## 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 LOUISVILLE ) GAS AND ELECTRIC COMPANY FOR THE )

CASE NO. 2015-00222 TWO-YEAR BILLING PERIOD ENDING APRIL ) 30, 2015

RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO THE COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED JULY 10, 2015

FILED: August 12, 2015

## VERIFICATION

## COMMONWEALTH OF KENTUCKY ) ) $\mathrm{SS}:$ 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.


Subscribed and sworn to before me, a Notary Public in and before said County and State, this $\qquad$ day of
 2015.


My Commission Expires:

## JUDY SCHOOLER

Notary Public, State at Large, KY

- commission expires July 11,2043

Notary ID $\$ 512743$

## VERIFICATION

## COMMONWEALTH OF KENTUCKY )

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.


Subscribed and sworn to before me, a Notary Public in and before said County and State, this $\qquad$ 2015.


My Commission Expires:

```
uULI uvIMvLER
    Notary Public, State at Large, KY
Nay commission expires.July 11,2043
    Notary ID#512743
```


# LOUISVILLE GAS AND ELECTRIC COMPANY 

Response to the Commission Staff's First Request for Information Dated July 10, 2015

Case No. 2015-00222
Question No. 1

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

Q-1. Concerning the rate of return on the 2009 and 2011 amendments to the environmental compliance plan, for the period under review, calculate any true-up adjustment needed to recognize changes in LG\&E's cost of debt, preferred stock, accounts receivable financing (if applicable), or changes in LG\&E's jurisdictional capital structure as of February 28, 2015. 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.

A-1. Please see the attachment.
LG\&E 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 last six months of the two-year 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 February 28, 2015. LG\&E 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. 2011-00162.

LG\&E recommends using an effective tax rate of $38.6660 \%$ in the gross-up revenue factor used in the rate of return calculation for the period ended February 28, 2015. LG\&E expects to incur a tax loss in both 2014 and 2015 as a result of bonus depreciation and will be unable to take the Internal Revenue Code $\S 199$ manufacturing tax deduction. As discussed in the rebuttal testimony of Kent Blake in Case No. 2014-00372, LG\&E will elect to take bonus depreciation in 2014 and 2015 as this provides the greatest revenue requirement benefit to customers over the life of the assets.

Pages 4 through 6 provide the revised adjusted weighted average cost of capital for the expense periods ending December 31, 2013, February 28, 2014 and August 31, 2014. In
the course of preparing the data responses, LG\&E discovered an inadvertent error in the calculation of the overall rate of return used in the true-up adjustment. The original calculation did not include the full six-months in each of the periods in the calculation of the average daily balances and daily interest rates for short- and long-term debt rates. The calculation only used four months as noted in the testimony of Mr. Conroy. See also the response to Question No. 2.

Louisville Gas \& Electric Company
verall Rate of Return True-up Adjustment - Revised Rate Base Impact on Calculated E(m)

| (1)Billing Month | (2) | (3) |  | (4) |  | (5) |  | (6) |  | (7) | (8) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Expense Month | Rate of Return as Filed | Rate Base as Filed |  | Rate Base As Revised |  | $\begin{aligned} & \text { Change in Rate } \\ & \text { Base } \end{aligned}$ |  | True-up Adjustment |  | Jurisdictional Allocation, ES Form 1.10 | Jurisdictional True up Adjustment |  |
|  |  |  |  |  |  |  |  | (5) - (4) |  | (3) * (6) / 12 |  |  |  |
| May-13 | Mar-13 | 10.52\% | \$ | 139,933,777 | \$ | 139,933,777 | \$ | 0 | \$ | \$ | 92.94\% | \$ | 0 |
| Jun-13 | Apr-13 | 10.61\% |  | 161,383,490 |  | 161,383,490 |  | 0 |  | 0 | 92.71\% |  | 0 |
| Jul-13 | May-13 | 10.61\% |  | 182,125,984 |  | 182,125,984 |  | 0 |  | 0 | 90.64\% |  | 0 |
| Aug-13 | Jun-13 | 10.61\% |  | 202,935,087 |  | 202,935,087 |  | 0 |  | 0 | 94.04\% |  | 0 |
| Sep-13 | Jul-13 | 10.61\% |  | 221,625,403 |  | 221,625,403 |  | 0 |  | 0 | 93.97\% |  | 0 |
| Oct-13 | Aug-13 | 10.61\% |  | 239,722,466 |  | 239,722,466 |  | 0 |  | 0 | 95.56\% |  | 0 |
|  |  |  |  |  |  |  |  |  | \$ | \$ 0 |  | \$ | 0 |
| Nov-13 | Sep-13 | 10.61\% | \$ | 255,472,880 | \$ | 255,472,880 | \$ | 0 | \$ | \$ 0 | 96.12\% | \$ | 0 |
| Dec-13 | Oct-13 | 10.61\% |  | 280,843,907 |  | 280,843,907 |  | 0 |  | 0 | 96.41\% |  | 0 |
| Jan-14 | Nov-13 | 10.26\% |  | 309,271,936 |  | 309,271,936 |  | 0 |  | 0 | 90.64\% |  | 0 |
| Feb-14 | Dec-13 | 10.26\% |  | 338,421,185 |  | 338,421,185 |  | 0 |  |  | 88.98\% |  | 0 |
| Mar-14 | Jan-14 | 10.26\% |  | 354,933,396 |  | 354,933,396 |  | 0 |  | 0 | 79.20\% |  | 0 |
| Apr-14 | Feb-14 | 10.26\% |  | 381,567,587 |  | 381,567,587 |  | 0 |  | 0 | 84.16\% |  | 0 |
|  |  |  |  |  |  |  |  |  | \$ | \$ 0 |  | \$ | 0 |
| May-14 | Mar-14 | 10.26\% | \$ | 407,949,606 | \$ | 407,949,606 | \$ | 0 | \$ | \$ 0 | 82.67\% | \$ | 0 |
| Jun-14 | Apr-14 | 10.26\% |  | 440,821,795 |  | 440,821,795 |  | 0 |  | 0 | 85.89\% |  | 0 |
| Jul-14 | May-14 | 10.26\% |  | 471,739,235 |  | 471,739,235 |  | 0 |  | 0 | 88.21\% |  | , |
| Aug-14 | Jun-14 | 10.26\% |  | 507,040,783 |  | 507,040,783 |  | 0 |  | 0 | 93.58\% |  | 0 |
| Sep-14 | Jul-14 | 10.43\% |  | 550,894,435 |  | 550,894,435 |  | 0 |  | 0 | 95.20\% |  | 0 |
| Oct-14 | Aug-14 | 10.43\% |  | 593,739,573 |  | 593,739,573 |  | 0 |  | 0 | 94.18\% |  | , |
|  |  |  |  |  |  |  |  |  | \$ | \$ 0 |  | \$ | 0 |
| Nov-14 | Sep-14 | 10.43\% | \$ | 634,391,653 | \$ | 634,391,653 | \$ | 0 | \$ | \$ 0 | 94.65\% | \$ | 0 |
| Dec-14 | Oct-14 | 10.43\% |  | 677,572,522 |  | 677,572,522 |  | 0 |  | 0 | 94.92\% |  | , |
| Jan-15 | Nov-14 | 10.43\% |  | 718,625,020 |  | 718,625,020 |  | 0 |  | 0 | 89.57\% |  | 0 |
| Feb-15 | Dec-14 | 10.43\% |  | 685,355,081 |  | 685,355,081 |  | 0 |  | 0 | 93.91\% |  | 0 |
| Mar-15 | Jan-15 | 10.43\% |  | 704,968,082 |  | 704,968,082 |  | 0 |  | 0 | 90.28\% |  | 0 |
| Apr-15 | Feb-15 | 10.43\% |  | 738,255,113 |  | 738,255,113 |  | 0 |  | 0 | 83.18\% |  | 0 |
|  |  |  |  |  |  |  |  |  | \$ | \$ 0 |  | \$ | 0 |

