

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

**In the Matter of:**

**THE APPLICATION OF KENTUCKY UTILITIES )  
COMPANY FOR A CERTIFICATE OF PUBLIC )  
CONVENIENCE AND NECESSITY TO )  
CONSTRUCT FLUE GAS DESULFURIZATION ) CASE NO. 2004-00426  
SYSTEMS AND APPROVAL OF ITS 2004 )  
COMPLIANCE PLAN FOR RECOVERY BY )  
ENVIRONMENTAL SURCHARGE )**

**DIRECT TESTIMONY OF  
ROBERT M. CONROY  
MANAGER, RATES  
LG&E ENERGY SERVICES INC.**

**Filed: December 20, 2004**

1 **Q. Please state your name, position, and business address.**

2 A. My name is Robert M. Conroy. I am the Manager of Rates for LG&E Energy Services  
3 Inc. which provides services to Louisville Gas & Electric Company (“LG&E”) and  
4 Kentucky Utilities Company (“KU”) (collectively “the Companies”). My business  
5 address is 220 West Main Street, Louisville, Kentucky, 40202. A complete statement of  
6 my education and work experience is attached to this testimony as Appendix A.

7 **Q. Have you previously testified before this Commission?**

8 A. Yes. I have previously testified before this Commission in proceedings concerning the  
9 fuel adjustment clauses for LG&E and KU.

10 **Q. Are you sponsoring any exhibits?**

11 A. Yes. I am sponsoring four exhibits, identified as Exhibits RMC-1, RMC-2, RMC-3 and  
12 RMC-4. These exhibits are:

13 Exhibit RMC-1 Proposed KU Environmental Cost Recovery Surcharge Tariff

14 Exhibit RMC-2 Proposed KU Environmental Cost Recovery Surcharge Tariff (redline)

15 Exhibit RMC-3 Current KU Environmental Surcharge Monthly Reports Tariff

16 Exhibit RMC-4 Proposed KU Environmental Surcharge Monthly Reports Tariff

17 **Q. What is the purpose of your testimony?**

18 A. My testimony addresses how KU’s Electric Rate Schedule Environmental Cost Recovery  
19 Surcharge (“ECR”) tariff will be calculated to include the costs incurred with the new and  
20 additional pollution control projects in KU’s 2004 Environmental Compliance Plan  
21 (“2004 Plan”).

22 **Q. Is KU proposing any changes to its Environmental Cost Recovery Surcharge tariff?**

1 A. Yes. KU filed a revised ECR tariff sheet in accordance with the Commission Order in  
2 Case No. 2003-00434 issued on June 30, 2004 and as outlined in the Partial Settlement  
3 Agreement, Stipulation, and Recommendation (“Settlement Agreement”) entered into on  
4 May 12, 2004. KU is proposing modifications to incorporate Operations & Maintenance  
5 (“O&M”) expense for the Flue Gas Desulfurization systems (“scrubbers”) and minor  
6 tariff language changes. The proposed ECR Tariff is attached as Exhibit RMC-1. A  
7 redline version comparing the proposed ECR Tariff to the existing tariff is attached as  
8 Exhibit RMC-2.

9 **Q. Will the methodologies for calculating the environmental surcharge change if the**  
10 **Commission approves recovery of KU’s 2004 Plan?**

11 A. No. KU will use the approved methodologies for calculating the environmental  
12 surcharge as specified by the Commission in Case Nos. 2000-00439 and 2002-00146.  
13 The calculation of the monthly Environmental Surcharge billing factor will continue to  
14 consolidate the Post-1994 Environmental Compliance Plan and if approved, the proposed  
15 2004 Plan.

16 **Q. Will the monthly reporting forms used for calculating the environmental surcharge**  
17 **change if the Commission approves recovery of KU’s 2004 Plan?**

18 A. Yes. KU is proposing to change the format of some of the forms to reflect the recovery  
19 of the costs associated with the 2004 Plan and to reflect the changes agreed to in the  
20 Settlement Agreement, Section 3.4. Exhibit RMC-3 contains the forms KU currently  
21 uses when filing its monthly environmental surcharge report. Exhibit RMC-4 shows the  
22 sample monthly environmental surcharge report forms KU is proposing in this case.

23 **Q. Please describe the modifications that KU is proposing.**

1 A. The calculation of the monthly billing factor for recovery of the cost of KU's 2004 Plan  
2 will be consistent with the methodology approved by the Commission in Case No. 2002-  
3 00146 and used to calculate the recovery of the cost of KU's Post 1994 Environmental  
4 Compliance Plan. The ES Form 1.00 will be modified to combine Total E(m) for all  
5 ECR Plans that have not been incorporated into base rates at the 11.0% return on  
6 common equity as specified in the Commission's Order of June 30, 2004 in Case No.  
7 2003-00434 and the Settlement Agreement, Section 3.1. The ES Form 1.00 columns  
8 associated with the 1994 Plan are being removed as ordered by the Commission in Case  
9 No. 2003-00434 and as agreed to in the Settlement Agreement, Section 3.4. ES Form  
10 1.00 will continue to show the calculation of the Jurisdictional Environmental Surcharge  
11 Billing Factor using the same methodology previously approved by the Commission.  
12 Additionally, in the calculation of the Jurisdictional Environmental Surcharge Billing  
13 Factor, the line item for the Final Adjustment and True-Up for Over Recovery per  
14 Commission Order 2003-00068 has been removed due to its completion.

