Expense Month (Line 8 / LINE 9)                                 | 7.5719%      |  |  |  |

| Effective Date for Billing: | August 2004                  |
|-----------------------------|------------------------------|
| Submitted By :              | Enolfmon                     |
|                             | <u> </u>                     |
| Title:                      | Director Regulatory Services |
| Date Submitted :            | July 19, 2004                |

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

#### CALCULATION OF BASE PERIOD REVENUE REQUIREMENT

| LINE<br>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<br>NO. COST COMPON  | ENT   |
|--|---|
| Return on Rate Base (Balances as of  | December 31, 1990) :  |
| 1 Utility Plant at Original Cost 2 Less Accumulated Depreciation 3 Less Acum. Def. Income Taxes 4 Total Rate Base 5 Weighted Average Cost of Capital 6 Monthly Weighted Avg. Cost of Capital 7 December 1990 Return on Rate Base | 1.0683%<br>(4) * (6) \$4,794<br>ses:<br>\$10,597<br>\$234<br>\$10,831<br>ssociated with |

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

#### For the Month of December 1990

| LINE<br>NO. | COST COMPONENT                                    |                        | ,                   |
|-------------|---|------------------------|---------------------|
|             | Data Bara Bara                                    |                        |                     |
|             | Return on Rate Base :                             |                        | WWW.TRANGERACIPATES |
| 1 ]         | Utility Plant at Oringinal 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   | (\$13,834)<br>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:                               |                        | <b>43</b>           |
| 8           | Monthly Depreciation Expense                      |                        | \$313               |
|             | Monthly Indiana Air Emissions Fee                 |                        | \$7                 |
| 10          | Total Operating Expenses (8 + 9)                  |                        | \$3 <u>20</u>       |
| 11          | Total Revenue Requirement, Cost Associated with   |                        | <u> </u>            |
|             | Rockport (7) + (10)                               |                        | \$1,068             |
| 12          | Kentucky Power Portion of Rockport Total          |                        | φ1,000              |
|             | Revenue Requirement. Record on ES FORM 2.00,      |                        |                     |
| ]           | Line 2 (11 * 15%)                                 |                        | <b>6400</b>         |
| i l         | 2 (1. 10/6)                                       |                        | \$160               |
|             |   | 語思別沒能認用是從是能            |                     |

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<br>NO.   | Component  | Balances  | Cap.<br>Structures                   | Cost<br>Rates            |    | WACC<br>(NET OF TAX)             | GRCF  | · • · • | WACC<br>(PRE - TAX)                       |
|---|--|---|--------------------------------------|--------------------------|----|----------------------------------|---|---------|---|
| 1<br>2<br>3   | L/T DEBT<br>S/T DEBT<br>C EQUITY<br>TOTAL                            | 240,670,885<br>17,796,815<br>190,611,826<br>449,079,526 | 53.59%<br>3.96%<br>42.45%<br>100.00% | 8.20%<br>9.16%<br>11.50% | 1/ | 4.39%<br>0.36%<br>4.88%<br>9.63% | 1.6545  | 2/      | 4.39%<br>0.36%<br>8.07%<br><b>12.82</b> % |
| 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<br>2<br>3<br>4<br>5   | 2 UNCOLLECTIBLE 3 INCOME BEFORE STATE TAXES 4 LESS: STATE INCOME TAX |   |                                      |                          |    |                                  | 100.00<br><u>0.20</u><br>99.80<br><u>8.23</u> |         |   |
| 6 7   | 6 INCOME BEFORE FED INC TAX 7 LESS: FEDERAL INCOME TAX               |   |                                      |                          |    |                                  |   |         |   |
| 8<br>9<br>10<br>11  | GROSS REVEN  | 34)<br>INC PERCENTA<br>NUE CONVERSI<br>(100%/LINE 9)    |                                      |                          |    |                                  | 31.13<br>60.44<br>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<br>NO.           | DESC   | CAP. BAL,   | WEIGHTED<br>CAP. BAL.                            | CAP. COST<br>RATES                        |  | WAC<br>(NET OF TAX)                       | GRCF                             |    | WAC<br>(PRE - TAX)                        |
|-----------------------|--|---|--|---|--|---|----------------------------------|----|---|
| 1<br>2<br>3<br>4<br>5 | L/T DEBT<br>S/T DEBT<br>S/T INV<br>DEBT<br>C EQUITY  | 162,770,349<br>0<br>(26,356,261)<br>94,919,467<br>231,333,555 | 70.3618%<br>0.0000%<br>-11.3932%<br>41.0314%<br> | 7.7961%<br>0.0000%<br>7.7961%<br>12.1600% |  | 5.4855%<br>0.0000%<br>-0.8882%<br>4.9894% | 1.608260                         | 2/ | 4.5973%<br>8.0243%<br>12.6216%<br>======= |
| 1/                    | The second secon |   |  |   |  |   |                                  |    |   |
| 1<br>2<br>3<br>4      | 1 OPERATING REVENUE 2 LESS: INDIANA AJUSTED GROSS INCOME 3 (LINE 1 X .0434)  |   |  |   |  |   | 100.00<br><u>4.340</u><br>95.660 |    |   |
| 5<br>6<br>7<br>8<br>9 | 1100010  |   |  |   |  |   |                                  |    |   |

