

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

**AN EXAMINATION BY THE PUBLIC SERVICE)
COMMISSION OF THE ENVIRONMENTAL)
SURCHARGE MECHANISM OF KENTUCKY) CASE NO.
UTILITIES COMPANY FOR THE SIX-MONTH) 2016-00437
BILLING PERIOD ENDING OCTOBER 31, 2016)**


**RESPONSE OF
KENTUCKY UTILITIES COMPANY
TO
COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO
APPENDIX B OF COMMISSION'S ORDER
DATED JANUARY 4, 2017**

FILED: JANUARY 24, 2017

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Derek A. Rahn**, being duly sworn, deposes and says that he is Manager - Revenue Requirement for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Derek A. Rahn

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 24th day of January 2017.



Notary Public (SEAL)

My Commission Expires:
JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Heather D. Metts**, being duly sworn, deposes and says that she is Director – Regulatory Accounting & Reporting for LG&E and KU Services Company, and that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge and belief.

Heather D. Metts

Heather D. Metts

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 24th day of January 2017.

Judy Schooler (SEAL)

Notary Public

My Commission Expires:

JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Christopher M. Garrett**, being duly sworn, deposes and says that he is Director – Rates for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.


Christopher M. Garrett

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 24th day of January 2017.

 (SEAL)
Notary Public

My Commission Expires:
JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

KENTUCKY UTILITIES COMPANY

**Response to Commission Staff's First Request for Information
To Appendix B of Commission's Order Dated January 4, 2017**

Case No. 2016-00437

Question No. 1

Witness: Derek A. Rahn / Heather D. Metts

- Q-1. Concerning the rate of return on the 2009, 2011, and 2016 amendments to the environmental compliance plan, for the period under review, calculate any true-up adjustment needed to recognize changes in KU's cost of debt, preferred stock, accounts receivable financing (if applicable), or changes in KU's jurisdictional capital structure as of October 31, 2016. Include all assumptions and other supporting documentation used to make this calculation. Any true-up adjustment is to be included in the determination of the over- or under-recovery of the surcharge for the corresponding billing period under review. Provide all exhibits and schedules of your response in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.
- A-1. The question requests capital structure as of October 31, 2016. To be consistent with most recent review cases and the period under review, the response uses a capital structure as of August 31, 2016 (last expense month in the 6-month review period).

See the attachment provided in Excel format.

KU calculated the true-up adjustment to recognize changes in the cost of debt and capital structure in two steps, shown on Pages 1 and 2 of the attachment to this response. Page 1 reflects the true-up required due to the changes between the Rate Base as filed and the Rate Base as Revised through the Monthly Filings. During the period under review, a revision was made to reflect the issue on ES Form 2.61 in the June 2016 expense month filing and described further in response to Question No. 7. Page 2 represents the true-up in the Rate of Return as filed compared to the actual Rate of Return calculations, which impacted the true-up adjustment for the period under review in this case. No further revisions to Rate Base were identified in preparation of this response.

Page 3 provides the adjusted weighted average cost of capital for the expense period ending August 31, 2016 to true-up the months in the review period utilizing the return on equity of 10.00% as agreed to for all pre-2016 ECR Plans and approved by the Commission in its October 25, 2016 Order in Case No. 2016-00214. KU calculated the short- and long-term debt rates using average daily balances and daily interest rates pursuant to the Commission's Order in Case No. 2011-00161.

Page 4 provides the adjusted weighted average cost of capital for the expense period ending August 31, 2016 to true-up the months in the review period utilizing the return on equity of 9.80% as agreed to for the 2016 ECR Plan and approved by the Commission in its August 8, 2016 Order in Case No. 2016-00026. KU calculated the short- and long-term debt rates using average daily balances and daily interest rates pursuant to the Commission's Order in Case No. 2011-00161.

Page 5 provides detail for short- and long-term debt for the expense period ending August 31, 2016.

Attachment in Excel

The attachment(s)
provided in separate
file(s) in Excel format.

KENTUCKY UTILITIES COMPANY

**Response to Commission Staff's First Request for Information
To Appendix B of Commission's Order Dated January 4, 2017**

Case No. 2016-00437

Question No. 2

Witness: Derek A. Rahn

- Q-2. Prepare a summary schedule showing the calculation of Total E(m), Net Retail E(m) , and the surcharge factor for the expense months covered by the applicable billing period. Include the expense months for the two expense months subsequent to the billing period in order to show the over- and under-recovery adjustments for the months included for the billing period under review. The summary schedule is to incorporate all corrections and revisions to the monthly surcharge filings KU has submitted during the billing period under review. Include all supporting calculations and documentation for any such additional over- or under-recovery. Provide all exhibits and schedules of your response in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.
- A-2. See the attachment provided in Excel format. For the period under review, KU experienced a net over-recovery of \$110,995.