15 The determination of the Environmental Compliance Rate Base is based on  
16 combining all ECR approved expenditures and calculating the rate base according to the  
17 methodologies ordered in Case Nos. 2000-00439 and 2002-00146.

18 The calculation of the Environmental Compliance Rate Base on ES Form 2.00 is  
19 being modified to combine all ECR approved expenditures from the Post-1994 Plan and  
20 the 2004 Plan and in accordance with the methodologies ordered in Case Nos. 2000-  
21 00439 and 2002-00146. The current month ending inventory balance for current vintage  
22 emission allowances from ES Form 2.30 will be included in the calculation of the  
23 Environmental Compliance Rate Base net of the inventory baseline amount included in

1 KU's base rates. The monthly emission allowance expense for steam generation, as  
2 reported on ES Form 2.31 will be incorporated into the Determination of the Total  
3 Pollution Control Operating Expense on ES Form 2.00 net of the emission allowance  
4 expense included in base rates. An additional modification made to the form was to  
5 delete the reference to "1994 Plan Only" in the calculation of the Gross Proceeds From  
6 By-Product and Allowance Sales section.

7 The plant, construction work in progress and depreciation expense for the Post  
8 1994 Environmental Compliance Plan will continue to be reported using ES Form 2.11.  
9 KU is proposing to add on ES Form 2.11 monthly amounts for plant, construction work  
10 in progress, and depreciation for the additional projects in the 2004 Plan.

11 The Inventory of Emission Allowances will be reported on ES Forms 2.30 and  
12 2.31. The reporting format of these forms was previously approved in Case Nos. 2000-  
13 00439 and 2002-00146. ES Form 2.30 will be modified to include the current year  
14 allowance bank and the inventory dollars. Additionally, KU proposes that ES Form 2.31  
15 be utilized to report beginning and ending allowance inventory and monthly utilization by  
16 steam power generation and other power generation for the current year. The Allowances  
17 from Purchases is expanded to separately identify those purchases from the emission  
18 allowance market and those purchases from LG&E.

19 The ES Forms 2.40 and 2.50 are being modified to remove the references to the  
20 1994 Plan as ordered by the Commission in Case No. 2003-00434 and as agreed to in  
21 Section 3.4 of the Settlement Agreement and to include O&M Expenses for the 2004  
22 Plan. On ES Form 2.40, the reference to the 2001 Plan is being replaced with  
23 Environmental Compliance Plan to calculate Total 12 Month O&M and the Pollution

1 Control Cash Working Capital Allowance for all approved ECR Plans. Additional  
2 modifications to ES Form 2.40 include the deletion of all references to “incremental” in  
3 the form. On ES Form 2.50, the references to Tyrone and Green River have been omitted  
4 due to the deletion of items associated with the 1994 Plan. The account numbers for  
5 Scrubber O&M expense were added to the form to capture the expenses associated with  
6 the 2004 Plan.

7 The ES Forms 3.0 and 3.1 will not change and will continue to be used for  
8 monthly ES reporting.

9 **Q. Does KU anticipate having to purchase emission allowances?**

10 A. Yes. As discussed in Mr. Malloy’s testimony, it is anticipated that KU will need to  
11 purchase additional emission allowances by the end of 2005. Such purchases may be  
12 from the emission allowance market or from LG&E. Consistent with the Power Supply  
13 System Agreement (“PSSA”) the joint planning of the combined LG&E and KU system  
14 relies upon the ability to transfer allowances from one system to the other to develop a  
15 least cost compliance plan.

16 **Q. How will KU report these purchased allowances in the monthly filing?**

17 A. Any purchase will be reported on ES Form 2.31 and will be included in the  
18 Environmental Compliance Rate Base. Any transfer from LG&E will be treated as a  
19 purchase of an emission allowance at the then current market price as published by  
20 Cantor Emission Brokerage. Such transfers will be reported on ES Form 2.31 and will be  
21 included in the Environmental Compliance Rate Base for KU. Any transfer to LG&E  
22 will be treated as a sale of an emission allowance at the then current market price as

1 published by Cantor Emission Brokerage. The proceeds from such transfers will be  
2 accounted for and returned to customers on ES Form 2.00.

3 **Q. Does the relief requested by KU in this case have any effect on the existing electric**  
4 **base rates?**

5 A. No. Ms. Scott's testimony affirms that none of the costs of the new and additional  
6 pollution control facilities was incurred prior to or during the 12-month period ending  
7 September, 30, 2003 or included as adjustments hereto. Thus, none of these costs is  
8 already included in existing base rates.

9 The current base rates also do not include existing environmental surcharge  
10 revenues, expenses or assets associated with the 2001, 2003, and proposed 2004 Plans.  
11 The environmental surcharge revenues, expenses and assets associated with KU's 1994  
12 Plan are now recovered in KU's base rates as agreed to by all parties in the Settlement  
13 Agreement. To the extent that the installation of the new and additional pollution control  
14 facilities causes existing facilities to be replaced or retired, the cost of which is already  
15 included in existing rates, KU will credit the amount of net plant balance of retired or  
16 replaced plant against the amount of the capital expenditure to be recovered through the  
17 surcharge in accordance with the Commission's Order of May 14, 2001 in Case No.  
18 2000-00439. KU has been removing such amounts from the surcharge as necessary in  
19 the monthly calculation of the surcharge factor.