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

#### CALCULATION OF CURRENT PERIOD REVENUE REQUIREMENT

| LINE<br>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                           | ·               | \$2,755,954 |
| 2           | Second Component: Associated with Rockport Plant [((RB IM(C)) (ROR IM(C)/12)) + OE IM(C) ES FORM 3.20, Line 12                          |                 | \$3,658     |
|             | 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 | (\$144,605)     |             |
|             | Total Net Proceeds from SO2 Allowances  | (\$144,605)     |             |
|             | 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  | *************** | (\$144,605) |
| 4           | Total Current Period Revenue Requirement, CRR Record on ES FORM 1.00.   |                 | \$2,904,217 |

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

#### For the Expense Month of June 2004

| LINE |   | [              |                   |
|------|---|----------------|-------------------|
| NO.  | COST COMPONENT  | ļ              |                   |
|      | · · · · · · · · · · · · · · · · · · ·                     |                |                   |
| 1 1  | Return on Raté Base :                                     | ł              |                   |
| 1 1  | Utility Plant at Original Cost                            | \$187,226,105  |                   |
| 2    | Less Accumulated Depreciation                             | (\$12,666,788) |                   |
| 3    | Less Accum. Def. Income Taxes                             | (\$22,752,729) |                   |
| 4    | Net Utility Plant   |                | \$151,806,588     |
| 5    | SO2 Emission Allowance Inventory from ES FORM 3.11        |                | \$14,008,912      |
| 6    | ECR & NOx Emission Allowance Inventory from ES FORM 3.12  |                | \$0               |
| 7    | Cash Working Capital Allowance from ES FORM 3.13, Line11  |                | \$91,031          |
| 8    | Total Rate Base   |                | \$165,906,531     |
| 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)                     |                | \$1,410,206       |
|      | Operating Expenses:                                       |                |                   |
| 12   | Monthly Depreciation Expense                              |                | \$563,691         |
| 13   | Monthly Catalyst Amortization Expense                     |                | \$46,029          |
|      | Monthly Property Taxes                                    |                | \$7,783           |
| 15   | Monthly Kentucky Air Emissions Fee                        |                | \$23,668          |
|      | Monthly Gavin Scrubber Cost from ES FORM 3.14             |                | \$189,000         |
|      | Monthly 2003 Plan Non-Fuel O&M Expenses from ES FORM 3.13 |                | \$202,487         |
| 18   | Monthly SO2 Emission Allowance Consumption                |                | \$313,090         |
|      | Monthly ERC & NOx Emission Allowance Consumption          |                | \$0               |
| 20   | Total Operating Expenses [Line 12 thru Line 18]           |                | \$1,345,748       |
| 21   | Total Revenue Requirement - Big Sandy                     |                | <u>₩.10.011±0</u> |
| i I  | Record on ES FORM 3.00, Line 1                            |                | \$2,755,954       |
|      |   |                | φε,, σο,σοτ<br>   |