Attachment in Excel

The attachment(s)
provided in separate
file(s) in Excel format.

KENTUCKY UTILITIES COMPANY

**Response to Commission Staff's First Request for Information
To Appendix B of Commission's Order Dated January 4, 2017**

Case No. 2016-00437

Question No. 3

Witness: Christopher M. Garrett

- Q-3. Provide the calculations, assumptions, work papers, and other supporting documents used to determine the amounts KU has reported during each billing period under review for Pollution Control Deferred Income Taxes. Provide all exhibits and schedules of your response in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.
- A-3. KU calculates Deferred Income Taxes as the taxable portion of the difference between book depreciation, using straight line depreciation, and tax depreciation, generally using 20 year MACRS accelerated depreciation, bonus depreciation, or 5 or 7 year rapid amortization. Accelerated depreciation results in a temporary tax savings to the Company and the Accumulated Deferred Tax balance reflects the value of those temporary savings as a reduction to environmental rate base.

See the attachment for the calculation of Deferred Income Taxes and the balance of Accumulated Deferred Income Taxes reported each month of the review period.

Attachment in Excel

The attachment(s)
provided in separate
file(s) in Excel format.

KENTUCKY UTILITIES COMPANY

**Response to Commission Staff's First Request for Information
To Appendix B of Commission's Order Dated January 4, 2017**

Case No. 2016-00437

Question No. 4

Witness: Heather D. Metts

- Q-4. Refer to ES Form 2.50, Pollution Control - Operations & Maintenance Expenses, for the expense months covered by the applicable billing period. For each expense account number listed on this schedule, explain the reason(s) for any change in the expense levels from month to month if that change is greater than plus or minus 10 percent.
- A-4. Attached is a schedule showing the changes in the operations and maintenance expense accounts for March 2016 through August 2016 expense months. The changes in the expense levels are reasonable and generally occurred as a part of routine plant operations and maintenance or normal testing expenses.

2009 Plan

Monthly variances in the NOx operation expenses, account 506154, reflect normal Selective Catalytic Reduction (SCR) operations at E.W. Brown Unit 3 (BR3). The variances for account 506154 were driven by the purchase and delivery timing of the raw consumable material (ammonia), as well as variations in generation and coal quality. BR3 was offline 3 weeks during March / April 2016 for a maintenance outage.

Fluctuations in the NOx maintenance expenses, account 512151, were the result of routine monthly maintenance on the SCR at BR3. The increase in March 2016 was the result of an arsenic mitigation study and the replacement of soot blowing cold air blowers. The increases in June and July 2016 were the result of sootblower safety valve replacement and catalyst sampling.

Landfill maintenance, account 512107, reflects routine monthly landfill maintenance at Ghent. The increase in March 2016 was for maintenance to replace a belt scraper, service Kobelco/IR compressor and repair the hydrocyclone feed distributor.

2011 Plan

Fluctuations in sorbent injection operation expenses, account 506159, were the result of on-going operations of Ghent Units 1, 3 and 4 (GH1, GH3 and GH4).

Fluctuations in sorbent injection reactant (hydrated lime) expenses, account 506152, were the result of on-going operations of all Ghent units and E.W. Brown Unit 3 (BR3). The variances are driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality. GH1, GH3, GH4 and BR3 were offline for various times in March and April 2016 and BR3 was offline for around 2 weeks in August 2016.

Fluctuations in sorbent injection maintenance expenses, account 512152, were the result of normal system maintenance. The higher expenses in March and April 2016 were the result of replacing the blow thru and outlet duct lime lance. The higher expenses in July and August 2016 were the result of calibrating the lime silo level transmitter, replacing a converger valve and replacing the blow-thru and drop-thru for performance test.

Fluctuations in baghouse maintenance expenses, account 512156, were the result of normal system maintenance on all Ghent Units and BR3. The increase in August 2016 was the result of replacing a bearing on the PAC (Powder Activated Carbon) blower.

Fluctuations in activated carbon expenses, account 506151 were the result of on-going operation of the Ghent Units and BR3. The variances are driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality. GH4 was offline in April 2016. The increase in July and August 2016 was the result of the initial fill of the silo for BR3.

