

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

**In the Matter of:**

<b>AN EXAMINATION BY THE PUBLIC SERVICE</b>	)	
<b>COMMISSION OF THE ENVIRONMENTAL</b>	)	
<b>SURCHARGE MECHANISM OF KENTUCKY</b>	)	<b>CASE NO.</b>
<b>UTILITIES COMPANY FOR THE SIX-MONTH</b>	)	<b>2013-00436</b>
<b>BILLING PERIOD ENDING OCTOBER 31, 2013</b>	)	

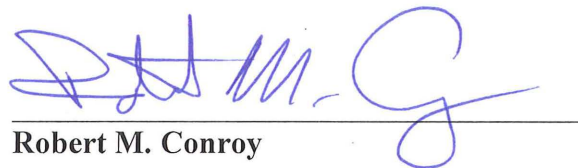
**RESPONSE OF**  
**KENTUCKY UTILITIES COMPANY**  
**TO**  
**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION IN**  
**APPENDIX B OF COMMISSION'S ORDER**  
**DATED DECEMBER 23, 2013**

**FILED: January 23, 2014**

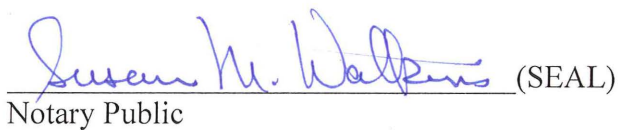
VERIFICATION

COMMONWEALTH OF KENTUCKY )  
 ) SS:  
COUNTY OF JEFFERSON )

The undersigned, **Robert M. Conroy**, 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.

  
Robert M. Conroy

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 22<sup>nd</sup> day of January 2014.

 (SEAL)  
Notary Public

My Commission Expires:

~~SUSAN M. WATKINS  
Notary Public, State at Large, KY  
My Commission Expires Mar. 19, 2017  
Notary ID # 485723~~

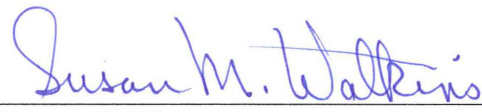
VERIFICATION

COMMONWEALTH OF KENTUCKY )  
 ) SS:  
COUNTY OF JEFFERSON )

The undersigned, **Christopher M. Garrett**, being duly sworn, deposes and says that he is Director – Accounting and Regulatory Reporting 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 22<sup>nd</sup> day of January 2014.

  
\_\_\_\_\_  
Notary Public (SEAL)

My Commission Expires:

SUSAN M. WATKINS  
\_\_\_\_\_  
Notary Public, State at Large, KY  
My Commission Expires Mar. 19, 2017  
Notary ID # 485723

**KENTUCKY UTILITIES COMPANY**

**Response to Commission Staff's First Request for Information  
in Appendix B of Commission's Order Dated December 23, 2013**

**Case No. 2013-00436**

**Question No. 1**

**Witness: Robert M. Conroy / Christopher M. Garrett**

- Q-1. Concerning the rate of return on the two 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. 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. Please see the attachment being 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. However, during the period under review there were no revisions to reflect. 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 billing period under review ending October 31, 2013. The Commission approved a single rate of return for all Plans in Case No. 2012-00221; therefore, the Pre-2011 and 2011 Plans are no longer shown separately. 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.

KU did not engage in accounts receivable financing or have any preferred stock outstanding during the period under review.

**Kentucky Utilities Company**  
**Overall Rate of Return True-up Adjustment - Revised Rate Base**  
**Impact on Calculated E(m)**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Billing Month	Expense Month	Rate of Return as Filed	Rate Base as Filed	Rate Base As Revised	Change in Rate Base	True-up Adjustment	Jurisdictional Allocation, ES Form 1.10	Jurisdictional True up Adjustment
					(5) - (4)	(3) * (6) / 12		(7) * (8)
May-13	Mar-13	10.26%	\$ 466,605,240	\$ 466,605,240	\$ -	\$ -	87.29%	\$ -
Jun-13	Apr-13	10.30%	488,353,534	488,353,534	-	-	88.61%	-
Jul-13	May-13	10.30%	500,727,214	500,727,214	-	-	86.28%	-
Aug-13	Jun-13	10.30%	522,490,759	522,490,759	-	-	87.29%	-
Sep-13	Jul-13	10.30%	545,861,106	545,861,106	-	-	88.29%	-
Oct-13	Aug-13	10.30%	565,466,957	565,466,957	-	-	87.53%	-
						\$ -		\$ -
						Impact of Change in Rate of Return during the six-month billing period ending October 31, 2013		
						\$ -		\$ -