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

#### For the Expense Month of June 2004

|                                     | (1)<br>Allowance        | (2)        | (3)             | (4)                  | (5)                                     |
|-------------------------------------|-------------------------|------------|-----------------|----------------------|---|
|                                     | Activity in             | Cumulative | Dollar Value of | Cumulative           | Weighted                                |
|                                     | Month                   | Balance    | Activity        | Dollar Balance       | _                                       |
| DECIMINACINIVENTORY                 |                         | 754 000    |                 | 04.005.700           | <b>#0.000</b>                           |
| BEGINNING INVENTORY                 |                         | 754,608    |                 | \$4,685,726          | \$6.209                                 |
| Additions -                         | _                       |            |                 |                      |   |
| EPA Allowances                      | 0                       | 88,625     | \$0             | \$0                  | \$0.000                                 |
| Gavin Reallocation                  | 0                       | 3,853      | \$0             | \$0                  | \$0.000                                 |
| P & E Transfers In                  | 0                       | 312,630    | \$0             | \$3,639,150          | \$11.640                                |
| Intercompany Purchases              | 0                       | 12,132     | . \$0           | \$1,615,719          | \$133.178                               |
| Other (List)                        | 0                       | 556,230    | · \$0           | \$61,829,059         | \$111.157                               |
| Withdrawals -                       | ·                       |            | ·               |                      | • |
| P & E Transfers Out                 | 0                       | 2,415      | \$0             | \$272,099            | \$112.670                               |
| Intercompany Sales                  | 0                       | 51,893     | \$0             | \$4,941,374          | \$95.222                                |
| Off - System Sales                  | 0                       | 276,219    | \$0             | \$28,737,649         | \$104.039                               |
| SO2 Emissions Allowances            | , and the second        | _, _,,     | ,               | Ψ20,707,040          | Ψ104.000                                |
| Adjustments                         | 0                       | 34,941     | \$0             | \$0                  | \$0.000                                 |
| SO2 Emissions Allowances            |                         | 04,041     | ΨΟ              | Ψυ                   | φυ.υυυ                                  |
| Consumed By Kentucky Power          | 4,441                   | 259,753    | \$313,090       | \$23,809,620         | 004 CC0                                 |
| ENDING INVENTORY - Record           |                         | 200,700    | \$313,030       | φ <b>2</b> 3,009,020 | \$91.663                                |
| Balance in Column (4) on ES FORM    |                         |            |                 |                      |   |
| 3.10, Line 5                        |                         | 1 100 057  |                 | h11 000 010          | 040 700                                 |
|                                     | <b>《新聞》的學術學的學術學的學術學</b> | 1,102,857  | 地區的新聞的          | \$14,008,912         | \$12.702                                |
| Evpapa Month Mambaulas (D.)         | ,                       | Б          |                 |                      | l i                                     |
| Expense Month Member Load Ratio for | or AEP/Kentucky         | Power      | ·               |                      | 0.07034                                 |

#### 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 June 2004

|   | (1)<br>Allowance<br>Activity in<br>Month | (2)<br>Cumulative<br>Balance | (3)<br>Dollar Value of<br>Activity | (4)<br>Cumulative<br>Dollar Balance | (5)<br>Weighted<br>Average Cost |
|---|--|------------------------------|------------------------------------|-------------------------------------|---------------------------------|
| BEGINNING INVENTORY Additions -   |  |                              |                                    | \$0                                 | 0.000                           |
| EPA Allowances  | 10,094                                   | 10,094                       | \$0.                               | \$0                                 |                                 |
| P&E Transfers In  | 0  | 0                            |                                    | \$0                                 |                                 |
| Intercompany Purchases  | 0  | 0                            | \$0                                | \$0                                 | 0.000                           |
| Other (List)<br>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                            | <b>\$</b> 0                        | \$0                                 | 0.000                           |
| ERC Consumed By Kentucky Power  | 420                                      | 420                          | \$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 |  | 9,674                        |                                    | \$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 -

Total Early Reduction Credity (CDC)

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.

| Consumed:                               | 930              |
|---|------------------|
| June 2004                               | 420              |
| Total Consumed                          | <sup>~</sup> 420 |
| Remaining Early Reduction Credits (ERC) | 510              |