2016 Plan

There have been no expenses recorded in this plan.

Attachment in Excel

The attachment(s)
provided in separate
file(s) in Excel format.

KENTUCKY UTILITIES COMPANY

**Response to Commission Staff's First Request for Information
To Appendix B of Commission's Order Dated January 4, 2017**

Case No. 2016-00437

Question No. 5

Witness: Heather D. Metts

Q-5. In Case No. 2000-00439,⁶ the Commission ordered that KU's cost of debt and preferred stock would be reviewed and re-established during the six-month review case. Provide the following information as of October 31, 2016:

- a. The outstanding balances for long-term debt, short-term debt, preferred stock, and common equity. Provide this information on total company and Kentucky jurisdictional bases.
- b. The blended interest rates for long-term debt, short-term debt, and preferred stock. Include all supporting calculations showing how these blended interest rates were determined. If applicable, provide the blended interest rates on total company and Kentucky jurisdictional bases. For each outstanding debt listed, indicate whether the interest rate is fixed or variable.
- c. KU's calculation of its weighted average cost of capital for environmental surcharge purposes.
- d. Provide all supporting exhibits and schedules in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.

A-5. The question requests information as of October 31, 2016. To be consistent with most recent review cases and the period under review, the response uses information as of August 31, 2016 (last expense month in the 6-month review period).

Please see the attachments being provided in Excel format for the period ended August 31, 2016 under review. There was no preferred stock outstanding as of August 31, 2016; therefore, it is not listed in the attached schedules.

⁶ Case No. 2000-00439, Kentucky Utilities Company (Ky. PSC Apr. 18, 2001).

For the period ended August 31, 2016, KU proposes utilizing a return on equity of 10.00% as agreed to for all pre-2016 ECR Plan projects and approved by the Commission in its October 25, 2016 Order in Case No. 2016-00214.

For the period ended August 31, 2016, KU proposes utilizing a return on equity of 9.80% as agreed to for all 2016 ECR Plan projects and approved by the Commission in its August 8, 2016 Order in Case No. 2016-00026.

KU recommends the continued use of an effective tax rate of 38.6660% in the gross-up revenue factor used in the rate of return calculation for the period ended August 31, 2016. KU expects to have taxable income in 2016 that will be offset by a net operating loss carry forward and will be unable to take the Internal Revenue Code §199 manufacturing tax deduction.

Attachment in Excel

The attachment(s)
provided in separate
file(s) in Excel format.

KENTUCKY UTILITIES COMPANY

**Response to Commission Staff's First Request for Information
To Appendix B of Commission's Order Dated January 4, 2017**

Case No. 2016-00437

Question No. 6

Witness: Derek A. Rahn

Q-6. Provide the actual average residential customer's usage. Based on this usage amount, provide the dollar impact the over/under recovery will have on the average residential customer's bill for the requested recovery period. Provide all supporting calculations and documentation in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.

A-6. See the attachment provided in Excel format.

The actual average residential customer's usage for the 12-months ending November 30, 2016 is 1,090 kWh per month. Actual average monthly usage for residential customers will vary monthly depending on the time of year.

Based on distributing the over-recovered position of \$110,995 over one month, the ECR billing factor will be lower by approximately 0.10% for one month. For a residential customer using 1,090 kWh per month, the impact of the adjusted ECR billing factor would be a decrease of approximately \$0.11 per month for one month, using rates and adjustment clause factors in effect for the December 2016 billing month.

Attachment in Excel

The attachment(s)
provided in separate
file(s) in Excel format.

KENTUCKY UTILITIES COMPANY

**Response to Commission Staff's First Request for Information
To Appendix B of Commission's Order Dated January 4, 2017**

Case No. 2016-00437

Question No. 7

Witness: Derek A. Rahn

- Q-7. Refer to KU's monthly environmental surcharge reports for expense months of May and June 2016, ES Form 2.6, lines 1 and 2. The amounts in the column labeled "Total" are the same for both months. Explain whether this is an error and provide any necessary corrections.
- A-7. In the June 2016 expense month on ES Form 2.61 lines 1 and 2, the values were not correct. The values have been corrected and forms impacted by the correction are attached with changes highlighted. These updates were also filed with the commission January 20, 2017, with the monthly ECR filing.

Billing factors for the expense months of June 2016 through August 2016 were unchanged as a result of the correction.