**Kentucky Utilities Company**  
**Overall Rate of Return True-up Adjustment - Revised Rate of Return**  
**Impact on Calculated E(m)**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Billing Month	Expense Month	Rate of Return as Filed	Rate of Return as Revised	Change in Rate of Return (4) - (3)	Rate Base as Revised	True-up Adjustment (5) * (6) / 12	Jurisdictional Allocation, ES Form 1.10	Jurisdictional True up Adjustment (7) * (8)
May-13	Mar-13	10.26%	10.25%	-0.01%	\$ 466,605,240	\$ (3,888)	87.29%	\$ (3,394)
Jun-13	Apr-13	10.30%	10.25%	-0.05%	488,353,534	(20,348)	88.61%	(18,030)
Jul-13	May-13	10.30%	10.25%	-0.05%	500,727,214	(20,864)	86.28%	(18,001)
Aug-13	Jun-13	10.30%	10.25%	-0.05%	522,490,759	(21,770)	87.29%	(19,003)
Sep-13	Jul-13	10.30%	10.25%	-0.05%	545,861,106	(22,744)	88.29%	(20,081)
Oct-13	Aug-13	10.30%	10.25%	-0.05%	565,466,957	(23,561)	87.53%	(20,623)
						<u>(113,176)</u>		<u>(99,133)</u>
Impact of Change in Rate of Return during the six-month billing period ending October 31, 2013						<u>\$ (113,176)</u>		<u>\$ (99,133)</u>

**KENTUCKY UTILITIES**

**Adjusted Electric Rate of Return on Common Equity**  
**As of October 31, 2013**

	Balance at 10-31-13 (1)	Capital Structure (2)	EEL (3)	Investments in OVEC and Other (Col 2 x Col 4 Line 4) (4)	Adjustments to Total Co. Capitalization (Sum of Col 3 - Col 4) (5)	Adjusted Total Company Capitalization (Col 1 + Col 5) (6)	Jurisdictional Rate Base Percentage (7)	Kentucky Jurisdictional Capitalization (Col 6 x Col 7) (8)
1. Short Term Debt	\$ 136,218,209 (a)	3.13%	\$ -	\$ (38,240)	\$ (38,240)	\$ 136,179,969	87.63%	\$ 119,334,507
2. Long Term Debt	1,841,623,843 (a)	42.35%	-	(517,398)	(517,398)	1,841,106,445	87.63%	1,613,361,578
3. Common Equity	2,370,331,639	54.52%	(504,066)	(666,082)	(1,170,148)	2,369,161,491	87.63%	2,076,096,215
4. Total Capitalization	<u>\$ 4,348,173,691</u>	<u>100.000%</u>	<u>\$ (504,066)</u>	<u>\$ (1,221,720)</u>	<u>\$ (1,725,786)</u>	<u>\$ 4,346,447,905</u>		<u>\$ 3,808,792,300</u>

	Kentucky Jurisdictional Capitalization (8)	Capital Structure (9)	Environmental Surcharge (Col 9 x Col 10 Line 4) (10)	DSM Rate Base (Col 9 x Col 11 Line 4) (11)	Adjusted Kentucky Jurisdictional Capitalization (Col 8 + Col 10 + Col 11) (12)	Adjusted Capital Structure (13)	Annual Cost Rate (14)	Cost of Capital (Col 13 x Col 14) (15)
1. Short Term Debt	\$ 119,334,507	3.13%	\$ (17,082,451)	\$ (62,377)	\$ 102,189,679	3.13%	0.32%	0.01%
2. Long Term Debt	1,613,361,578	42.36%	(231,186,140)	(844,178)	1,381,331,260	42.36%	3.65%	1.55%
3. Common Equity	2,076,096,215	54.51%	(297,496,613)	(1,086,311)	1,777,513,291	54.51%	10.25%	5.59%
4. Total Capitalization	<u>\$ 3,808,792,300</u>	<u>100.000%</u>	<u>\$ (545,765,204)</u>	<u>\$ (1,992,866)</u>	<u>\$ 3,261,034,230</u>	<u>100.000%</u>		<u>7.15%</u>
5. Weighted Cost of Capital Grossed up for Income Tax Effect {ROR + (ROR - DR) x [TR / (1 - TR)]}								<u>10.25%</u>

(a) Average daily balance per Settlement Agreement in Case No. 2011-00161.

**KENTUCKY UTILITIES COMPANY**

**Response to Commission Staff's First Request for Information  
in Appendix B of Commission's Order Dated December 23, 2013**

**Case No. 2013-00436**

**Question No. 2**

**Witness: Robert M. Conroy**

- 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 a calculation of any additional over- or under-recovery amount KU believes needs to be recognized for the six-month 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. Please see the attachment being provided in Excel format for the summary schedule and components that make up the over-recovery.

For the period under review, KU experienced an over-recovery of \$347,028.