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

#### For the Expense Month of June 2004

| LINE                                    | 0.045   |   |  |
|---|---|---|--|
| NO.                                     | O&M Expenses  |   |  |
| 1<br>2<br>3<br>4                        | 1997 Plan: Monthly Kentucky Air Emissions Fee Monthly Gavin Scrubber Costs Monthly SO2 Allowance Consumption Total 1997 Plan O&M Expenses   | \$23,668<br>\$189,000<br><u>\$313,090</u>                     | \$525,758  |
| 5<br>6<br>7<br>8<br>9<br>10<br>11<br>12 | 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  Cash Working Capital Allowance ( Line 10 X 1/8 ) | \$0<br>\$162,148<br>\$0<br>\$0<br>\$22,444<br><u>\$17,895</u> | <u>\$202,487</u><br><u>\$728,245</u><br>\$91,031 |

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 June 2004

| LINE<br>NO.                          | COST   | AMOUNTS   |
|--------------------------------------|--|---|
| 1                                    | Operations: Disposal (5010000) Lime (5020000) Lease (5070000) Total Operations (1) + (2) + (3) Maintenance: Scrubbers (5120000) 1/2 of Maintenance (5) * 50% Fixed O&M (4) + (6)   | \$676,390<br>\$3,979,874<br>\$5.555,822<br>\$10,212,086<br>\$230,595<br>\$115,298<br>\$10,327,384 |
| 8<br>9<br>10<br>11<br>12<br>13<br>14 | Impact on Weighted Average Capacity Rate: Ohio Power Steam Capacity (kw) Gavin Scrubber Rate (\$/kw) (7) / (8) Ohio Power Surplus Weighing Portion of Weighted Average Capacity Rate Attributed to Gavin Scrubber (\$/kw) (9) * (10) Gavin Costs to Kentucky Power: Gavin Scrubber Portion (\$/kw) (11) Kentucky Power Capacity Deficit (kw) Scrubber Cost to Kentucky Power (12) * (13) | 8,472,000<br>\$1.22<br>86.00%<br>\$1.05<br>\$1.05<br><u>180.000</u><br>\$189,000                  |

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 June 2004

| LINE<br>NO.                         | Component   | Balances  | Cap.<br>Structure                             | Cost<br>Rates                         |  | WACC<br>(Net of Tax)   | GRCF           |    | WACC<br>(PRE-TAX)                          |
|-------------------------------------|---|---|---|---------------------------------------|--|--|----------------|----|--|
|                                     |   | As of 12/31/2002  |   |                                       |  |  | <b>G</b> 11.01 |    | ,  |
| 1<br>2<br>3<br>4<br>5               | L/T DEBT S/T DEBT ACCTS REC FINANCING C EQUITY TOTAL  | \$466,631,680<br>\$23,386,094<br>\$27,214,021<br>\$298,018,017<br>\$815,249,812 | 57.24%<br>2.87%<br>3.34%<br>36.56%<br>100.00% | 5.752%<br>2.062%<br>2.804%<br>11.000% |  | 3.29%<br>0.06%<br>0.09%<br>4.02%<br>7.46%  | 1.6801         | 2/ | 3.29%<br>0.06%<br>0.09%<br>6.76%<br>10.20% |
| 1/<br>2/<br>1 2 3 4 5 6 7 8 9 10 11 | WACC = Weighted Average Cost of Capital Rate of Return on Common Equity per Case No. 2002 - 00169  Gross Revenue Conversion Factor (GRCF) Calculation:  OPERATING REVENUE 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 FACTOR (100%/LINE 9) |   |   |                                       |  | 100.00<br><u>0.20</u><br>99.80<br><u>8.23</u><br>91.57<br><u>32.05</u><br><u>59.52</u><br>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 June 2004