Louisville Gas \& Electric Company
Overall Rate of Return True-up Adjustment - Revised Rate of Return Impact on Calculated E(m)


LOUISVILLE GAS AND ELECTRIC COMPANY
Adjusted Electric Rate of Return on Common Equity - ECR Plan As of February 28, 2015

## ELECTRIC



## LOUSVILLE GAS AND ELECTRIC COMPANY

## Adjusted Electric Rate of Return on Common Equity - ECR Plans

 As of December 31, 2013 - Revised to Reflect Correction to Annual Cost Rates
5. Weighted Cost of Capital Grossed up for Income Tax Effect \{ROR + (ROR - DR) $\mathrm{x}[\mathrm{TR} /(1-\mathrm{TR})]$
$10.43 \%$


|  |  | Electric Capitalization (Col4) (10) | Capital Structure (11) | Trimble County Inventories (a) (Col $11 \times$ Col 12 Line 4) (12) |  | Investments in OVEC \& Other (Coll $11 \times \mathrm{Col} 13$ Line 4) (13) |  | $\begin{gathered} \text { JDIC } \\ \left(\begin{array}{c} \text { Coll } 11 \times \text { Col } 14 \text { Lire } 4) \\ (14) \end{array}\right. \\ \hline \end{gathered}$ |  | $\begin{aligned} & \text { Environmental } \\ & \text { Compliance } \\ & \text { Rate Base } \\ & \text { (Col } 11 \times \text { Col } 15 \text { Line 4) } \\ & (15) \\ & \hline \end{aligned}$ |  | DSMRate Base(Coll $11 \times$ Col 16 Line 4)$(16)$ |  | Advanced Coal Investment <br> Tax Credit (b) <br> (Col $11 \times$ Col 17 Line 4) <br> (17) |  | TotalAdjustmentsTo Capital(Sumoffol 12-Col17)(18) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ELECTRIC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Short Term Debt | \$ | 38,776,100 | 1.71\% | \$ | $(82,770)$ | \$ | $(18,531)$ | \$ | 262,891 | \$ | $(5,787,002)$ | \$ | $(27,579)$ | \$ | 377,564 | \$ | $(5,275,427)$ |
| 2. Long Term Debt |  | 967,433,495 | 42.61\% |  | $(2,062,475)$ |  | $(461,767)$ |  | 6,550,744 |  | $(144,201,267)$ |  | $(687,220)$ |  | 9,408,201 |  | (131,453,784) |
| 3. Common Equity |  | 1,264,026,273 | 55.68\% |  | $(2,695,110)$ |  | $(603,408)$ |  | 8,560,089 |  | (188,432,916) |  | $(898,016)$ |  | 12,294,030 |  | (171,775,331) |
| 4. Total Capitalization |  | $\xrightarrow{2,270,235,868}$ | 100.000\% | \$ | $\underline{(4,840,355)}$ | \$ | $\underline{(1,083,706)}$ | \$ | $\underline{\text { 15,373,724 }}$ | \$ | $\xlongequal{(338,421,185)}$ | \$ | $\xlongequal{1,612,815)}$ | \$ | $\stackrel{\text { 22,079,795 }}{ }$ | \$ | $\xrightarrow{(308,504,542)}$ |

(a) Trimble County Inventories As of December 31, 2013-Revised to Reflect Correction to Annual Cost Rates Materials and Supplies Stores Expense
Coal
\$ 8,686,387
$8,686,387$
$1,540,521$
8,635025
Limestone
272,006
Fuel Oil
Total Trimble County Inventories
Multiplied by Disallowed Portion
9,632
Trimble County Inv. Disallowed
(b) Reflects Investment Tax Credit treatment per Case No. 2007-00179
(c) Average daily balance per Settlement Agreement in Case No. 2011-00162.

## LOUISVILLE GAS AND ELECTRIC COMPANY

## Adjusted Electric Rate of Return on Common Equity - ECR Plans

 As of February 28, 2014-Revised to Reflect Correction to Annual Cost Rates|  |  | Per Books 02-28-14 (1) |  | Capital Structure (2) | Electric Rate Base Percentage (3) |  | Electric Capitalization $(\operatorname{Col} 1 \times \operatorname{Col} 3)$ (4) |  | Adjustments <br> to Capitalization (Col 18) (5) |  | Adjusted Electric Capitalization $(\operatorname{Col} 4+\operatorname{Col} 5)$ (6) | Adjusted Capital Structure (7) | Annual Cost Rate (8) | Cost of Capital (Coll 8 Col7) (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ELECTRIC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Short Term Debt | \$ | 38,848,379 | (c) | 1.35\% | 80.500\% | \$ | 31,272,945 | \$ | $(4,736,445)$ | \$ | 26,536,500 | 1.35\% | 0.30\% | 0.00\% |
| 2. Long Term Debt |  | 1,250,801,747 | (c) | 43.53\% | 80.500\% |  | 1,006,895,406 |  | (152,724,062) |  | 854,171,344 | 43.53\% | 3.61\% | 1.57\% |
| 3. Common Equity |  | 1,583,989,691 |  | 55.12\% | 80.500\% |  | 1,275,111,701 |  | $(193,387,324)$ |  | 1,081,724,377 | 55.12\% | 10.25\% | 5.65\% |
| 4. Total Capitalization | \$ | 2,873,639,817 |  | $\underline{ }$ |  | \$ | $\underline{2,313,280,052}$ | \$ | $\xrightarrow{(350,847,831)}$ | \$ | 1,962,432,221 | $\underline{ }$ |  | 7.22\% |
| 5. Weighted Cost of C | Inc | me Tax Effect \{ | ROR | OR - DR) x [TR | TR) $\}$ \} |  |  |  |  |  |  |  |  | 10.78\% |