**Kentucky Utilities Company**  
**Calculation of E(m) and Jurisdictional Surcharge Billing Factor**  
**Summary Schedule for Expense Months March 2013 through August 2013**

**Attachment to Response to Question No. 2**  
**Page 1 of 3**  
**Conroy**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Expense Month	Rate Base as Revised	Monthly Rate Base as Revised	Rate of Return as Revised	Operating Expenses (net of allowance proceeds)	Total E(m)	Jurisdictional Allocation Ratio	Retail E(m)	Comments: As Revised in This Review
	ES Form 2.00	(2) / 12		ES Form 2.00	(3) * (4) + (5)	ES Form 1.10	(6) * (7)	
Mar-13	\$ 466,605,240	\$ 38,883,770	10.25%	\$ 1,534,382	\$ 5,519,968	87.29%	\$ 4,818,380	
Apr-13	488,353,534	40,696,128	10.25%	1,482,877	5,654,230	88.61%	5,010,213	
May-13	500,727,214	41,727,268	10.25%	1,574,123	5,851,168	86.28%	5,048,388	
Jun-13	522,490,759	43,540,897	10.25%	1,282,021	5,744,963	87.29%	5,014,778	
Jul-13	545,861,106	45,488,426	10.25%	1,328,577	5,991,141	88.29%	5,289,578	
Aug-13	565,466,957	47,122,246	10.25%	1,293,263	6,123,293	87.53%	5,359,719	

**Kentucky Utilities Company**  
**Calculation of E(m) and Jurisdictional Surcharge Billing Factor**  
**Summary Schedule for Expense Months March 2013 through August 2013**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Expense Month	Retail E(m) for All ECR Plans	Adjustment to Retail E(m) for (Over)/Under-Collection	Retail E(m) Including all Adjustments to be billed as ECR	Monthly Billing Factor (Group 1)	Monthly Billing Factor (Group 2)	ECR Revenue Recovered Through Base Rates	Billing Period	ECR Billing Factor Revenues (Group 1)	ECR Billing Factor Revenues (Group 2)	Combined Total Over/(Under) Recovery
	Page 1 Col (8)	Case No. 2012-546	(2) + (3)	As Filed	As Filed	As Filed		As Filed	As Filed	(7) + (9) + (10) - (4)
Mar-13	\$ 4,818,380	\$ -	\$ 4,818,380	4.02%	6.97%	\$ 438,490	May-13	\$ 1,386,055	\$ 2,584,995	\$ (408,841)
Apr-13	5,010,213	(218,511)	4,791,702	3.96%	6.86%	423,362	Jun-13	1,602,385	2,753,864	(12,091)
May-13	5,048,388	-	5,048,388	4.24%	7.36%	355,318	Jul-13	2,047,689	3,053,535	408,154
Jun-13	5,014,778	-	5,014,778	4.17%	7.25%	390,332	Aug-13	1,911,882	3,065,470	352,907
Jul-13	5,289,578	-	5,289,578	4.39%	7.65%	431,471	Sep-13	2,050,794	3,160,751	353,438
Aug-13	5,359,719	-	5,359,719	4.47%	7.78%	421,674	Oct-13	1,601,933	2,989,573	(346,538)
			\$ 30,322,546			\$ 2,460,647		\$ 10,600,739	\$ 17,608,188	\$ 347,028
<b>Over-Recovery to be returned to customers for the 6-month billing period ending October 31, 2013</b>										<b>\$ 347,028</b>

**Kentucky Utilities Company****Reconciliation of Combined Over/(Under) Recovery****Summary Schedule for Expense Months March 2013 through August 2013**

(1) Billing Month	(2) Expense Month	(3) Rate of Return as Filed	(4) Rate of Return as Revised	(5) Change in Rate of Return (4) - (3)	(6) Rate Base as Revised	(7) Impact of change in Rate of Return (5) * (6) / 12	(8) Jurisdictional Allocation, ES Form 1.10	(9) Jurisdictional Impact (Over)/Under (7) * (8)
May-13	Mar-13	10.26%	10.25%	-0.01%	\$ 466,605,240	(3,888)	87.29%	(3,394)
Jun-13	Apr-13	10.30%	10.25%	-0.05%	488,353,534	(20,348)	88.61%	(18,030)
Jul-13	May-13	10.30%	10.25%	-0.05%	500,727,214	(20,864)	86.28%	(18,001)
Aug-13	Jun-13	10.30%	10.25%	-0.05%	522,490,759	(21,770)	87.29%	(19,003)
Sep-13	Jul-13	10.30%	10.25%	-0.05%	545,861,106	(22,744)	88.29%	(20,081)
Oct-13	Aug-13	10.30%	10.25%	-0.05%	565,466,957	(23,561)	87.53%	(20,623)
Impact of Changes in Rate of Return during period under review						<u>\$ (113,176)</u>		<u>\$ (99,133)</u>