June 2016 Expense Month

ES FORM 1.00

KENTUCKY UTILITIES COMPANY ENVIRONMENTAL SURCHARGE REPORT

Net Jurisdictional E(m) and
Jurisdictional Environmental Surcharge Billing Factor
For the Expense Month of June 2016

GROUP 1 (Total Revenue)

Group 1 E(m) -- ES Form 1.10, line 15	=	\$ 1,110,953
Group 1 ES Billing Factor -- ES Form 1.10, line 17	=	2.32%

GROUP 2 (Net Revenue)

Group 2 E(m) -- ES Form 1.10, line 15	=	\$ 1,647,123
Group 2 ES Billing Factor -- ES Form 1.10, line 17	=	3.54%

Effective Date for Billing: August billing cycle beginning August 1, 2016

Submitted by: _____

Title: Manager - Revenue Requirement

Date Submitted: July 22, 2016

**KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT**

**Calculation of Total E(m) and
Jurisdictional Surcharge Billing Factor**

For the Expense Month of June 2016

Calculation of Total E(m)

$E(m) = [(RB / 12) (ROR + (ROR - DR)(TR / (1 - TR)))] + OE - BAS + BR$, 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
BAS = Total Proceeds from By-Product and Allowance Sales
BR = Beneficial Reuse Operating Expenses

		Environmental Compliance Plans
(1)	RB	= \$ 1,065,221,558
(2)	RB / 12	= \$ 88,768,463
(3)	$(ROR + (ROR - DR) (TR / (1 - TR)))$	= 10.30%
(4)	OE	= \$ 4,051,202
(5)	BAS	= \$ -
(6)	BR	= \$ 20,239
(7)	E(m) (2) x (3) + (4) - (5) + (6)	= \$ 13,214,593

Calculation of Adjusted Net Jurisdictional E(m)

(8)	Jurisdictional Allocation Ratio for Expense Month -- ES Form 3.10	= 87.21%
(9)	Jurisdictional E(m) = Total E(m) x Jurisdictional Allocation Ratio [(7) x (8)]	= \$ 11,524,447
(10)	Adjustment for (Over)/Under-collection pursuant to Case No. 2015-00411	= \$ -
(11)	Prior Period Adjustment (if necessary)	= \$ -
(12)	Revenue Collected through Base Rates	= \$ 8,766,371
(13)	Adjusted Net Jurisdictional E(m) [(9) + (10) + (11) - (12)]	= \$ 2,758,076

Calculation of Group Environmental Surcharge Billing Factors

		<u>GROUP 1 (Total Revenue)</u>	<u>GROUP 2 (Net Revenue)</u>
(14)	Revenue as a Percentage of 12-month Total Revenue ending with the Current Month -- ES Form 3.00	= 40.28%	59.72%
(15)	Group E(m) [(13) x (14)]	= \$ 1,110,953	\$ 1,647,123
(16)	Group R(m) = Average Monthly Group Revenue for the 12 Months Ending with the Current Expense Month -- ES Form 3.00	= \$ 47,807,715	\$ 46,517,245
(17)	Group Environmental Surcharge Billing Factors [(15) ÷ (16)]	= 2.32%	3.54%

**KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT**

Revenue Requirements of Environmental Compliance Costs
For the Expense Month of June 2016

Determination of Environmental Compliance Rate Base

	Environmental Compliance Plan	
Eligible Pollution Control Plant	\$ 1,165,093,652	
Eligible Pollution CWIP Excluding AFUDC	171,086,468	
Subtotal		\$ 1,336,180,120
Additions:		
Inventory - Emission Allowances per ES Form 2.31, 2.32 and 2.33	\$ 137,630	
Less: Allowance Inventory Baseline	-	
Net Emission Allowance Inventory	137,630	
Cash Working Capital Allowance	2,525,157	
Subtotal		2,662,787
Deductions:		
Accumulated Depreciation on Eligible Pollution Control Plant	\$ 40,450,063	
Pollution Control Deferred Income Taxes	233,171,286	
Pollution Control Deferred Investment Tax Credit	-	
Subtotal		273,621,349
Environmental Compliance Rate Base		\$ 1,065,221,558

Determination of Pollution Control Operating Expenses

	Environmental Compliance Plan	
Monthly Operations & Maintenance Expense		\$ 1,800,920
Monthly Depreciation & Amortization Expense		2,105,146
Monthly Taxes Other Than Income Taxes		144,624
Monthly Emission Allowance Expense from ES Form 2.31, 2.32 and 2.33	512	
Add KU Current Month TC2 Emission Allowance Expense reported on ES Form 2.31, 2.32 and 2.33	-	
Less Monthly Emission Allowance Expense in base rates	-	
Net Recoverable Emission Allowance Expense		512
Monthly Surcharge Consultant Fee		-
Construction Monitoring Consultant Fee		-
Total Pollution Control Operations Expense		\$ 4,051,202