20 **Q. Will the estimated fuel cost reductions anticipated by the operation of the new**  
21 **FGD's be included in the monthly Fuel Adjustment Clause?**

22 A. Yes. As noted in Ms. Pfeiffer's testimony, KU expects to achieve reductions in fuel cost  
23 with the construction and operation of FGD's on Ghent 2, 3, and 4 and E.W. Brown 1-3

1 compared to the expected fuel cost under current operation. This reduction in fuel cost  
2 will be realized by the KU customers through the normal application of the Uniform Fuel  
3 Adjustment Clause (FAC). The FAC is a monthly billing adjustment that reflects the  
4 difference between the current cost of coal and other fuels and the fuel costs included in  
5 KU's base rates. The monthly billing factor is calculated as the total current month fuel  
6 costs divided by total current month energy sales. The result is a cost per kWh that is  
7 charged to all retail energy sales. To the extent that KU is able to make use of different  
8 coals with lower costs than those coal types currently being used at the Ghent and E. W.  
9 Brown stations, those lower costs will result in a lower monthly FAC billing factor than  
10 would otherwise be the case.

11 **Q. Please summarize what relief KU is requesting from the Commission.**

12 A. KU is asking the Commission to approve: (1) the 2004 Plan proposed in this case for  
13 purposes of recovering the costs of pollution control facilities in that plan through the  
14 environmental surcharge beginning with service rendered on and after July 1, 2005; (2)  
15 the proposed ECR Tariff; and (3) the proposed reporting formats.

16 **Q. Does this conclude your testimony?**

17 A. Yes it does.





## APPENDIX A

### **Robert M. Conroy**

Manager, Rates  
LG&E Energy Services Inc.  
220 West Main Street  
Louisville, Kentucky 40202  
(502) 627-3324

### **Education**

Masters of Business Administration  
Indiana University (Southeast campus), December 1998. GPA: 3.9.

Bachelor of Science in Electrical Engineering;  
Rose Hulman Institute of Technology, May 1987. GPA: 3.3

Center for Creative Leadership, Foundations in Leadership program, 1998.

Registered Professional Engineer in Kentucky, 1995.

### **Previous Positions**

Manager, Generation Systems Planning	Feb. 2001 – April 2004
Group Leader, Generation Systems Planning	Feb. 2000 – Feb. 2001
Lead Planning Engineer	Oct. 1999 – Feb. 2000
Consulting System Planning Analyst	April 1996 – Oct. 1999
System Planning Analyst III & IV	Oct. 1992 - April 1996
System Planning Analyst II	Jan. 1991 - Oct. 1992
Electrical Engineer II	Jun. 1990 - Jan. 1991
Electrical Engineer I	Jun. 1987 - Jun. 1990

### **Professional/Trade Memberships**

Registered Professional Engineer in Kentucky, 1995.

**Exhibit RMC-1 -- Proposed KU Environmental Cost  
Recovery Surcharge**

## Kentucky Utilities Company

First Revision to Original Sheet No. 72

P.S.C. No. 13

**ECR****Environmental Cost Recovery Surcharge****APPLICABLE**

In all territory served.

**AVAILABILITY OF SERVICE**

To all electric rate schedules.

**RATE**

The monthly billing amount under each of the schedules to which this mechanism is applicable, including the fuel clause, shall be increased or decreased by a percentage factor calculated in accordance with the following formula.

$$\text{CESF} = \text{E(m)} / \text{R(m)}$$

$$\text{MESF} = \text{CESF} - \text{BESF}$$

MESF = Monthly Environmental Surcharge Factor

CESF = Current Environmental Surcharge Factor

BESF = Base Environmental Surcharge Factor

Where E(m) is the jurisdictional total of each approved environmental compliance plan revenue requirement of environmental compliance costs for the current expense month and R(m) is the revenue for the current expense month as set forth below.

**DEFINITIONS**

- 1) For all Plans,  $\text{E(m)} = [(\text{RB}/12) (\text{ROR} + (\text{ROR} - \text{DR}) (\text{TR} / (1 - \text{TR})))] + \text{OE}$   
Where:
  - a) RB is the Total Environmental Compliance Rate Base.
  - b) Where ROR is the Rate of Return in Environmental Compliance Rate Base, designated as the overall all rate of return [cost of short term debt, long term debt, preferred stock, and common equity]
  - c) Where DR is the Debt Rate [cost of short term debt, and long term debt]
  - d) Where TR is the Composite Federal and State Income Tax Rate.
  - e) Where OE is the Operating Expenses [Depreciation and Amortization Expense, Property Taxes, Insurance Expense adjusted for the Average Month Expense already included in existing rates]. Includes operation and maintenance expense recovery authorized by the K.P.S.C. in Case Nos. 2000-439, 2002-146 and 2004-00426.
- 2) Total E(m) (sum of each approved environmental compliance plan revenue requirement) is multiplied by the Jurisdictional Allocation Factor to arrive at Net Jurisdictional E(m)
- 3) The revenue R(m) is the average monthly revenue, including base revenues and automatic adjustment clause revenues less Environmental Cost Recovery Surcharge revenues, for the Company for the 12 months ending with the current expense month.
- 4) Current expense month (m) shall be the second month preceding the month in which the Environmental Surcharge is billed.