(1) Billing Month	(2) Expense Month	(3) Combined Total Over/(Under) Recovery (Q2, pg 2, Col 11)	(4) Rate of Return True-up	(5) Use of 12 Month Average Revenues
May-13	Mar-13	\$ (408,841)	\$ 3,394	\$ (412,235)
Jun-13	Apr-13	(12,091)	18,030	(30,122)
Jul-13	May-13	408,154	18,001	390,153
Aug-13	Jun-13	352,907	19,003	333,903
Sep-13	Jul-13	353,438	20,081	333,357
Oct-13	Aug-13	(346,538)	20,623	(367,162)
Total Over-Recovery for 6-month billing period		\$ 347,028	\$ 99,133	\$ 247,895

OVER/(UNDER) RECONCILIATION	
Combined Over/(Under) Recovery	\$ 347,028
Due to Change in ROR	\$ 99,133
Use of 12 Month Average Revenues	247,895
Subtotal	<u>347,028</u>
Unreconciled Difference	\$ -

**KENTUCKY UTILITIES COMPANY**

**Response to Commission Staff's First Request for Information  
in Appendix B of Commission's Order Dated December 23, 2013**

**Case No. 2013-00436**

**Question No. 3**

**Witness: Christopher M. Garrett**

- Q-3. Provide the calculations, assumptions, workpapers, 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.

Please see the attachment being provided in Excel format for the calculation of Deferred Income Taxes and the balance of Accumulated Deferred Income Taxes reported each month of the period under review.

**Kentucky Utilities Company  
Deferred Tax Calculations  
Environmental Compliance Plans, by Approved Project**

**2009 - Plan  
Project 28 - Brown 3 SCR**

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance							16,993,413	
Mar-13	91,793,424	179,762	593,165	413,403	38.9000%	160,814	17,154,227	-
Apr-13	91,793,424	179,762	593,164	413,402	38.9000%	160,813	17,315,040	-
May-13	91,793,424	179,762	593,164	413,402	38.9000%	160,813	17,475,854	-
Jun-13	91,793,424	179,762	593,164	413,402	38.9000%	160,813	17,636,667	-
Jul-13	91,793,424	179,762	593,168	413,406	38.9000%	160,815	17,797,481	-
Aug-13	91,793,424	179,762	593,167	413,405	38.9000%	160,815	17,958,294	-

Due to Bonus Depreciation for tax purposes taken on certain components of Project 28, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 50% bonus depreciation, which reduces the Federal tax basis to 50% of the plant balance. A sample calculation of deferred taxes for Mar 2013 is shown below:

Federal Basis	Book Depr.	Federal Tax Dep	Fed. Difference	Fed Tax Rate	Fed Def Tax
45,896,712	179,762	532,251	352,489	35.0000%	123,371
45,896,712		-	-	35.0000%	-
State Basis	Book Depr.	State Tax Depr	St. Difference	State Tax Rate	St Def Tax
91,793,424	179,762	1,139,838	960,076	6.0000%	57,605
					St. Offset for Fed Taxes not Owed (20,162)
					Total Deferred Tax 160,814

**Kentucky Utilities Company  
Deferred Tax Calculations  
Environmental Compliance Plans, by Approved Project**

**2009 - Plan****Project 29 - ATB Expansion at E.W. Brown Station (Phase II)**

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance							861,626	
Mar-13	16,622,587	22,343	704,140	681,797	38.9000%	265,219	1,126,844	-
Apr-13	16,622,587	22,343	703,623	681,280	38.9000%	265,018	1,391,862	-
May-13	16,622,587	22,343	703,625	681,282	38.9000%	265,019	1,656,880	-
Jun-13	16,622,587	22,343	703,623	681,280	38.9000%	265,018	1,921,898	-
Jul-13	16,622,587	22,343	703,627	681,284	38.9000%	265,019	2,186,916	-
Aug-13	16,622,587	22,343	703,626	681,283	38.9000%	265,019	2,451,934	-

Due to Bonus Depreciation for tax purposes taken on certain components of Project 29, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 50% bonus depreciation, which reduces the Federal tax basis to 50% of the plant balance. A sample calculation of deferred taxes for Aug 2013 is shown below:

Federal Basis:	Book Depr.	Federal Tax Dep	Fed. Difference	Fed Tax Rate	Fed Def Tax	
8,311,293	22,343	66,520	44,177	35.0000%	15,462	
8,311,293		692,608	692,608	35.0000%	242,413	
State Basis	Book Depr.	State Tax Depr	St. Difference	State Tax Rate	St Def Tax	
16,622,587	22,343	205,504	183,161	6.0000%	10,990	
						St. Offset for Fed Taxes not Owed (3,846)
						Total Deferred Tax 265,018