Determination of Beneficial Reuse Operating Expenses

	Environmental Compliance Plan	
Total Monthly Beneficial Reuse Expense	\$ 38,355	
Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)		(18,116)
Net Beneficial Reuse Operations Expense		\$ 20,239

Proceeds From By-Product and Allowance Sales

	Total Proceeds	Amount in Base Rates	Net Proceeds
	(1)	(2)	(1) - (2)
Allowance Sales	\$ -	\$ -	\$ -
Scrubber By-Products Sales	-	-	-
Total Proceeds from Sales	\$ -	\$ -	\$ -

ES FORM 2.40

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

For the Month Ended: June 30, 2016

Environmental Compliance Plan	
O&M Expenses	Amount
11th Previous Month	\$ 1,941,333
10th Previous Month	1,770,411
9th Previous Month	1,561,589
8th Previous Month	1,427,881
7th Previous Month	1,362,465
6th Previous Month	1,388,633
5th Previous Month	1,660,060
4th Previous Month	2,061,736
3rd Previous Month	1,885,094
2nd Previous Month	1,621,574
Previous Month	1,699,325
Current Month	1,821,159
Total 12 Month O&M	\$ 20,201,259

Determination of Working Capital Allowance	
12 Months O&M Expenses	\$ 20,201,259
One Eighth (1/8) of 12 Month O&M Expenses	1/8
Pollution Control Cash Working Capital Allowance	\$ 2,525,157

ES FORM 2.60

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Beneficial Reuse - Operations & Maintenance Expenses
For the Month Ended: June 30, 2016

Third Party	O&M Expense Account	Plant	Total O&M
C and B Marine	501253 - ECR Fly Ash Disposal	Trimble County	15,986
Legner Energy Group	501253 - ECR Fly Ash Disposal	Trimble County	-
Synmat	502011 - ECR Other Waste Disposal	Trimble County	10,345
Charah	501253 - ECR Fly Ash Disposal	Ghent	200
Facilities Performance Gr	501253 - ECR Fly Ash Disposal	Trimble County	11,824
Total Monthly Beneficial Reuse Expense			38,355
Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)			(18,116)
Net Beneficial Reuse O&M Expense			20,239

ES FORM 2.61

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Beneficial Reuse Opportunities
For the Month Ended: June 30, 2016

On-Site CCP Disposal O&M Expense	E. W. Brown	Ghent	Trimble County	Total
Existing Beneficial Reuse Opportunities (Pre 2009 Plan Project)				
(1) 12 Months Ending with Expense Month	\$ -	\$ (649,716)	\$ (7,677)	\$ (657,393)
(2) Monthly Amount [(1) / 12]	\$ -	\$ (54,143)	\$ (640)	\$ (54,783)
2009 Plan Project 33				
(3) Monthly Amount (Expense/Revenue)	\$ -	\$ 200	\$ 38,155	\$ 38,355
Total Beneficial Reuse - Generating Station				
(4) Monthly Expense [(2) + (3)]	\$ -	\$ (53,943)	\$ 37,515	\$ (16,428)
Beneficial Reuse in Base Rates				
(5) Annual Expense Amount (12 Mo Ending with Last Test Year)	\$ -	\$ (440,000)	\$ -	\$ (440,000)
(6) Monthly Expense Amount [(5) / 12]	\$ -	\$ (36,667)	\$ -	\$ (36,667)
(7) Total Generating Station Less Base Rates [(4) - (6)]	\$ -	\$ (17,276)	\$ 37,515	\$ 20,239
(8) Less 2009 Plan Project 33 [(7) - (3)]	\$ -	\$ (17,476)	\$ (640)	\$ (18,116)
If Line (8) Greater than Zero, No Adjustment				
If Line (8) Less than Zero, Adjustment for Base Rates				
Adjustment for Base Rate Amount (to ES Form 2.60)	\$ -	\$ (17,476)	\$ (640)	\$ (18,116)

Note 1: Trimble County projects for the 2009 Plan are proportionately shared by KU at 48% and LG&E at 52%.