Date of Issue: December 20, 2004  
Canceling Original Sheet No. 72  
Issued July 20, 2004

Issued By

John R. McCall, Executive Vice President  
General Counsel and Secretary  
Louisville, Kentucky

Date Effective: With Service Rendered  
On and After July 1, 2005

Issued By Authority of an Order of the KPSC in Case No. 2004-00426 dated:

**Exhibit RMC-2 -- Proposed KU Environmental Cost  
Recovery Surcharge [Redline]**

**ECR**  
**Environmental Cost Recovery Surcharge**

**APPLICABLE**

In all territory served.

**AVAILABILITY OF SERVICE**

To all electric rate schedules.

**RATE**

The monthly billing amount under each of the schedules to which this mechanism is applicable, including the fuel clause, shall be increased or decreased by a percentage factor calculated in accordance with the following formula.

$$CESF = E(m) / R(m)$$

$$MESF = CESF - BESF$$

MESF = Monthly Environmental Surcharge Factor

CESF = Current Environmental Surcharge Factor

BESF = Base Environmental Surcharge Factor

Where E(m) is the jurisdictional total of each approved environmental compliance plan revenue requirement of environmental compliance costs for the current expense month and R(m) is the revenue for the current expense month as set forth below.

**DEFINITIONS**

1) For all Plans,  $E(m) = [(RB/12) (ROR + (ROR - DR) (TR / (1 - TR)))] + OE$

Where:

- a) RB is the Total Environmental Compliance Rate Base,
- b) Where ROR is the Rate of Return in Environmental Compliance Rate Base, designated as the overall all rate of return [cost of short term debt, long term debt, preferred stock, and common equity]
- c) Where DR is the Debt Rate [cost of short term debt, and long term debt]
- d) Where TR is the Composite Federal and State Income Tax Rate.
- e) Where OE is the Operating Expenses [Depreciation and Amortization Expense, Property Taxes, Insurance Expense adjusted for the Average Month Expense already included in existing rates]. Includes operation and maintenance expense recovery authorized by the K.P.S.C. in Case Nos. 2000-439, 2002-146 and 2004-00426.

2) Total E(m) (sum of each approved environmental compliance plan revenue requirement) is multiplied by the Jurisdictional Allocation Factor to arrive at Net Jurisdictional E(m)

3) The revenue R(m) is the average monthly revenue, including base revenues and automatic adjustment clause revenues less Environmental Cost Recovery Surcharge revenues, for the Company for the 12 months ending with the current expense month.

4) Current expense month (m) shall be the second month preceding the month in which the Environmental Surcharge is billed.

**Deleted:** excluding the 1994 Environmental Compliance Rate Base, adjusted for eligible Pollution Control Plant in Service, Accumulated Depreciation, and Deferred Taxes already included in existing rates

**Deleted:** accounts receivable financing,

**Deleted:** accounts receivable financing,

**Deleted:** and

**Deleted:** Date of Issue: July 20, 2004 Issued By Date Effective: With Service Rendered On and After October 31, 2003  
Refiled: July 20, 2004  
Michael S. Beer, Vice President  
Lexington, Kentucky  
Issued By Authority of an Order of the KPSC in Case No. 2003-00434 dated June 30, 2004

Date of Issue: December 20, 2004      Issued By      Date Effective: With Service Rendered  
Canceling Original Sheet No. 72      On and After July 1, 2005

Issued July 20, 2004      John R. McCall, Executive Vice President  
General Counsel and Secretary  
Louisville, Kentucky

Issued By Authority of an Order of the KPSC in Case No. 2004-00426 dated:

**Exhibit RMC-3 – Current KU Environmental  
Surcharge Monthly Reports**

## KENTUCKY UTILITIES COMPANY ENVIRONMENTAL SURCHARGE REPORT

Calculation of Monthly Billed Environmental Surcharge Factor - MESF  
For the Expense Month of

$$\text{MESF} = \text{CESF} - \text{BESF}$$

Where:

CESF = Current Period Jurisdictional Environmental Surcharge Factor

BESF = Base Period Jurisdictional Environmental Surcharge Factor

Calculation of MESF:

CESF, from ES Form 1.1	=	
BESF, from Case No. 2003-00434	=	0.30%
MESF	=	

Effective Date for Billing:

Submitted by: \_\_\_\_\_

Title: Manager, Rates

Date Submitted: \_\_\_\_\_



**KENTUCKY UTILITIES COMPANY  
ENVIRONMENTAL SURCHARGE REPORT**

**Calculation of Total E(m) and  
Jurisdictional Surcharge Billing Factor  
For the Expense Month of**

Calculation of Total E(m)

$$\text{Total E(m)} = 1994\text{E(m)} + 2001\text{E(m)}$$

$$1994\text{E(m)} = [(RB / 12) (ROR)] + OE - \text{BAS, where}$$

- RB = Environmental Compliance Rate Base for the 1994 Plan
- ROR = Rate of Return on the 1994 Plan Rate Base
- OE = Pollution Control Operating Expenses for the 1994 Plan
- BAS = Gross Proceeds from By-Product and Allowance Sales

$$\text{Post-1994E(m)} = [(RB / 12) (ROR + (ROR - DR)(TR / (1 - TR)))] + OE, \text{ where}$$