**Kentucky Utilities Company**  
**Deferred Tax Calculations**  
**Environmental Compliance Plans, by Approved Project**

**2009 - Plan****Project 30 - Ghent CCP Storage (Landfill-Phase I)**

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance							435	
Mar-13	34,137	406	1,506	1,100	38.9000%	428	862	-
Apr-13	34,137	406	2,257	1,851	38.9000%	720	1,581	-
May-13	2,335,800	2,622	133,293	130,671	38.9000%	50,831	52,411	-
Jun-13	2,335,800	4,837	135,284	130,447	38.9000%	50,744	103,154	-
Jul-13	2,335,800	4,837	135,284	130,447	38.9000%	50,744	153,897	-
Aug-13	2,335,800	4,837	135,284	130,447	38.9000%	50,744	204,640	-

Due to Bonus Depreciation for tax purposes taken on certain components of Project 30, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 50% bonus depreciation, which reduces the Federal tax basis to 50% of the plant balance. A sample calculation of deferred taxes for Aug 2013 is shown below:

Federal Basis	Book Depr.	Federal Tax Dep	Fed. Difference	Fed Tax Rate	Fed Def Tax
1,167,900	4,837	1,994	(2,843)	35.0000%	(995)
1,167,900		145,988	145,988	35.0000%	51,096
State Basis	Book Depr.	State Tax Depr	St. Difference	State Tax Rate	St Def Tax
2,335,800	4,837	21,377	16,540	6.0000%	992
					St. Offset for Fed Taxes not Owed
					(347)
					Total Deferred Tax
					50,746

**Kentucky Utilities Company  
Deferred Tax Calculations  
Environmental Compliance Plans, by Approved Project**

**2009 - Plan**

**Project 31 - Trimble County Ash Treatment Basin (BAP/GSP)**

<b>Month</b>	<b>Plant Balance</b>	<b>Book Depreciation</b>	<b>Tax Depreciation</b>	<b>Temporary Difference</b>	<b>Income Tax Rate</b>	<b>Deferred Tax</b>	<b>Accumulated Deferred Taxes</b>	<b>Deferred Taxes on Retirements</b>
Beg Balance							322,320	
Mar-13	9,102,469	14,253	50,656	36,403	38.9000%	14,161	336,480	-
Apr-13	9,102,469	14,253	50,656	36,403	38.9000%	14,161	350,641	-
May-13	9,102,469	14,253	50,658	36,405	38.9000%	14,162	364,801	-
Jun-13	9,102,469	14,253	50,656	36,403	38.9000%	14,161	378,962	-
Jul-13	9,102,469	14,253	50,656	36,403	38.9000%	14,161	393,122	-
Aug-13	9,102,469	14,253	50,660	36,407	38.9000%	14,162	407,283	-



**Kentucky Utilities Company**  
**Deferred Tax Calculations**  
**Environmental Compliance Plans, by Approved Project**

**2009 - Plan****Project 33 - Beneficial Reuse**

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance							785,464	
Mar-13	4,279,420	7,489	14,163	6,674	38.9000%	2,596	788,060	-
Apr-13	4,279,420	7,489	14,163	6,674	38.9000%	2,596	790,656	-
May-13	4,279,420	7,489	14,161	6,672	38.9000%	2,595	793,252	-
Jun-13	4,279,420	7,489	14,165	6,676	38.9000%	2,597	795,849	-
Jul-13	4,279,420	7,489	14,165	6,676	38.9000%	2,597	798,445	-
Aug-13	4,279,420	7,489	14,165	6,676	38.9000%	2,597	801,041	-

Due to Bonus Depreciation for tax purposes taken on certain components of Project 33, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 50% bonus depreciation, which reduces the Federal tax basis to 50% of the plant balance. A sample calculation of deferred taxes for Mar 2013 is shown below:

Federal Basis	Book Depr.	Federal Tax Dep	Fed. Difference	Fed Tax Rate	Fed Def Tax
2,139,710	7,489	12,872	5,383	35.0000%	1,884
2,139,710		-	-	35.0000%	-
State Basis	Book Depr.	State Tax Depr	St. Difference	State Tax Rate	St Def Tax
4,279,420	7,489	25,744	18,255	6.0000%	1,095
					St. Offset for Fed Taxes not Owed (383)
					Total Deferred Tax 2,596