July 2016 Expense Month

**KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT**

**Calculation of Total E(m) and
Jurisdictional Surcharge Billing Factor**

For the Expense Month of July 2016

Calculation of Total E(m)

$E(m) = [(RB / 12) (ROR + (ROR - DR)(TR / (1 - TR)))] + OE - BAS + BR$, 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
BAS = Total Proceeds from By-Product and Allowance Sales
BR = Beneficial Reuse Operating Expenses

	Pre-2016 Environmental Compliance Plans	2016 Environmental Compliance Plans
(1) RB	= \$ 1,064,056.687	\$ 1,707,598
(2) RB / 12	= \$ 88,671.391	\$ 142,300
(3) (ROR + (ROR - DR) (TR / (1 - TR)))	= 10.30%	10.12%
(4) OE	= \$ 4,512,705	\$ 17,830
(5) BAS	= \$ -	Not Applicable
(6) BR	= \$ 12,660	Not Applicable
(7) E(m) (2) x (3) + (4) - (5) + (6)	= \$ 13,658,518	\$ 32,231
(8) Total E(m) = sum of Pre-2016 E(m) + 2016 E(m)	= \$ 13,690,749	

Calculation of Adjusted Net Jurisdictional E(m)

(9) Jurisdictional Allocation Ratio for Expense Month -- ES Form 3.10	= 87.36%
(10) Jurisdictional E(m) = Total E(m) x Jurisdictional Allocation Ratio [(8) x (9)]	= \$ 11,960,238
(11) Adjustment for (Over)/Under-collection pursuant to Case No. 2015-00411	= \$ -
(12) Prior Period Adjustment (if necessary)	= \$ -
(13) Revenue Collected through Base Rates	= \$ 9,780,147
(14) Adjusted Net Jurisdictional E(m) [(10) + (11) + (12) - (13)]	= \$ 2,180,091

Calculation of Group Environmental Surcharge Billing Factors

	<u>GROUP 1 (Total Revenue)</u>	<u>GROUP 2 (Net Revenue)</u>
(15) Revenue as a Percentage of 12-month Total Revenue ending with the Current Month -- ES Form 3.00	= 40.67%	59.33%
(16) Group E(m) [(14) x (15)]	= \$ 886,643	\$ 1,293,448
(17) Group R(m) = Average Monthly Group Revenue for the 12 Months Ending with the Current Expense Month -- ES Form 3.00	= \$ 48,220,484	\$ 46,762,928
(18) Group Environmental Surcharge Billing Factors [(16) ÷ (17)]	= 1.84%	2.77%

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Revenue Requirements of Environmental Compliance Costs
For the Expense Month of July 2016

Determination of Environmental Compliance Rate Base

	Pre-2016 Environmental Compliance Plan		2016 Environmental Compliance Plan	
Eligible Pollution Control Plant	\$	1,175,103,580	\$	-
Eligible Pollution CWIP Excluding AFUDC		163,882,368		1,293,521
Subtotal		\$ 1,338,985,948		\$ 1,293,521
Additions:				
Inventory - Emission Allowances per ES Form 2.31, 2.32, 2.33 and 2.34	\$	137,132		
Less: Allowance Inventory Baseline		-		
Net Emission Allowance Inventory		137,132		
Cash Working Capital Allowance		2,565,674		
Net Unamortized Closure Cost Balance - Active Stations ¹			\$	-
Net Unamortized Closure Cost Balance - Retired Stations ¹				414,077
Subtotal		\$ 2,702,806		\$ 414,077
Deductions:				
Accumulated Depreciation on Eligible Pollution Control Plant	\$	42,573,371	\$	-
Pollution Control Deferred Income Taxes		235,058,696		-
Pollution Control Deferred Investment Tax Credit		-		-
Subtotal		\$ 277,632,067		\$ -
Environmental Compliance Rate Base		\$ 1,064,056,687		\$ 1,707,598

Determination of Pollution Control Operating Expenses

	Pre-2016 Environmental Compliance Plan		2016 Environmental Compliance Plan	
Monthly Operations & Maintenance Expense		\$ 2,252,803		\$ -
Monthly Depreciation & Amortization Expense		2,114,780		-
Monthly Taxes Other Than Income Taxes - Eligible Plant		144,624		-
Monthly Taxes Other Than Income Taxes - Closure Costs				-
Amortization of Monthly Closure Costs - Active Stations				11,594
Amortization of Monthly Closure Costs - Retired Stations				6,236
Monthly Emission Allowance Expense from ES Form 2.31, 2.32, 2.33 and 2.34		498		
Add KU Current Month TC2 Emission Allowance Expense reported on ES Form 2.31, 2.32, 2.33 and 2.34		-		
Less Monthly Emission Allowance Expense in base rates		-		
Net Recoverable Emission Allowance Expense		498		
Monthly Surcharge Consultant Fee		-		-
Construction Monitoring Consultant Fee		-		-
Total Pollution Control Operations Expense		\$ 4,512,705		\$ 17,830