## ELECTRIC

| Electric |
| :---: |
| Capitalization |
| $($ Col4) |
| $(10)$ |



| $\begin{gathered} \text { Environmental } \\ \text { Compliance } \\ \text { Rate Base } \\ (\text { Coll } 11 \times \text { Coll } 15 \text { Lie 4) } \\ (15) \\ \hline \end{gathered}$ |  | DSMRate Base(Coll $1 \times$ Col 6 Line 4)$(16)$ |  | $\qquad$ |  | TotalAdjustmentsTo Capital(Ssmoffol 12-Col17)(18) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | $(5,151,162)$ | \$ | $(18,213)$ | \$ | 297,140 | \$ | $(4,736,445)$ |
|  | $(166,096,371)$ |  | $(587,278)$ |  | 9,581,110 |  | $(152,724,062)$ |
|  | (210,320,054) |  | (743,642) |  | 12,132,111 |  | (193,387,324) |
|  | (381,567,587) | \$ | $\underline{\text { 1,349,133) }}$ | \$ | 22,010,361 | \$ | (350,847,831) |

(a) Trimble County Inventories Materials and Supplies Stores Expense
Coal
Fuel Oil
Emission Allowances
Total Trimble County Inventorie
Multiplied by Disallowed Portion
Trimble County Inv. Disallowed

| $\$$ | $8,835,113$ |
| ---: | ---: |
| $1,574,988$ |  |
|  | $5,187,547$ |
|  | 27,504 |
|  | 233,422 |
|  | 7,472 |
| $\$ \quad 16,076,046$ |  |
|  | $25.00 \%$ |
| $\$ \quad 4,019,012$ |  |

(b) Reflects Investment Tax Credit treatment per Case No. 2007-00179
(c) Average daily balance per Settlement Agreement in Case No. 2011-00162.

## LOUSVILLE GAS AND ELECTRIC COMPANY

## Adjusted Electric Rate of Return on Common Equity - ECR Plans

 As of August 31, 2014-Revised to Reflect Correction to Annual Cost Rates

## ELECTRIC

| Electric |
| :---: |
| Capitalization |
| $($ Col4 $)$ |
| $(10)$ |


| Capital | Trimble County Inventories (a) | Investments in OVEC \& Other | JDIC |
| :---: | :---: | :---: | :---: |
| Structure <br> (11) | $(\operatorname{Col} 11 \times \operatorname{Col} 12 \text { Line 4) }$ <br> (12) | (Col $11 \times \operatorname{Col} 13$ Line 4) <br> (13) | (Col $11 \times \mathrm{Col} 14$ Line 4) <br> (14) |


| $\begin{gathered} \text { Environmental } \\ \text { Compliance } \\ \text { Rate Base } \\ (\text { Coll } 11 \times \text { Col } 15 \text { Line 4) } \\ (15) \\ \hline \end{gathered}$ | DSMRate Base(Coll $1 \times$ Col 6 Line 4)$(16)$ |  | Advanced CoalInvestmentTax Credit (b)(Col $11 \times$ Col 17 Line 4)(17) |  | TotalAdjustmentsTo Capital(Sum of Col 12 . Col 17)(18) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $(9,084,215)$ | \$ | $(32,883)$ | \$ | 333,572 | \$ | (8,635,822) |
| $(262,670,387)$ |  | $(950,812)$ |  | 9,645,232 |  | $(249,705,087)$ |
| (321,984,971) |  | 1,165,519) |  | 11,823,257 |  | $(306,091,930)$ |
| (593,739,573) | \$ | $\underline{\text { 2,149,214) }}$ | \$ | 21,802,061 | \$ | (564,432,839) |

(a) Trimble County Inventories Materials and Supplies
Stores Expense
As of August 31, 2014 - Revis

| \$ | 9,078,295 |
| :---: | :---: |
|  | 1,652,253 |
|  | 3,778,474 |
|  | 230,122 |
|  | 185,311 |
|  | 20,442 |
| \$ | 14,944,897 |
|  | 25.00\% |
| \$ | 3,736,224 |

(b) Reflects Investment Tax Credit treatment per Case No. 2007-00179
(c) Average daily balance per Settlement Agreement in Case No. 2011-00162.

# LOUISVILLE GAS AND ELECTRIC COMPANY 

## Response to the Commission Staff's First Request for Information Dated July 10, 2015

Case No. 2015-00222
Question No. 2

## Witness: Robert M. Conroy

Q-2. Prepare a summary schedule showing the calculation of Total $\mathrm{E}(\mathrm{m})$, Net Retail $\mathrm{E}(\mathrm{m})$, 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 LG\&E has submitted during the billing period under review. Include a calculation of any additional over- or under-recovery amount LG\&E believes needs to be recognized for the two-year review. Include all supporting calculations and documentation for any such additional over- or underrecovery.

A-2. Please see the attachment that includes the summary schedule and cumulative components which make up the cumulative under-recovery for the two-year period.

For the six-month expense period under review, ending February 28, 2015, LG\&E experienced an under-recovery of $\$ 1,635,624$.

In the course of preparing the data responses, LG\&E discovered an inadvertent error in the calculation of the overall rate of return used in the true-up adjustment for the sixmonth periods ending February 28, 2014 and August 31, 2014. The original calculation did not include the full six-months in each of the periods in the calculation of the average daily balances and daily interest rates for short- and long-term debt rates. The result was an understatement of the previous true-up adjustment of $\$ 323,700$.

LG\&E experienced a cumulative under-recovery of $\$ 1,959,324$ to be recognized for the two-year review.