- RB = Environmental Compliance Rate Base for the 2001 Plan
- ROR = Rate of Return on the 2001 Plan Rate Base
- DR = Debt Rate (both short-term and long-term debt)
- TR = Composite Federal & State Income Tax Rate
- OE = Pollution Control Operating Expenses for the 2001 Plan

	1994 Plan	Post-1994 Plan
RB	=	
RB / 12	=	
ROR [1994 Plan]	=	
(ROR + (ROR - DR) (TR / (1 - TR))) [2001 Plan]	=	11.48%
OE	=	
BAS	=	
1994E(m)	=	
Post-1994E(m)	=	
Total E(m) = 1994E(m) + Post-1994E(m)	=	

**Calculation of Jurisdictional Environmental Surcharge Billing Factor**

Jurisdictional Allocation Ratio for Expense Month	=
Jurisdictional E(m) = Total E(m) x Jurisdictional Allocation Ratio	=
Adjustment for Monthly True-up (from Form 2.0)	=
Prior Month Adjustment (if necessary)	=
Final Adjustment and True-up for Over Recovery per Commission Order 2003-00068	=
Net Jurisdictional E(m) = Jurisdictional E(m) minus Adjustment for Over/(Under) Recovery	=
Jurisdictional R(m) = Average Monthly Jurisdictional Revenue for the 12 Months Ending with the Current Expense Month	=
Jurisdictional Environmental Surcharge Billing Factor: Net Jurisdictional E(m) / Jurisdictional R(m) ; as a % of Revenue	=

**KENTUCKY UTILITIES COMPANY**  
**ENVIRONMENTAL SURCHARGE REPORT**  
Revenue Requirements of Environmental Compliance Costs  
For the Expense Month of  
Determination of Environmental Compliance Rate Base

	1994 Plan	Post-1994 Plan
Eligible Pollution Control Plant		
Eligible Pollution CWIP Excluding AFUDC		
Subtotal		
Additions:		
Inventory - Spare Parts		
Inventory - Limestone		
Inventory - Emission Allowances per Form 2.30		
less Allowance Inventory baseline		\$69,415
Net Emission Allowance Inventory		
Cash Working Capital Allowance		
Subtotal		
Deductions:		
Accumulated Depreciation on Eligible Pollution Control Plant		
Pollution Control Deferred Income Taxes		
Pollution Control Deferred Investment Tax Credit		
Subtotal		
Environmental Compliance Rate Base		

Determination of Pollution Control Operating Expenses

	1994 Plan	Post-1994 Plan
Monthly Operations & Maintenance Expense (Incremental for 1994)		
Monthly Depreciation & Amortization Expense		
Monthly Taxes Other Than Income Taxes		
Monthly Insurance Expense		
Monthly Emission Allowance Expense		
Monthly Surcharge Consultant Fee		
Total Pollution Control Operating Expense		

Gross Proceeds From By-Product and Allowance Sales (1994 Plan Only)

Allocated Allowances from EPA	Allowances from Over-Control	Allowances from Purchases	Total Proceeds from Allowance Sales	Proceeds from By-Products Sales

True-up Adjustment: Over/Under Recovery of Monthly Surcharge Due to Timing Differences

MESF for Expense Month	
Net Jurisdictional E(m) for Expense Month	
Environmental Surcharge Revenue, current month (from Form 3.00)	
Environmental Surcharge Revenue recovered through base rates (Base Revenues, Form 3.0 * 2.685%)	
Over/(Under) Recovery due to Timing Differences (D - C)	
Over-recoveries will be deducted from the Jurisdictional E(m); under-recoveries will be added to the Jurisdictional E(m)	

**KENTUCKY UTILITIES COM PANY**  
**ENVIRONMENTAL SURCHARGE REPORT**  
 Plant, CWIP & Depreciation Expense - Post-1994 Plan

For the Month Ended

(1) Description	(2) Eligible Plant In Service	(3) Eligible Accumulated Depreciation	(4) CWIP Amount Excluding AFUDC	(5) Eligible Net Plant In Service	(6) Unamortized ITC as of xx/dd/yy	(7) Deferred Tax Balance as of xx/dd/yy	(8) Monthly Depreciation Expense	(9) Monthly Property Tax Expense
				(2)-(3)-(4)				
<b>2001 Plan:</b>								
Project 16 - KU Nox modifications								
Project 17 - KU Nox SCR's								
Less Retirements and Replacement resulting from implementation of 2001 Plan								
Subtotal								
<b>2003 Plan:</b>								
Project 18 - Ghent Ash Pond Dike Elevation								
Less Retirements and Replacement resulting from implementation of 2001 Plan								
Subtotal								
<b>TOTAL</b>								



**KENTUCKY UTILITIES COMPANY**  
**ENVIRONMENTAL SURCHARGE REPORT**  
**O&M Expenses and Determination of Cash Working Capital Allowance**