**Kentucky Utilities Company  
Deferred Tax Calculations  
Environmental Compliance Plans, by Approved Project**

**2011 - Plan  
Project 35 - Ghent Station Air Compliance**

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Beg Balance							1,253,783	
Mar-13	3,645,863	7,026	2,201	(4,825)	38.9000%	(1,877)	1,251,906	-
Apr-13	12,079,086	12,156	456,058	443,902	38.9000%	172,678	1,424,584	-
May-13	12,079,086	17,286	463,571	446,285	38.9000%	173,605	1,598,189	-
Jun-13	12,079,086	17,286	463,571	446,285	38.9000%	173,605	1,771,794	-
Jul-13	11,376,711	16,902	407,504	390,602	38.9000%	151,944	1,923,738	949
Aug-13	12,184,254	17,009	483,891	466,882	38.9000%	181,617	2,105,354	949

Due to Bonus Depreciation for tax purposes taken on certain components of Project 35, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 100% bonus depreciation, which reduces the Federal tax basis to 100% of the plant balance. A sample calculation of deferred taxes for Mar 2013 is shown below:

Federal Basis	Book Depr.	Federal Tax Dep	Fed. Difference	Fed Tax Rate	Fed Def Tax
3,645,863	7,026	-	(7,026)	35.0000%	(2,459)
State Basis	Book Depr.	State Tax Depr	St. Difference	State Tax Rate	St Def Tax
3,645,863	7,026	21,933	14,907	6.0000%	894
					St. Offset for Fed Taxes not Owed (313)
					Total Deferred Tax (1,878)

**KENTUCKY UTILITIES COMPANY**

**Response to Commission Staff's First Request for Information  
in Appendix B of Commission's Order Dated December 23, 2013**

**Case No. 2013-00436**

**Question No. 4**

**Witness: Christopher M. Garrett**

- Q-4. Refer to ES Form 2.50, Pollution Control - Operations & Maintenance Expenses, for the March 2013 through August 2013 expense months. 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 please find a schedule showing the changes in the operations and maintenance expense accounts for March 2013 through August 2013 expense months. The changes in the expense levels are reasonable and generally occurred as a part of routine plant operations and maintenance or normal annual testing expenses.

2009 Plan

Monthly variances in the NOx operation expenses, accounts 506154 and 506155, reflect normal SCR operations at E.W. Brown Unit 3. The variances for account 506154 are driven by the purchase and delivery timing of the raw consumable material (ammonia), as well as variations in generation and coal quality.

Fluctuations in the NOx maintenance expenses, account 512151, are the result of routine monthly maintenance on the SCR at E.W. Brown Unit 3. The decrease in June is due to increased air compressor maintenance in April and May. The increase in August is due to air filter replacement.

2011 Plan

Fluctuations in sorbent injection operation expenses, account 506159, are the result of on-going operation of Ghent and E.W. Brown Units.

Fluctuations in sorbent injection reactant (hydrated lime/trona) expenses, account 506152, are the result of on-going operation of all Ghent and E.W. Brown Units.

Fluctuations in sorbent injection maintenance expenses, account 512152, are the result of normal system maintenance and the timing of preventive maintenance performed.

**KENTUCKY UTILITIES COMPANY  
ENVIRONMENTAL SURCHARGE REPORT**

**Pollution Control - Operations & Maintenance Expenses**

O&M Expense Account	Mar-13	Apr-13	% Change from Prior Period	May-13	% Change from Prior Period	Jun-13	% Change from Prior Period	Jul-13	% Change from Prior Period	Aug-13	% Change from Prior Period
<b>2009 Plan</b>											
506154 - ECR NOx Operation -- Consumables	31,466.24	62,224.49	98%	75,760.64	22%	60,016.45	-21%	57,653.83	-4%	53,792.47	-7%
506155 - ECR NOx Operation -- Labor and Other	-	-	0%	-	0%	-	0%	-	0%	-	0%
512151 - ECR NOx Maintenance	14,207.68	22,551.69	59%	20,743.16	-8%	3,094.47	-85%	8,989.73	191%	13,830.81	54%
502013 - ECR Landfill Operations	-	-	0%	-	0%	-	0%	-	0%	-	0%
512107 - ECR Landfill Maintenance	-	-	0%	-	0%	-	0%	-	0%	-	0%
Total 2009 Plan O&M Expenses	45,673.92	84,776.18	86%	96,503.80	14%	63,110.92	-35%	66,643.56	6%	67,623.28	1%
<b>2011 Plan</b>											
506159 - ECR Sorbent Injection Operation	57,544.96	59,974.57	4%	58,381.82	-3%	54,362.92	-7%	61,567.56	13%	62,890.58	2%
506152 - ECR Sorbent Reactant - Reagent Only	1,114,685.97	999,005.78	-10%	1,016,377.75	2%	804,996.28	-21%	831,844.92	3%	814,316.17	-2%
512152 - ECR Sorbent Injection Maintenance	23,546.99	28,404.04	21%	47,345.97	67%	33,808.38	-29%	41,273.12	22%	14,263.29	-65%
506156 - ECR Baghouse Operations	-	-	0%	-	0%	-	0%	-	0%	-	0%
512156 - ECR Baghouse Maintenance	-	-	0%	-	0%	-	0%	-	0%	-	0%
506151 - ECR Activated Carbon	-	-	0%	-	0%	-	0%	-	0%	-	0%
502013 - ECR Landfill Operations	-	-	0%	-	0%	-	0%	-	0%	-	0%
512107 - ECR Landfill Maintenance	-	-	0%	-	0%	-	0%	-	0%	-	0%
Total 2011 Plan O&M Expenses	1,195,777.92	1,087,384.39	-9%	1,122,105.54	3%	893,167.58	-20%	934,685.60	5%	891,470.04	-5%