| (1) ${ }_{\text {Expense Month }}$ |  | (2) |  | (3) | (4) |  | (5) |  | (6) | (7) |  | (8) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 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 | \$ | 139,933,777 | \$ | 11,661,148 | 10.46\% | \$ | 111,448 | \$ | 1,331,204 | 92.94\% | \$ | 1,237,221 |  |
| Apr-13 |  | 161,383,490 |  | 13,448,624 | 10.46\% |  | 136,726 |  | 1,543,452 | 92.71\% |  | 1,430,935 |  |
| May-13 |  | 182,125,984 |  | 15,177,165 | 10.46\% |  | 154,661 |  | 1,742,193 | 90.64\% |  | 1,579,124 |  |
| Jun-13 |  | 202,935,087 |  | 16,911,257 | 10.46\% |  | 166,262 |  | 1,935,180 | 94.04\% |  | 1,819,843 |  |
| Jul-13 |  | 221,625,403 |  | 18,468,784 | 10.46\% |  | 193,113 |  | 2,124,948 | 93.97\% |  | 1,996,813 |  |
| Aug-13 |  | 239,722,466 |  | 19,976,872 | 10.46\% |  | 216,750 |  | 2,306,330 | 95.56\% |  | 2,203,929 |  |
| Sep-13 | \$ | 255,472,880 | \$ | 21,289,407 | 10.43\% | \$ | 185,156 | \$ | 2,405,641 | 96.12\% | \$ | 2,312,302 | Revised ROR Correction |
| Oct-13 |  | 280,843,907 |  | 23,403,659 | 10.43\% |  | 108,206 |  | 2,549,207 | 96.41\% |  | 2,457,691 | Revised ROR Correction |
| Nov-13 |  | 309,271,936 |  | 25,772,661 | 10.43\% |  | 186,728 |  | 2,874,817 | 90.64\% |  | 2,605,734 | Revised ROR Correction |
| Dec-13 |  | 338,421,185 |  | 28,201,765 | 10.43\% |  | 235,615 |  | 3,177,059 | 88.98\% |  | 2,826,947 | Revised ROR Correction |
| Jan-14 |  | 354,933,396 |  | 29,577,783 | 10.78\% |  | 331,175 |  | 3,519,660 | 79.20\% |  | 2,787,571 | Revised ROR Correction |
| Feb-14 |  | 381,567,587 |  | 31,797,299 | 10.78\% |  | 139,445 |  | 3,567,194 | 84.16\% |  | 3,002,151 | Revised ROR Correction |
| Mar-14 | \$ | 407,949,606 | \$ | 33,995,801 | 10.66\% | \$ | 237,851 | \$ | 3,861,803 | 82.67\% | \$ | 3,192,553 | Revised ROR Correction |
| Apr-14 |  | 440,821,795 |  | 36,735,150 | 10.66\% |  | 333,745 |  | 4,249,712 | 85.89\% |  | 3,650,077 | Revised ROR Correction |
| May-14 |  | 471,739,235 |  | 39,311,603 | 10.66\% |  | 254,049 |  | 4,444,666 | 88.21\% |  | 3,920,640 | Revised ROR Correction |
| Jun-14 |  | 507,040,783 |  | 42,253,399 | 10.66\% |  | 248,330 |  | 4,752,542 | 93.58\% |  | 4,447,429 | Revised ROR Correction |
| Jul-14 |  | 550,894,435 |  | 45,907,870 | 10.66\% |  | 251,576 |  | 5,145,355 | 95.20\% |  | 4,898,378 | Revised ROR Correction |
| Aug-14 |  | 593,739,573 |  | 49,478,298 | 10.66\% |  | 226,360 |  | 5,500,746 | 94.18\% |  | 5,180,603 | Revised ROR Correction |
| Sep-14 | \$ | 634,391,653 | \$ | 52,865,971 | 10.39\% | \$ | 247,501 | \$ | 5,740,275 | 94.65\% | \$ | 5,433,171 |  |
| Oct-14 |  | 677,572,522 |  | 56,464,377 | 10.39\% |  | 191,261 |  | 6,057,910 | 94.92\% |  | 5,750,168 |  |
| Nov-14 |  | 718,625,020 |  | 59,885,418 | 10.39\% |  | 186,868 |  | 6,408,963 | 89.57\% |  | 5,740,509 |  |
| Dec-14 |  | 685,355,081 |  | 57,112,923 | 10.39\% |  | 533,223 |  | 6,467,256 | 93.91\% |  | 6,073,400 |  |
| Jan-15 |  | 704,968,082 |  | 58,747,340 | 10.39\% |  | 698,482 |  | 6,802,331 | 90.28\% |  | 6,141,144 |  |
| Feb-15 |  | 738,255,113 |  | 61,521,259 | 10.39\% |  | 855,689 |  | 7,247,748 | 83.18\% |  | 6,028,677 |  |



Louisville Gas \& Electric Company
Reconciliation of Combined Over/(Under) Recovery
Summary Schedule for Expense Months March 2013 through February 2015

Attachment to Response to Question No. 2
Page 3 of 4 Conroy

| (1) | (2) | (3) | (4) | (5) |  | (6) |  | (7) | (8) | (9) Jurisdictional Impact (Over)/Under (7) * (8) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Billing <br> Month | Expense Month | Rate of Return as Filed | Rate of Return as Revised | Change in Rate of Return (4) - (3) |  | Rate Base as Revised | Impact of change in Rate of Return$(5) *(6) / 12$ |  | Jurisdictional Allocation, ES Form 1.10 |  |  |
| May-13 | Mar-13 | 10.52\% | 10.46\% | -0.06\% | \$ | 139,933,777 | \$ | $(6,997)$ | 92.94\% | \$ | $(6,503)$ |
| Jun-13 | Apr-13 | 10.61\% | 10.46\% | -0.15\% |  | 161,383,490 |  | $(20,173)$ | 92.71\% |  | $(18,702)$ |
| Jul-13 | May-13 | 10.61\% | 10.46\% | -0.15\% |  | 182,125,984 |  | $(22,766)$ | 90.64\% |  | $(20,635)$ |
| Aug-13 | Jun-13 | 10.61\% | 10.46\% | -0.15\% |  | 202,935,087 |  | $(25,367)$ | 94.04\% |  | $(23,855)$ |
| Sep-13 | Jul-13 | 10.61\% | 10.46\% | -0.15\% |  | 221,625,403 |  | $(27,703)$ | 93.97\% |  | $(26,033)$ |
| Oct-13 | Aug-13 | 10.61\% | 10.46\% | -0.15\% |  | 239,722,466 |  | $(29,965)$ | 95.56\% |  | $(28,635)$ |
|  |  |  |  |  |  |  | \$ | $(132,971)$ |  | \$ | $(124,362)$ |
| Nov-13 | Sep-13 | 10.61\% | 10.43\% | -0.18\% |  | 255,472,880 | \$ | $(38,321)$ | 96.12\% | \$ | $(36,834)$ |
| Dec-13 | Oct-13 | 10.61\% | 10.43\% | -0.18\% |  | 280,843,907 |  | $(42,127)$ | 96.41\% |  | $(40,614)$ |
| Jan-14 | Nov-13 | 10.26\% | 10.43\% | 0.17\% |  | 309,271,936 |  | 43,814 | 90.64\% |  | 39,713 |
| Feb-14 | Dec-13 | 10.26\% | 10.43\% | 0.17\% |  | 338,421,185 |  | 47,943 | 88.98\% |  | 42,660 |
| Mar-14 | Jan-14 | 10.26\% | 10.78\% | 0.52\% |  | 354,933,396 |  | 153,804 | 79.20\% |  | 121,813 |
| Apr-14 | Feb-14 | 10.26\% | 10.78\% | 0.52\% |  | 381,567,587 |  | 165,346 | 84.16\% |  | 139,155 |
|  |  |  |  |  |  |  | \$ | 330,459 |  | \$ | 265,892 |
| May-14 | Mar-14 | 10.26\% | 10.66\% | 0.40\% |  | 407,949,606 | \$ | 135,983 | 82.67\% | \$ | 112,417 |
| Jun-14 | Apr-14 | 10.26\% | 10.66\% | 0.40\% |  | 440,821,795 |  | 146,941 | 85.89\% |  | 126,207 |
| Jul-14 | May-14 | 10.26\% | 10.66\% | 0.40\% |  | 471,739,235 |  | 157,246 | 88.21\% |  | 138,707 |
| Aug-14 | Jun-14 | 10.26\% | 10.66\% | 0.40\% |  | 507,040,783 |  | 169,014 | 93.58\% |  | 158,163 |
| Sep-14 | Jul-14 | 10.43\% | 10.66\% | 0.23\% |  | 550,894,435 |  | 105,588 | 95.20\% |  | 100,520 |
| Oct-14 | Aug-14 | 10.43\% | 10.66\% | 0.23\% |  | 593,739,573 |  | 113,800 | 94.18\% |  | 107,177 |
|  |  |  |  |  |  |  | \$ | 828,572 |  | \$ | 743,191 |
| Nov-14 | Sep-14 | 10.43\% | 10.39\% | -0.04\% | \$ | 634,391,653 | \$ <br>  | $(21,146)$ | 94.65\% | \$ | $(20,015)$ |
| Dec-14 | Oct-14 | 10.43\% | 10.39\% | -0.04\% |  | 677,572,522 |  | $(22,586)$ | 94.92\% |  | $(21,438)$ |
| Jan-15 | Nov-14 | 10.43\% | 10.39\% | -0.04\% |  | 718,625,020 |  | $(23,954)$ | 89.57\% |  | $(21,456)$ |
| Feb-15 | Dec-14 | 10.43\% | 10.39\% | -0.04\% |  | 685,355,081 |  | $(22,845)$ | 93.91\% |  | $(21,454)$ |
| Mar-15 | Jan-15 | 10.43\% | 10.39\% | -0.04\% |  | 704,968,082 |  | $(23,499)$ | 90.28\% |  | $(21,215)$ |
| Apr-15 | Feb-15 | 10.43\% | 10.39\% | -0.04\% |  | 738,255,113 |  | $(24,609)$ | 83.18\% |  | $(20,469)$ |
|  |  |  |  |  |  |  |  | $(138,639)$ |  | \$ | $(126,047)$ |