**For the Month Ended**

1994 Plan		2001 Plan	
Incremental O&M Expenses	Amount	NOx O&M Expenses	Amount
11th Previous Month		11th Previous Month	
10th Previous Month		10th Previous Month	
9th Previous Month		9th Previous Month	
8th Previous Month		8th Previous Month	
7th Previous Month		7th Previous Month	
6th Previous Month		6th Previous Month	
5th Previous Month		5th Previous Month	
4th Previous Month		4th Previous Month	
3rd Previous Month		3rd Previous Month	
2nd Previous Month		2nd Previous Month	
Previous Month		Previous Month	
Current Month		Current Month	
Total 12 Month O&M		Total 12 Month O&M	
Less Baseline (12 Months End 05/31/94)	0.00		
12 Months Incremental O&M			
Monthly Incremental O&M			

Determination of Working Capital Allowance	
12 Months Incremental O&M Expenses	Total 12 Months O&M Expenses
One Eighth (1/8) of 12 Month Incremental O&M Expenses	One Eighth (1/8) of 12 Month Incremental O&M Expenses
Pollution Control Cash Working Capital Allowance - 1994 Plan	Pollution Control Cash Working Capital Allowance - 2001 Plan

**KENTUCKY UTILITIES COMPANY  
ENVIRONMENTAL SURCHARGE REPORT**

Pollution Control - Operations & Maintenance Expenses  
For the Month Ended

O&M Expense Account	Tyrone	Green River	E. W. Brown	Ghent	Total
<b>1994 Plan</b>					
502006 - Scrubber Operation					
506001 - CEMS & Precipitators Operation					
512005 - Scrubber Maintenance					
512011 - CEMS & Precipitators Maintenance					
512017 - Ash Handling - Maintenance					
Total 1994 Plan O&M Expenses					
<b>2001 Plan</b>					
506105 - NOx Operation					
512101 - NOx Maintenance					
Total 2001 Plan O&M Expenses					

**KENTUCKY UTILITIES COMPANY**  
**ENVIRONMENTAL SURCHARGE REPORT**  
Monthly Average Revenue Computation of R (m)

For the Month Ended

(1)	Kentucky Jurisdictional Revenues					Non-Jurisdictional Revenues (7)	Total Company Revenues (8)	Total Excluding Environmental Surcharge (9)
	(2)	(3)	(4)	(5)	(6)			
Month	Base Rate Revenues	Fuel Clause Revenues	Environmental Surcharge Revenues	Total (2)+(3)+(4)	Total Excluding Environmental Surcharge (5)-(4)	Total Including Off-System Sales (See Note 1)	Total (5)+(7)	Total Excluding Environmental Surcharge (8)-(4)
Sep-03				(2)+(3)+(4)	(5)-(4)	(See Note 1)	(5)+(7)	(8)-(4)
Oct-03								
Nov-03								
Dec-03								
Jan-04								
Feb-04								
Mar-04								
Apr-04								
May-04								
Jun-04								
Jul-04								
Aug-04								
Average Monthly Jurisdictional Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month.								
Jurisdictional Allocation Percentage for Current Month (Environmental Surcharge Excluded from Calculations):								
Expense Month Kentucky Jurisdictional Revenues Divided by Expense Month Total Company Revenues: Column (6) / Column (9) =								
						Note 1 - Excludes Brokered Sales, Total for Current Month =		

**KENTUCKY UTILITIES COMPANY**  
**ENVIRONMENTAL SURCHARGE REPORT**  
**Reconciliation of Reported Revenues**

For the Month Ended

Description	Revenues per ES Form 3.0	Revenues per Income Statement
Kentucky Retail Revenues		
Base Rates		
Fuel Adjustment Clause		
Environmental Surcharge		
CSR Credits		
Total Kentucky Jurisdictional Revenues for Environmental Surcharge Purposes =		
Non -Jurisdictional Revenues		
Tennessee Retail		
Virginia Retail		
Wholesale		
InterSystem ( Total Less Transmission Portion Booked in Account 447)		
Pitcairn, PA		
Total Non-Jurisdictional Revenues for Environmental Surcharge Purposes =		
Total Company Revenues for Environmental Surcharge Purposes =		
Reconciling Revenues		
Brokered		
InterSystem ( Transmission Portion Booked in Account 447)		
Unbilled		
Provision for Refund		
Monthly Merger Surcredit Settlement Amortization		
Miscellaneous		
Total Company Revenues per Income Statement =		



**Exhibit RMC-4 -- Proposed KU Environmental  
Surcharge Monthly Reports**

# KENTUCKY UTILITIES COMPANY ENVIRONMENTAL SURCHARGE REPORT

Calculation of Monthly Billed Environmental Surcharge Factor - MESF  
For the Expense Month of

$$\text{MESF} = \text{CESF} - \text{BESF}$$

Where:

CESF = Current Period Jurisdictional Environmental Surcharge Factor

BESF = Base Period Jurisdictional Environmental Surcharge Factor

Calculation of MESF:

CESF, from ES Form 1.1	=	
BESF, from Case No. 2003-00434	=	0.30%
MESF	=	

Effective Date for Billing:

Submitted by: \_\_\_\_\_

Title: Manager, Rates

Date Submitted: \_\_\_\_\_

**KENTUCKY UTILITIES COMPANY  
ENVIRONMENTAL SURCHARGE REPORT**  
Calculation of E(m) and  
Jurisdictional Surcharge Billing Factor  
For the Expense Month of