Determination of Beneficial Reuse Operating Expenses

	Environmental Compliance Plan
Total Monthly Beneficial Reuse Expense	\$ 33,106
Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)	(20,446)
Net Beneficial Reuse Operations Expense	\$ 12,660

Proceeds From By-Product and Allowance Sales

	Total Proceeds	Amount in Base Rates	Net Proceeds
	(1)	(2)	(1) - (2)
Allowance Sales	\$ -	\$ -	\$ -
Scrubber By-Products Sales	-	-	-
Total Proceeds from Sales	\$ -	\$ -	\$ -

Note 1: The net unamortized closure cost balance is comprised of CCR closure cost expenditures less accumulated amortization, accumulated deferred income taxes and amount in base rates.

ES FORM 2.40

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

For the Month Ended: July 31, 2016

Environmental Compliance Plan	
O&M Expenses	Amount
11th Previous Month	\$ 1,770,411
10th Previous Month	1,561,589
9th Previous Month	1,427,881
8th Previous Month	1,362,465
7th Previous Month	1,388,633
6th Previous Month	1,660,060
5th Previous Month	2,061,736
4th Previous Month	1,885,094
3rd Previous Month	1,621,574
2nd Previous Month	1,699,325
Previous Month	1,821,159
Current Month	2,265,463
Total 12 Month O&M	\$ 20,525,390

Determination of Working Capital Allowance	
12 Months O&M Expenses	\$ 20,525,390
One Eighth (1/8) of 12 Month O&M Expenses	1/8
Pollution Control Cash Working Capital Allowance	\$ 2,565,674

August 2016 Expense Month

**KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT**

**Calculation of Total E(m) and
Jurisdictional Surcharge Billing Factor**

For the Expense Month of August 2016

Calculation of Total E(m)

$E(m) = [(RB / 12) (ROR + (ROR - DR)(TR / (1 - TR)))] + OE - BAS + BR$, 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
BAS = Total Proceeds from By-Product and Allowance Sales
BR = Beneficial Reuse Operating Expenses

	Pre-2016 Environmental Compliance Plans	2016 Environmental Compliance Plans
(1) RB	= \$ 1,063,106,137	\$ 2,517,802
(2) RB / 12	= \$ 88,592,178	\$ 209,817
(3) $(ROR + (ROR - DR) (TR / (1 - TR)))$	= 10.30%	10.12%
(4) OE	= \$ 4,726,026	\$ 20,314
(5) BAS	= \$ -	Not Applicable
(6) BR	= \$ 15,301	Not Applicable
(7) E(m) (2) x (3) + (4) - (5) + (6)	= \$ 13,866,321	\$ 41,547
(8) Total E(m) = sum of Pre-2016 E(m) + 2016 E(m)	= \$ 13,907,868	

Calculation of Adjusted Net Jurisdictional E(m)

(9) Jurisdictional Allocation Ratio for Expense Month -- ES Form 3.10	= 87.89%
(10) Jurisdictional E(m) = Total E(m) x Jurisdictional Allocation Ratio [(8) x (9)]	= \$ 12,223,625
(11) Adjustment for (Over)/Under-collection pursuant to Case No. 2015-00411	= \$ -
(12) Prior Period Adjustment (if necessary)	= \$ -
(13) Revenue Collected through Base Rates	= \$ 10,153,465
(14) Adjusted Net Jurisdictional E(m) [(10) + (11) + (12) - (13)]	= \$ 2,070,160

Calculation of Group Environmental Surcharge Billing Factors

	<u>GROUP 1 (Total Revenue)</u>	<u>GROUP 2 (Net Revenue)</u>
(15) Revenue as a Percentage of 12-month Total Revenue ending with the Current Month -- ES Form 3.00	= 40.69%	59.31%
(16) Group E(m) [(14) x (15)]	= \$ 842,348	\$ 1,227,812
(17) Group R(m) = Average Monthly Group Revenue for the 12 Months Ending with the Current Expense Month -- ES Form 3.00	= \$ 48,758,799	\$ 47,379,349
(18) Group Environmental Surcharge Billing Factors [(16) ÷ (17)]	= 1.73%	2.59%