## OVER/(UNDER) RECONCILIATION

Combined Over/(Under) Recovery \$ $(1,959,324)$
Due to Change in ROR in Current 6-month Period \$ 126,047
Use of 12 Month Average Revenues $\$(1,761,671)$
Correction to ROR in 26 -month Periods \$ $(323,700)$

| Subtotal | $\$$ | $(1,959,324)$ |
| ---: | ---: | ---: |
| Unreconciled Difference | $\$$ | 0 |

## LOUISVILLE GAS AND ELECTRIC COMPANY

# Response to the Commission Staff's First Request for Information Dated July 10, 2015 

Case No. 2015-00222
Question No. 3

## Witness: Christopher M. Garrett

Q-3. Provide the calculations, assumptions, work papers, and other supporting documents used to determine the amounts LG\&E has reported during each billing period under review for Pollution Control Deferred Income Taxes.

A-3. Please 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.

LG\&E 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.

## Louisville Gas and Electric Company Deferred Tax Calculations Environmental Compliance Plans, by Approved Project

2009 - Plan
Project 23 - Trimble County Ash Treatment Basis (BAP/GSP)

| Month | Plant Balance | Book Depreciation | Tax Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beg Balance |  |  |  |  |  |  | 338,013 |  |
| Mar-13 | 9,594,347 | 17,393 | 53,394 | 36,001 | 38.9000\% | 14,004 | 352,017 |  |
| Apr-13 | 9,594,347 | 17,393 | 53,394 | 36,001 | 38.9000\% | 14,004 | 366,021 |  |
| May-13 | 9,594,347 | 17,393 | 53,394 | 36,001 | 38.9000\% | 14,004 | 380,025 |  |
| Jun-13 | 9,594,347 | 17,393 | 53,394 | 36,001 | 38.9000\% | 14,004 | 394,029 |  |
| Jul-13 | 9,594,347 | 17,393 | 53,396 | 36,003 | 38.9000\% | 14,005 | 408,033 |  |
| Aug-13 | 9,594,347 | 17,393 | 53,394 | 36,001 | 38.9000\% | 14,004 | 422,037 |  |
| Sep-13 | 9,594,347 | 17,393 | 53,394 | 36,001 | 38.9000\% | 14,004 | 436,041 |  |
| Oct-13 | 9,594,347 | 19,603 | 53,394 | 33,791 | 38.9000\% | 13,145 | 449,186 |  |
| Nov-13 | 9,594,347 | 19,603 | 53,394 | 33,791 | 38.9000\% | 13,145 | 462,331 |  |
| Dec-13 | 9,594,347 | 19,603 | 53,394 | 33,791 | 38.9000\% | 13,145 | 475,476 | - |
| Jan-14 | 9,594,347 | 19,603 | 49,293 | 29,690 | 38.9000\% | 11,550 | 487,025 |  |
| Feb-14 | 9,594,347 | 19,603 | 49,388 | 29,785 | 38.9000\% | 11,587 | 498,612 | - |
| Mar-14 | 9,594,347 | 19,603 | 49,390 | 29,787 | 38.9000\% | 11,587 | 510,199 | - |
| Apr-14 | 9,599,354 | 19,625 | 49,437 | 29,812 | 38.9000\% | 11,597 | 521,796 | 63,566 |
| May-14 | 9,599,354 | 19,647 | 49,442 | 29,795 | 38.9000\% | 11,590 | 533,386 | 63,566 |
| Jun-14 | 9,599,354 | 19,647 | 49,443 | 29,796 | 38.9000\% | 11,591 | 544,977 | 63,566 |
| Jul-14 | 9,599,354 | 19,647 | 49,448 | 29,801 | 38.9000\% | 11,593 | 556,569 | 63,566 |
| Aug-14 | 9,599,354 | 19,647 | 49,447 | 29,800 | 38.9000\% | 11,592 | 568,161 | 63,566 |
| Sep-14 | 9,599,354 | 19,647 | 49,451 | 29,804 | 38.9000\% | 11,594 | 579,755 | 63,566 |
| Oct-14 | 9,599,354 | 19,647 | 49,453 | 29,806 | 38.9000\% | 11,595 | 591,350 | 63,566 |
| Nov-14 | 9,599,354 | 19,647 | 49,456 | 29,809 | 38.9000\% | 11,596 | 602,946 | 63,566 |
| Dec-14 | 9,599,354 | 19,647 | 49,010 | 29,363 | 38.9000\% | 11,422 | 614,368 | 63,566 |
| Jan-15 | 9,599,354 | 19,647 | 45,709 | 26,062 | 38.9000\% | 10,138 | 624,505 | 63,566 |
| Feb-15 | 9,599,354 | 19,647 | 45,707 | 26,060 | 38.9000\% | 10,137 | 634,642 | 63,566 |