| LINE<br>NO. | COST COMPONENT   |                |                 |
|-------------|--|----------------|-----------------|
|             | Return on Rate Base :  |                |                 |
| 1           | Utility Plant at Oringinal Cost                                | \$1,380,823    |                 |
| 2           | Less Accumulated Depreciation                                  | (\$439,582)    |                 |
| 3           | Less Accum. Def. Income Taxes                                  | (\$105,162)    |                 |
| 4           | Total Rate Base  |                | \$836,079       |
| 5.          | Weighted Average Cost of Capital - ES FORM 3.21                | 11.5023%       |                 |
| 6           | Monthly Weighted Avg. Cost of Capital (LINE 5/12)              |                | 0.9585%         |
| 7           | Monthly Return of Rate Base (4 * 6)                            |                | \$8,014         |
|             | Operating Expenses :   |                |                 |
| 8           | Monthly Depreciation Expense                                   |                | \$3,872         |
| 9           | Monthly Indiana Air Emissions Fee                              |                | <u>\$12,500</u> |
| 10          | Total Operating Expenses (8 + 9)                               |                | <u>\$16,372</u> |
| ł           | · -  |                |                 |
| 1           | Tetal Barragus Barrings and Cont. 6                            |                |                 |
| 11<br>f     | Total Revenue Requirement, Cost Associated with                |                |                 |
| 12          | Rockport (7) + (10) Kentucky Power Portion of Rockport Total   |                | \$24,386        |
| 12          | · ·  |                | . [             |
|             | Revenue Requirement. Record on ES FORM 3.00, Line 2 (11 * 15%) |                | #O 050          |
| ŀ           | (11 1376)  |                | \$3,658         |
| İ           |  |                |                 |
|             |  | <b>西州州西北京市</b> |                 |

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 June 2004

| LINE<br>NO.                                      | Component   | Balances  | Cap.<br>Structures                              | Cost<br>Rates                             |  | WACC<br>(NET OF TAX)   | GRCF     |    | WACC<br>(PRE - TAX)                          |
|--|---|---|---|---|--|--|----------|----|--|
|  |   | As of<br>06/30/2004                             |   |   |  |  |          |    |  |
| 1<br>2<br>3<br>4<br>5                            | L/T DEBT<br>S/T DEBT<br>S/T INV<br>DEBT<br>C EQUITY<br>TOTAL  | 44,814,517<br>10,391,821<br>0<br>45,874,893<br> | 44.3352%<br>10.2807%<br>0.0000%<br>45.3842%<br> | 4.6614%<br>1.5240%<br>4.0709%<br>12.1600% |  | 2.0666%<br>0.1567%<br>0.0000%<br>5.5187%<br><br>7.7420%                        | 1.681379 | 2/ | 2.0666%<br>0.1567%<br>0.0000%<br>9.2790%<br> |
| 1/<br>2/<br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8 | WACC = Weighted Average Cost of Capital Cost Rates per the Provisions of the Rockport Unit Power Agreement  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 |   |   |   |  | 100.00<br><u>8.500</u><br>91.500<br><u>32.025</u><br>59.475<br><u>1.681379</u> |          |    |  |

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 June 2004

#### SCHEDULE OF MONTHLY REVENUES

| Line<br>No.      | Description   | Monthly Revenues  | Percentage of Total<br>Revenues |
|------------------|---|---|---------------------------------|
| 1<br>2<br>3<br>4 | Kentucky Retail Revenues<br>FERC Wholesale Revenues<br>Associated Utilities Revenues<br>Non-Assoc. Utilities Revenues | \$24,636,706<br>\$241,287<br>\$4,678,539<br>\$9,735,117 | 62.7%<br>0.6%<br>11.9%<br>24.8% |
| 5                | Total Revenues for Surcharges Purposes  | \$39,291,649  | 100.0%                          |
| 6                | Non-Physical Revenues for Month   | \$910,158   |                                 |
| 7                | Total Revenues for Month  | \$40,201,807  |                                 |

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<br>No. | Description                                     | . Amounts    |
|-------------|---|--------------|
| 1           | Kentucky Retail Surcharge Factor for April 2004 | 8.5325%      |
| 2           | Kentucky Retail Revenues for Current Expense    | \$22,794,984 |
| 3           | Surcharge Collected (1) * (2)                   | \$1,944,982  |
| 4           | Surcharge Amount To Be Collected                | \$1,999,390  |
| 6           | Over/(Under) Recovery (3) - (4) - (5)           | (\$54,408)   |

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.