KENTUCKY UTILITIES COMPANY
ENVIRONMENTAL SURCHARGE REPORT
Revenue Requirements of Environmental Compliance Costs
For the Expense Month of August 2016

Determination of Environmental Compliance Rate Base

	Pre-2016 Environmental Compliance Plan		2016 Environmental Compliance Plan	
Eligible Pollution Control Plant	\$	1,188,998,832	\$	-
Eligible Pollution CWIP Excluding AFUDC		153,490,873		2,100,191
Subtotal		\$ 1,342,489,705		\$ 2,100,191
Additions:				
Inventory - Emission Allowances per ES Form 2.31, 2.32, 2.33 and 2.34	\$	136,560		
Less: Allowance Inventory Baseline		-		
Net Emission Allowance Inventory		136,560		
Cash Working Capital Allowance		2,651,998		-
Net Unamortized Closure Cost Balance - Active Stations ¹			\$	-
Net Unamortized Closure Cost Balance - Retired Stations ¹				417,611
Subtotal		\$ 2,788,558		\$ 417,611
Deductions:				
Accumulated Depreciation on Eligible Pollution Control Plant	\$	44,717,027	\$	-
Pollution Control Deferred Income Taxes		237,455,099		-
Pollution Control Deferred Investment Tax Credit		-		-
Subtotal		\$ 282,172,126		\$ -
Environmental Compliance Rate Base		\$ 1,063,106,137		\$ 2,517,802

Determination of Pollution Control Operating Expenses

	Pre-2016 Environmental Compliance Plan		2016 Environmental Compliance Plan	
Monthly Operations & Maintenance Expense		\$ 2,445,702		\$ -
Monthly Depreciation & Amortization Expense		2,135,127		-
Monthly Taxes Other Than Income Taxes - Eligible Plant		144,624		-
Monthly Taxes Other Than Income Taxes - Closure Costs				-
Amortization of Monthly Closure Costs - Active Stations				13,976
Amortization of Monthly Closure Costs - Retired Stations				6,338
Monthly Emission Allowance Expense from ES Form 2.31, 2.32, 2.33 and 2.34		573		
Add KU Current Month TC2 Emission Allowance Expense reported on ES Form 2.31, 2.32, 2.33 and 2.34		-		
Less Monthly Emission Allowance Expense in base rates		-		
Net Recoverable Emission Allowance Expense		573		
Monthly Surcharge Consultant Fee		-		-
Construction Monitoring Consultant Fee		-		-
Total Pollution Control Operations Expense		\$ 4,726,026		\$ 20,314

Determination of Beneficial Reuse Operating Expenses

	Environmental Compliance Plan
Total Monthly Beneficial Reuse Expense	\$ 36,968
Adjustment for Beneficial Reuse in Base Rates (from ES Form 2.61)	(21,667)
Net Beneficial Reuse Operations Expense	\$ 15,301

Proceeds From By-Product and Allowance Sales

	Total Proceeds	Amount in Base Rates	Net Proceeds
	(1)	(2)	(1) - (2)
Allowance Sales	\$ -	\$ -	\$ -
Scrubber By-Products Sales	-	-	-
Total Proceeds from Sales	\$ -	\$ -	\$ -

Note 1: The net unamortized closure cost balance is comprised of CCR closure cost expenditures less accumulated amortization, accumulated deferred income taxes and amount in base rates.

ES FORM 2.40

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

For the Month Ended: August 31, 2016

Environmental Compliance Plan		
O&M Expenses	Pre-2016 Environmental Compliance Plans	2016 Environmental Compliance Plan
11th Previous Month	\$ 1,561,589	\$ -
10th Previous Month	1,427,881	-
9th Previous Month	1,362,465	-
8th Previous Month	1,388,633	-
7th Previous Month	1,660,060	-
6th Previous Month	2,061,736	-
5th Previous Month	1,885,094	-
4th Previous Month	1,621,574	-
3rd Previous Month	1,699,325	-
2nd Previous Month	1,821,159	-
Previous Month	2,265,463	-
Current Month	2,461,002	-
Total 12 Month O&M	\$ 21,215,981	\$ -

Determination of Working Capital Allowance		
12 Months O&M Expenses	\$ 21,215,981	\$ -
One Eighth (1/8) of 12 Month O&M Expenses	1/8	1/8
Pollution Control Cash Working Capital Allowance	\$ 2,651,998	\$ -