# Louisville Gas and Electric Company Deferred Tax Calculations Environmental Compliance Plans, by Approved Project 

2009 - Plan
Project 25 -Beneficial Reuse

| Month | Plant Balance | Book Depreciation | Tax <br> Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred <br> Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beg Balance |  |  |  |  |  |  | 849,880 |  |
| Mar-13 | 4,636,272 | 9,504 | 15,343 | 5,840 | 38.9000\% | 2,272 | 852,152 | - |
| Apr-13 | 4,636,272 | 9,504 | 15,343 | 5,839 | 38.9000\% | 2,271 | 854,423 |  |
| May-13 | 4,636,272 | 9,504 | 15,344 | 5,840 | 38.9000\% | 2,272 | 856,695 | - |
| Jun-13 | 4,636,272 | 9,504 | 15,343 | 5,839 | 38.9000\% | 2,271 | 858,966 |  |
| Jul-13 | 4,636,272 | 9,504 | 15,346 | 5,842 | 38.9000\% | 2,273 | 861,238 |  |
| Aug-13 | 4,636,272 | 9,504 | 15,342 | 5,838 | 38.9000\% | 2,271 | 863,509 | - |
| Sep-13 | 4,636,272 | 9,504 | 15,343 | 5,840 | 38.9000\% | 2,272 | 865,781 | - |
| Oct-13 | 4,636,272 | 9,504 | 15,343 | 5,839 | 38.9000\% | 2,271 | 868,052 |  |
| Nov-13 | 4,636,272 | 9,504 | 15,344 | 5,840 | 38.9000\% | 2,272 | 870,324 |  |
| Dec-13 | 4,636,272 | 9,504 | 15,343 | 5,839 | 38.9000\% | 2,271 | 872,595 |  |
| Jan-14 | 4,636,272 | 9,504 | 14,195 | 4,691 | 38.9000\% | 1,825 | 874,419 |  |
| Feb-14 | 4,636,272 | 9,504 | 14,191 | 4,687 | 38.9000\% | 1,823 | 876,242 |  |
| Mar-14 | 4,636,272 | 9,504 | 14,190 | 4,686 | 38.9000\% | 1,823 | 878,065 |  |
| Apr-14 | 4,636,272 | 9,504 | 14,192 | 4,688 | 38.9000\% | 1,824 | 879,889 | - |
| May-14 | 4,636,272 | 9,504 | 14,191 | 4,687 | 38.9000\% | 1,823 | 881,712 | - |
| Jun-14 | 4,636,272 | 9,504 | 14,191 | 4,687 | 38.9000\% | 1,823 | 883,535 | - |
| Jul-14 | 4,636,272 | 9,504 | 14,195 | 4,691 | 38.9000\% | 1,825 | 885,359 | - |
| Aug-14 | 4,636,272 | 9,504 | 14,191 | 4,687 | 38.9000\% | 1,823 | 887,182 | - |
| Sep-14 | 4,636,272 | 9,504 | 14,191 | 4,687 | 38.9000\% | 1,823 | 889,005 | - |
| Oct-14 | 4,636,272 | 9,504 | 14,193 | 4,689 | 38.9000\% | 1,824 | 890,829 | - |
| Nov-14 | 4,636,272 | 9,504 | 14,191 | 4,687 | 38.9000\% | 1,823 | 892,652 | - |
| Dec-14 | 4,636,272 | 9,504 | 14,201 | 4,697 | 38.9000\% | 1,827 | 894,479 | - |
| Jan-15 | 4,636,272 | 9,504 | 13,131 | 3,627 | 38.9000\% | 1,411 | 895,889 | - |
| Feb-15 | 4,636,272 | 9,504 | 13,129 | 3,625 | 38.9000\% | 1,410 | 897,299 | - |

Due to Bonus Depreciation for tax purposes taken on certain components of Project 25, 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 Feb 2015 is shown below:

| Federal Basis | Book Depr. | Federal Tax Dt Fed. Differencı Fed Tax Rate | Fed Def Tax |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2,318,136$ | 9,504 | 11,933 | 2,429 | $35.0000 \%$ | 850 |
| State Basis | Book Depr. | State Tax Depı | St. Difference | State Tax Rate | St Def Tax |
| $4,636,272$ | 9,504 | 23,865 | 14,361 | $6.0000 \%$ | 862 |
|  |  |  |  | St. Offset for Fed Taxes not Owed |  |
|  |  |  |  | (302) |  |
|  |  |  |  | Total Deferred Tax |  |
|  |  |  |  | 1,410 |  |