**KENTUCKY UTILITIES COMPANY**

**Response to Commission Staff's First Request for Information  
in Appendix B of Commission's Order Dated December 23, 2013**

**Case No. 2013-00436**

**Question No. 5**

**Witness: Christopher M. Garrett**

- Q-5. In Case No. 2000-00439, 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 August 31, 2013:
- 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 exhibits and schedules of your response in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.
- A-5. a-d. Please see the attachment being provided in Excel format. There was no preferred stock outstanding as of August 31, 2013; therefore, it is not listed in the attached schedule. KU is utilizing a return on equity of 10.25% as agreed to for all ECR Plans and approved by the Commission in its December 20, 2012 Order in Case No. 2012-00221.

**KENTUCKY UTILITIES**

**Adjusted Electric Rate of Return on Common Equity**  
**As of August 31, 2013**

	Balance at 08-31-13 (1)	Capital Structure (2)	EEI (3)	Investments in OVEC and Other (Col 2 x Col 4 Line 4) (4)	Adjustments to Total Co. Capitalization (Sum of Col 3 - Col 4) (5)	Adjusted Total Company Capitalization (Col 1 + Col 5) (6)	Jurisdictional Rate Base Percentage (7)	Kentucky Jurisdictional Capitalization (Col 6 x Col 7) (8)
1. Short Term Debt	\$ 124,993,822	2.90%	\$ -	\$ (35,430)	\$ (35,430)	\$ 124,958,392	87.63%	\$ 109,501,039
2. Long Term Debt	1,841,650,311	42.79%	-	(522,774)	(522,774)	1,841,127,537	87.63%	1,613,380,061
3. Common Equity	2,336,831,556	54.31%	(504,066)	(663,516)	(1,167,582)	2,335,663,974	87.63%	2,046,742,340
4. Total Capitalization	<u>\$ 4,303,475,689</u>	<u>100.000%</u>	<u>\$ (504,066)</u>	<u>\$ (1,221,720)</u>	<u>\$ (1,725,786)</u>	<u>\$ 4,301,749,903</u>		<u>\$ 3,769,623,440</u>

	Kentucky Jurisdictional Capitalization (8)	Capital Structure (9)	Environmental Surcharge (Col 9 x Col 10 Line 4) (10)	DSM Rate Base (Col 9 x Col 11 Line 4) (11)	Adjusted Kentucky Jurisdictional Capitalization (Col 8 + Col 10 + Col 11) (12)	Adjusted Capital Structure (13)	Annual Cost Rate (14)	Cost of Capital (Col 13 x Col 14) (15)
1. Short Term Debt	\$ 109,501,039	2.90%	\$ (14,370,042)	\$ (52,545)	\$ 95,078,452	2.91%	0.29%	0.01%
2. Long Term Debt	1,613,380,061	42.80%	(212,082,001)	(775,493)	1,400,522,567	42.80%	3.64%	1.56%
3. Common Equity	2,046,742,340	54.30%	(269,066,651)	(983,862)	1,776,691,827	54.29%	10.25%	5.56%
4. Total Capitalization	<u>\$ 3,769,623,440</u>	<u>100.000%</u>	<u>\$ (495,518,694)</u>	<u>\$ (1,811,900)</u>	<u>\$ 3,272,292,846</u>	<u>100.000%</u>		<u>7.13%</u>
5. Weighted Cost of Capital Grossed up for Income Tax Effect {ROR + (ROR - DR) x [TR / (1 - TR)]}								<u>10.22%</u>