Calculation of E(m)

$E(m) = [(RB / 12) (ROR + (ROR - DR)(TR / (1 - TR)))] + OE$ , where  
 RB = Environmental Compliance Rate Base  
 ROR = Rate of Return on the Environmental Compliance Rate Base  
 DR = Debt Rate (both short-term and long-term debt)  
 TR = Composite Federal & State Income Tax Rate  
 OE = Pollution Control Operating Expenses

	Environmental Compliance Plans	
RB	=	
RB / 12	=	
$(ROR + (ROR - DR) (TR / (1 - TR)))$	=	11.48%
OE	=	
BAS	=	
E(m)	=	

Calculation of Jurisdictional Environmental Surcharge Billing Factor

Jurisdictional Allocation Ratio for Expense Month	=	
Jurisdictional E(m) = E(m) x Jurisdictional Allocation Ratio	=	
Adjustment for Monthly True-up (from Form 2.0)	=	
Prior Month Adjustment (if necessary)	=	
Net Jurisdictional E(m) = Jurisdictional E(m) minus Adjustment for Over/(Under) Recovery	=	
Jurisdictional R(m) = Average Monthly Jurisdictional Revenue for the 12 Months Ending with the Current Expense Month	=	
Jurisdictional Environmental Surcharge Billing Factor: Net Jurisdictional E(m) / Jurisdictional R(m) ; as a % of Revenue	=	

**KENTUCKY UTILITIES COMPANY**  
**ENVIRONMENTAL SURCHARGE REPORT**  
Revenue Requirements of Environmental Compliance Costs  
For the Expense Month of

Determination of Environmental Compliance Rate Base

	Environmental Compliance Plan	
Eligible Pollution Control Plant		
Eligible Pollution CWIP Excluding AFUDC		
Subtotal		
Additions:		
Inventory - Spare Parts		
Inventory - Limestone		
Inventory - Emission Allowances per Form 2.30		
Less: Allowance Inventory Baseline	69,415	
Net Emission Allowance Inventory		
Cash Working Capital Allowance		
Subtotal		
Deductions:		
Accumulated Depreciation on Eligible Pollution Control Plant		
Pollution Control Deferred Income Taxes		
Pollution Control Deferred Investment Tax Credit		
Subtotal		
Environmental Compliance Rate Base		

Determination of Pollution Control Operating Expenses

	Environmental Compliance Plan
Monthly Operations & Maintenance Expense	
Monthly Depreciation & Amortization Expense	
Monthly Taxes Other Than Income Taxes	
Monthly Insurance Expense	
Monthly Emission Allowance Expense from Form 2.31	
Less Monthly Emission Allowance Expense in base rates (1/12 of \$58,345.76)	4,862
Net Recoverable Emission Allowance Expense	
Monthly Surcharge Consultant Fee	
Total Pollution Control Operating Expense	

Gross Proceeds From By-Product and Allowance Sales

Allocated Allowances from EPA	Allowances from Over-Control	Allowances from Purchases	Total Proceeds from Allowance Sales	Proceeds from By-Products Sales

True-up Adjustment: Over/Under Recovery of Monthly Surcharge Due to Timing Differences

MESF for Expense Month	
Net Jurisdictional E(m) for Expense Month	
Environmental Surcharge Revenue, current month (from Form 3.00)	
Environmental Surcharge Revenue recovered through base rates (Base Revenues, Form 3.0 * 0.30%)	
Over/(Under) Recovery due to Timing Differences (D - C)	
Over-recoveries will be deducted from the Jurisdictional E(m); under-recoveries will be added to the Jurisdictional E(m)	

ES FORM 2.11

**KENTUCKY UTILITIES COMPANY**  
**ENVIRONMENTAL SURCHARGE REPORT**  
Plant, CWIP & Depreciation Expense

For the Month Ended

(1) Description	(2) Eligible Plant In Service	(3) Eligible Accumulated Depreciation	(4) CWIP Amount Excluding AFUDC	(5) Eligible Net Plant In Service	(6) Unamortized ITC as of xx/dd/yy	(7) Deferred Tax Balance as of xx/dd/yy	(8) Monthly Depreciation Expense	(9) Monthly Property Tax Expense
<b>2001 Plan:</b>								
Project 16 - KU Nox modifications								
Project 17 - KU Nox SCR's								
Less Retirements and Replacement resulting from implementation of 2001 Plan				(2)-(3)+(4)				
Subtotal								
<b>2003 Plan:</b>								
Project 18 - Ghent Ash Pond Dike Elevation								
Less Retirements and Replacement resulting from implementation of 2003 Plan								
Subtotal								
<b>2004 Plan:</b>								
Project 19: Ash Handling at Ghent 1 and Ghent Station								
Project 20: Ash Treatment Basin Expansion at E.W. Brown Station								
Project 21: FGD's at all E.W. Brown Units and at Ghent 2, 3, and 4								
Less Retirements and Replacement resulting from implementation of 2004 Plan								
Subtotal								
<b>TOTAL</b>								

**KENTUCKY UTILITIES COMPANY**  
**ENVIRONMENTAL SURCHARGE REPORT**  
Inventory of Emission Allowances

For the Expense Month of

Vintage Year	Number of Allowances	Total Dollar Value of Vintage Year	Comments and Explanations
Current Year			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			
2014			
2015			
2016			
2017			
2018			
2019			
2020			
2021			
2022			
2023			
2024 - 2033			

In the "Comments and Explanation" Column, describe any allowance inventory adjustment other than the assignment of allowances by EPA. Inventory adjustments include, but are not limited to, purchases, allowances acquired as part of other purchases, and the sale of allowances.