# Louisville Gas and Electric Company Deferred Tax Calculations Environmental Compliance Plans, by Approved Project 

## 2011 - Plan

Project 26 - Mill Creek Station Air Compliance

| Month | Plant Balance | Book Depreciation | Tax <br> Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred <br> Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beg Balance |  |  |  |  |  |  | 348,288 |  |
| Mar-13 | 1,983,783 | 4,199 | 7,322 | 3,123 | 38.9000\% | 1,215 | 349,503 | - |
| Apr-13 | 5,188,794 | 6,370 | 19,200 | 12,830 | 38.9000\% | 4,991 | 354,494 |  |
| May-13 | 5,188,794 | 8,541 | 19,144 | 10,603 | 38.9000\% | 4,125 | 358,619 |  |
| Jun-13 | 5,188,794 | 8,541 | 19,144 | 10,603 | 38.9000\% | 4,125 | 362,744 |  |
| Jul-13 | 5,452,105 | 8,820 | 39,640 | 30,820 | 38.9000\% | 11,989 | 374,733 |  |
| Aug-13 | 5,452,105 | 9,098 | 39,861 | 30,763 | 38.9000\% | 11,967 | 386,700 |  |
| Sep-13 | 5,452,105 | 9,098 | 39,861 | 30,763 | 38.9000\% | 11,967 | 398,667 |  |
| Oct-13 | 5,452,105 | 9,098 | 39,861 | 30,763 | 38.9000\% | 11,967 | 410,634 |  |
| Nov-13 | 5,452,105 | 9,098 | 39,863 | 30,765 | 38.9000\% | 11,968 | 422,602 |  |
| Dec-13 | 5,452,105 | 9,098 | 39,862 | 30,764 | 38.9000\% | 11,967 | 434,569 |  |
| Jan-14 | 5,446,380 | 9,094 | 25,781 | 16,687 | 38.9000\% | 6,491 | 441,060 |  |
| Feb-14 | 5,446,380 | 9,090 | 24,262 | 15,172 | 38.9000\% | 5,902 | 446,962 |  |
| Mar-14 | 5,446,380 | 9,090 | 24,262 | 15,172 | 38.9000\% | 5,902 | 452,864 |  |
| Apr-14 | 5,446,380 | 9,090 | 24,262 | 15,172 | 38.9000\% | 5,902 | 458,766 | - |
| May-14 | 5,446,380 | 9,090 | 24,110 | 15,020 | 38.9000\% | 5,843 | 464,609 |  |
| Jun-14 | 5,446,380 | 9,090 | 24,110 | 15,020 | 38.9000\% | 5,843 | 470,452 |  |
| Jul-14 | 5,446,380 | 9,090 | 24,109 | 15,019 | 38.9000\% | 5,842 | 476,294 | - |
| Aug-14 | 5,446,380 | 9,090 | 24,097 | 15,007 | 38.9000\% | 5,838 | 482,132 | - |
| Sep-14 | 5,446,380 | 9,090 | 24,102 | 15,012 | 38.9000\% | 5,840 | 487,972 | - |
| Oct-14 | 5,446,380 | 9,090 | 24,101 | 15,011 | 38.9000\% | 5,839 | 493,811 | - |
| Nov-14 | 5,446,380 | 9,090 | 24,101 | 15,011 | 38.9000\% | 5,839 | 499,650 | - |
| Dec-14 | 328,596,413 | 289,655 | 145,646,943 | 145,357,288 | 38.9000\% | 56,543,985 | 57,043,635 | - |
| Jan-15 | 328,596,413 | 570,219 | 1,744,612 | 1,174,393 | 38.9000\% | 456,839 | 57,500,474 | 5,171,517 |
| Feb-15 | 328,596,413 | 570,219 | 1,744,612 | 1,174,393 | 38.9000\% | 456,839 | 57,957,313 | 5,171,517 |

Due to Bonus Depreciation for tax purposes taken on certain components of Project 26, 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 Dec 2014 is shown below:

| Federal Basis | Book Depr. | Federal Tax Dt | Fed. Differencı Fed Tax Rate | Fed Def Tax |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 982,514 | 289,655 | 5,475 | $(284,180)$ | $35.0000 \%$ | $(99,463)$ |
| 9,378 |  | 250 | 250 | $35.0000 \%$ | 88 |
| $2,975,818$ |  | 17,902 | 17,902 | $35.0000 \%$ | 6,266 |
| $(5,725)$ |  | $(18)$ | $(18)$ | $35.0000 \%$ | $(6)$ |
| $157,321,702$ |  | $157,321,702$ | $157,321,702$ | $35.0000 \%$ | $55,062,596$ |
| $64,989,653$ |  | $2,437,112$ | $2,437,112$ | $35.0000 \%$ | 852,989 |
| $97,484,479$ |  | $1,161,550$ | $1,161,550$ | $35.0000 \%$ | 406,543 |
| $3,354,199$ |  | 125,782 | 125,782 | $35.0000 \%$ | 44,024 |
| State Basis | Book Depr. | State Tax Depı | St. Difference | State Tax Rate | St Def Tax |
| $1,965,028$ | 289,655 | 10,934 | $(278,721)$ | $6.0000 \%$ | $(16,723)$ |
| 18,756 |  | 500 | 500 | $6.0000 \%$ | 30 |
| $3,107,474$ |  | 18,694 | 18,694 | $6.0000 \%$ | 1,122 |
| $(5,725)$ |  | $(18)$ | $(18)$ | $6.0000 \%$ | $(1)$ |
| $127,918,334$ |  | $4,796,938$ | $4,796,938$ | $6.000 \%$ | 287,816 |
| $191,877,500$ |  | $2,284,256$ | $2,284,256$ | $6.000 \%$ | 137,055 |
| $3,354,199$ | 125,782 | 125,782 | $6.0000 \%$ | 7,547 |  |
| 360,847 | - | - | $6.0000 \%$ | - |  |
|  |  |  |  |  | St. Offset for Fed Taxes not Owed |
|  |  |  |  |  | $(145,896)$ |
|  |  |  |  |  | Total Deferred Tax |
|  |  |  |  |  | $56,543,985$ |

# LOUISVILLE GAS AND ELECTRIC COMPANY 

## Response to the Commission Staff's First Request for Information Dated July 10, 2015

Case No. 2015-00222
Question No. 4

## Witness: Christopher M. Garrett

Q-4. Refer to ES Form 2.50, Pollution Control - Operations \& Maintenance Expenses, for the September 2014 through February 2015 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 September 2014 through February 2015 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.

## 2011 Plan

Fluctuations in scrubber operations expenses, account 502056, are the result of operation of the new scrubber at Mill Creek Unit 4. The variances are driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality.

Fluctuations in scrubber maintenance expenses, account 512055, are the result of normal system maintenance of the new scrubber at Mill Creek Unit 4.

Fluctuations in sorbent injection operation expenses, account 506159, are the result of ongoing operation of Trimble County Unit 1. The slight increase in September 2014 is the result of necessary filter changes on the sorbent injection system.

Fluctuations in sorbent injection reactant (hydrated lime) expenses, account 506152, are the result of on-going operation of Trimble County Unit 1 and the new operation of the hydrated lime system at Mill Creek. The variances are driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality.

Fluctuations in sorbent injection maintenance expense, account 512152, are the result of normal system maintenance. The increase in November 2014 was the result of element and gasket purchases. The increases in January and February 2015 were the result of contract labor to work on the injection systems.

Fluctuations in baghouse maintenance expense, account 512156, are the result of normal system maintenance on the new baghouse for Mill Creek Unit 4. Amounts improperly recorded in December 2014 were reversed in January 2015.

Fluctuations in activated carbon expenses, account 506151, are the result of on-going operation of Trimble County Unit 1. The variances are driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality.