**ECR - Gross-up Revenue Factor &  
Composite Income Tax Calculation  
2013**

	2013 Federal & State Production Credit W/ 6% 2013 State <u>Tax Rate Included</u>	
(1) Assume pre-tax income of	\$ 100.0000	
(2)		
(3) State income tax (see below)	<u>5.6400</u>	(40)
(4)		
(5) Taxable income for Federal income tax before production credit	94.3600	(1) - (3)
(6)		
(7) a. Production Rate	9%	
(8) b. Allocation to Production Income	100%	
(9) c. Allocated Production Rate (a x b)	9.00%	
(10)		
(11) Less: Production tax credit	<u>8.4924</u>	(6) * (9)
(12)		
(13) Taxable income for Federal income tax	85.8676	(6) - (11)
(14)		
(15) Federal income tax	<u>30.0537</u>	(13) * 35%
(16)		
(17)		
(18) Total State and Federal income taxes	<u>\$ 35.6937</u>	(3) + (15)
(19)		
(20) Gross-up Revenue Factor	<u><u>64.3063</u></u>	100 - (18)
(21)		
(22) Therefore, the composite rate is:		
(23) Federal	30.0537%	(15) / 100
(24) State	<u>5.6400%</u>	(3) / 100
(25) Total	<u><u>35.6937%</u></u>	(23) + (24)
(26)		
(27)		
(28)		
(29)		
(30)		
(31) <u>State Income Tax Calculation</u>		
(32) Assume pre-tax income of	\$ 100.0000	
(33)		
(34) Production credit @ 6%	<u>6.0000</u>	
(35)		
(36) Taxable income for State income tax	94.0000	(32) - (34)
(37)		
(38) State Tax Rate	<u>6.0000%</u>	
(39)		
(40) State Income Tax	<u><u>5.6400</u></u>	(36) * (38)



**KENTUCKY UTILITIES COMPANY**

**Response to Commission Staff's First Request for Information  
in Appendix B of Commission's Order Dated December 23, 2013**

**Case No. 2013-00436**

**Question No. 6**

**Witness: Robert M. Conroy**

- 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. Please see the attachment being provided in Excel format.

The actual average residential customer's usage for the 12-months ending November 30, 2013 is 1,208 kWh per month. Actual average monthly usage for residential customers will vary from month to month depending upon the time period of the year.

Based upon distributing the over-recovered position of \$347,028 in one month, the ECR billing factor will be lower by approximately 0.31% for that month. For a residential customer using 1,208 kWh per month the impact of the adjusted ECR billing factor would be a decrease of approximately \$0.31 on that month's bill, using rates and adjustment clause factors in effect for the November 2013 billing month.

KU ECR 6-Month Review Case No. 2013-00436

INPUTS:		
Expense Month for calculations		Nov-13
<u>ECR Monthly Filing - Expense Month for calculations</u>		
Form 1.10 - Line 13	Adjusted Net Juris E(M) as filed	\$ 5,438,479
Form 1.10 - Line 14	Group 1 Rev as % 12-mo Total Rev	40.55%
Form 1.10 - Line 15	Group 1 E(m)	\$ 2,205,303
Form 1.10 - Line 16	Group 1 12-month avg revenue	\$ 45,373,396
Form 1.10 - Line 17	Billing Factor filed	4.86%
<u>Financial Reports - Year Ended Current Month</u>		
		Nov-13
Page 28.1	Residential Sales (kWh)	6,085,794,561
Page 41	Residential Avg Customers Year Ended	419,984
	times 12 for 12-month number	5,039,808
Response to DR Q2	Adjustment for (Over)/Under Collection	(347,028)
	Number of Months to collect/distribute	1
	Monthly Adj for (Over)/Under Collection	(347,028)
	Position for Review Period Collection	OVER
<u>Billing Factors</u>		
Tariff	Basic Service Charge	10.75
Tariff	Base Rate	0.07459
Monthly Filing	FAC for Nov-13	(0.00180)
Tariff	DSM	0.00301

Residential Bill Impact Calculations

Adjusted Net Juris E(M) as filed	\$ 5,438,479
Adjustment for (Over)/Under Collection	(347,028)
Adjusted Net Juris E(M) as adjusted for (Over)/Under Collection	\$ 5,091,451

Group 1 Rev as % 12-mo Total Rev	40.55%
Group 1 E(m) as filed	\$ 2,205,303
Group 1 E(m) as adjusted	\$ 2,064,583
Group 1 12-month revenue	\$ 45,373,396
Billing Factor as filed	4.86%
Billing Factor as adjusted	4.55%
Impact to billing factor	-0.31%

Bill Impact, Average Residential Customer

Basic Service Charge	10.75	\$	10.75
Base Rate	0.07459		90.10
FAC for Nov-13	(0.00180)		(2.17)
DSM	0.00301		3.64
		\$	102.32

ECR (as billed)	4.86%	\$	4.97
ECR (as adjusted)	4.55%	\$	4.66
Change in ECR	-0.31%	\$	(0.31)

**Average Residential Usage  
1,208 kWh**

*negative number = over collection = distribution  
positive number = under collection = recovery*