**KENTUCKY UTILITIES COMPANY**  
**ENVIRONMENTAL SURCHARGE REPORT**  
Inventory of Emission Allowances - Current Vintage Year

For the Month Ended

	Beginning Inventory	Allocations/ Purchases	Utilized (Steam Power)	Utilized (Other Power Generation)	Sold	Ending Inventory	Allocation, Purchase, or Sale Date & Vintage Years
<b>TOTAL EMISSION ALLOWANCES IN INVENTORY, ALL CLASSIFICATIONS</b>							
Quantity							
Dollars							
\$/Allowance							
<b>ALLOCATED ALLOWANCES FROM EPA: STEAM vs OTHER</b>							
Quantity							
Dollars							
<b>ALLOWANCES FROM PURCHASES:</b>							
From Market:							
Quantity							
Dollars							
From LG&E:							
Quantity							
Dollars							
Cantor-Fitzgerald Market Price for SO2 emission allowances at [date]: [\$ amount]							

Emission Allowance Expense for Other Power Generation is excluded from expense reported on Form 2.00 for recovery through the monthly billing factor.

**KENTUCKY UTILITIES COMPANY  
ENVIRONMENTAL SURCHARGE REPORT  
O&M Expenses and Determination of Cash Working Capital Allowance**

**For the Month Ended**

Environmental Compliance Plan	
NOx O&M Expenses	Amount
11th Previous Month	
10th Previous Month	
9th Previous Month	
8th Previous Month	
7th Previous Month	
6th Previous Month	
5th Previous Month	
4th Previous Month	
3rd Previous Month	
2nd Previous Month	
Previous Month	
Current Month	
Total 12 Month O&M	

Determination of Working Capital Allowance	
12 Months O&M Expenses	
One Eighth (1/8) of 12 Month O&M Expenses	
Pollution Control Cash Working Capital Allowance	



**KENTUCKY UTILITIES COMPANY  
ENVIRONMENTAL SURCHARGE REPORT**

Pollution Control - Operations & Maintenance Expenses  
For the Month Ended

O&M Expense Account	E. W. Brown	Ghent	Total
<b>2001 Plan</b>			
506105 - NOx Operation			
512101 - NOx Maintenance			
Total 2001 Plan O&M Expenses			
<b>2004 Plan</b>			
502006-Scrubber Operations			
512005-Scrubber Maintenance			
Total 2004 Plan O&M Expenses			

**KENTUCKY UTILITIES COMPANY**  
**ENVIRONMENTAL SURCHARGE REPORT**  
Monthly Average Revenue Computation of R (m)

For the Month Ended

(1)	Kentucky Jurisdictional Revenues				(5)	(6)	Non-Jurisdictional Revenues	(8)	(9)
	(2)	(3)	(4)	(7)					
Month	Base Rate Revenues	Fuel Clause Revenues	Environmental Surcharge Revenues	Total	Total Excluding Environmental Surcharge	Total Including Off-System Sales	Total Company Revenues	Total Excluding Environmental Surcharge	
				(2)+(3)+(4)	(5)-(4)	(See Note 1)	(5)+(7)	(8)-(4)	
Sep-03									
Oct-03									
Nov-03									
Dec-03									
Jan-04									
Feb-04									
Mar-04									
Apr-04									
May-04									
Jun-04									
Jul-04									
Aug-04									
Average Monthly Jurisdictional Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month.									
Jurisdictional Allocation Percentage for Current Month (Environmental Surcharge Excluded from Calculations):									
Expense Month Kentucky Jurisdictional Revenues Divided by Expense Month Total Company Revenues: Column (6) / Column (9) =									
Note 1 - Excludes Brokered Sales, Total for Current Month =									

**KENTUCKY UTILITIES COMPANY  
ENVIRONMENTAL SURCHARGE REPORT  
Reconciliation of Reported Revenues**

**For the Month Ended**

Description	Revenues per ES Form 3.0	Revenues per Income Statement
Kentucky Retail Revenues		
Base Rates		
Fuel Adjustment Clause		
Environmental Surcharge		
CSR Credits		
Total Kentucky Jurisdictional Revenues for Environmental Surcharge Purposes =		
Non -Jurisdictional Revenues		
Tennessee Retail		
Virginia Retail		
Wholesale		
InterSystem ( Total Less Transmission Portion Booked in Account 447)		
Pitcairn, PA		
Total Non-Jurisdictional Revenues for Environmental Surcharge Purposes =		
Total Company Revenues for Environmental Surcharge Purposes =		
Reconciling Revenues		
Brokered		
InterSystem ( Transmission Portion Booked in Account 447)		
Unbilled		
Provision for Refund		
Monthly Merger Surcredit Settlement Amortization		
Miscellaneous		
Total Company Revenues per Income Statement =		