## LOUISVILLE GAS AND ELECTRIC COMPANY

 ENVIRONMENTAL SURCHARGE REPORTPollution Control - Operations \& Maintenance Expenses

| O\&M Expense Account |  | Sep-14 |  | Oct-14 | \% Change from Prior Period |  | Nov-14 | \% Change from Prior Period |  | Dec-14 | \% Change from Prior Period |  | Jan-15 | \% Change from Prior Period |  | Feb-15 | \% Change from Prior Period |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2009 Plan |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 502013 - ECR Landfill Operations | \$ | - | \$ | - | 0\% | \$ | - | 0\% | \$ | - | 0\% | \$ | - | 0\% | \$ | - | 0\% |
| 512107 - ECR Landfill Maintenance |  | - |  |  | 0\% |  | - | 0\% |  | - | 0\% |  | - | 0\% |  | - | 0\% |
| 2.51) |  | - |  |  | 0\% |  | - | 0\% |  | - | 0\% |  | - | 0\% |  | - | 0\% |
| Total 2009 Plan O\&M Expenses | \$ | - | \$ |  | 0\% | \$ | - | 0\% | \$ | - | 0\% | \$ |  | 0\% |  |  | 0\% |
| 2011 Plan |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 502056 - ECR Scrubber Operations | \$ | - | \$ | - | 0\% | \$ | - | 0\% | \$ | - | 0\% |  | 132,718 | 0\% | \$ | 95,131 | -28\% |
| 512055 - ECR Scrubber Maintenance |  | - |  |  | 0\% |  | - | 0\% |  | - | 0\% |  | 89,722 | 0\% |  | 65,540 | -27\% |
| 506159 - ECR Sorbent Injection Operation |  | 19,455 |  | 11,138 | -43\% |  | 10,133 | -9\% |  | 12,919 | 27\% |  | 12,223 | -5\% |  | 11,381 | -7\% |
| 506152 - ECR Sorbent Reactant - Reagent Only |  | 99,150 |  | 96,873 | -2\% |  | 73,352 | -24\% |  | 123,360 | 68\% |  | 102,264 | -17\% |  | 215,161 | 110\% |
| 512152 - ECR Sorbent Injection Maintenance |  | - |  | 7,258 | 100\% |  | 16,059 | 121\% |  | 3,242 | -80\% |  | 50,527 | 1458\% |  | 57,858 | 15\% |
| 506156 - ECR Baghouse Operations |  | - |  |  | 0\% |  | - | 0\% |  | - | 0\% |  |  | 0\% |  | - | 0\% |
| 512156 - ECR Baghouse Maintenance |  | - |  | - | 0\% |  | - | 0\% |  | 24,215 | 100\% |  | (24,102) | -200\% |  | 1,593 | -107\% |
| 506151 - ECR Activated Carbon |  | - |  | - | 0\% |  | - | 0\% |  | - | 0\% |  | - | 0\% |  | 60,996 | 0\% |
| Adjustment for Base Rates Baseline Amounts |  | - |  | - | 0\% |  | - | 0\% |  | - | 0\% |  | $(202,660)$ | -100\% |  | $(202,660)$ | 0\% |
| Total 2011 Plan O\&M Expenses | \$ | 118,605 | \$ | 115,269 | -3\% |  | 99,545 | -14\% | \$ | 163,736 | 64\% | \$ | 160,694 | -2\% | \$ | 305,000 | 90\% |

# LOUISVILLE GAS AND ELECTRIC COMPANY 

## Response to the Commission Staff's First Request for Information Dated July 10, 2015

Case No. 2015-00222
Question No. 5

## Witness: Robert M. Conroy

Q-5. KRS 278.183(3) provides that during the two-year review, the Commission shall, to the extent appropriate, incorporate surcharge amounts found just and reasonable into the existing base rates of the utility.
a. Provide the surcharge amount that LG\&E believes should be incorporated into its existing base rates. Include all supporting calculations, work papers, and assumptions.
b. The surcharge factor reflects a percentage of revenue approach, rather than a per-kWh approach. Taking this into consideration, explain how the surcharge amount should be incorporated into LG\&E's base rates. Include any analysis that LG\&E believes supports its position.
c. Does LG\&E believe that modifications will need to be made to either the surcharge mechanism or the monthly surcharge reports as a result of incorporating additional environmental surcharge amounts into LG\&E's existing base rates? If so, provide a detailed explanation of the modifications and provide updated monthly surcharge reports.

A-5. a. Please see the attachment. LG\&E is proposing to roll-in $\$ 60,574,071$ of incremental environmental surcharge revenues into base rates resulting in total environmental surcharge revenues in base rates of $\$ 73,663,008$.
b. The Commission previously approved LG\&E's proposed roll-in methodology in Case No. 2011-00232, which allocated the amount between Group 1 and Group 2 based on the percentage of each group's total revenue, excluding base environmental surcharge revenue, to LG\&E's total revenue, excluding base environmental surcharge revenue. The rolled-in amounts for Group 1 also use total billed revenues excluding base environmental surcharge revenues to allocate costs to base rates between the rate classes in Group 1. For Group 2 rate classes, the roll-in will be allocated based on non-fuel revenues only for each Group 2 rate class, rather than total revenues excluding base environmental surcharge revenues, which has been the allocation methodology previously utilized for all rate classes, including what are now Group 2.

For Group 1 and Group 2, the amount of the roll-in was spread to the energy portion of rates without a demand charge and to the demand portion of rates that include a separately metered and billed demand component. Lighting rates continue to be billed on a per-light basis. LG\&E recommends that this method continue to be used to accomplish this roll-in to base rates.
c. No. The incorporation of additional environmental surcharge revenues into existing base rates does not require modifications to the surcharge mechanism or monthly ES Forms.

## Louisville Gas And Electric Company <br> Calculation of ECR Roll-in At February 28, 2015

| Calculation of Revenue Requirement for Roll-In: |  | Environmental Compliance Plans at Feb. 28, 2015 |  | Jurisdictional Basis |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Environmental Compliance Rate Base |  |  |  |  |  |
| Pollution Control Plant in Service | ES Form 2.00, February 2015 | \$ | 260,305,557 | \$ | 235,955,274 |
| Pollution Control CWIP Excluding AFUDC | ES Form 2.00, February 2015 |  | 475,907,545 |  | 431,388,774 |
| Subtotal |  | \$ | 736,213,102 | \$ | 667,344,047 |
| Additions: |  |  |  |  |  |
| Emission Allowances | ES Form 2.00, February 2015 | \$ | 173 | \$ | 157 |
| Cash Working Capital Allowance | ES Form 2.00, February 2015 |  | 214,752 |  | 194,663 |
| Subtotal |  | \$ | 214,925 | \$ | 194,820 |
| Deductions: |  |  |  |  |  |
| Accumulated Depreciation on Pollution Control Plant | ES Form 2.00, February 2015 | \$ | $(56,081,258)$ | \$ | $(50,835,137)$ |
| Pollution Control Deferred Income Taxes | ES Form 2.00, February 2015 |  | 54,254,172 |  | 49,178,965 |
| Subtotal |  | \$ | $(1,827,086)$ | \$ | $(1,656,171)$ |
| Environmental Compliance Rate Base |  | \$ | 738,255,113 | \$ | 669,195,038 |
| Rate of Return -- Environmental Compliance Rate Base | ES Form 1.10, February 2015 |  | 10.43\% |  | 10.43\% |
| Return on Environmental Compliance Rate Base |  | \$ | 77,000,008 | \$ | 69,797,043 |
| Pollution Control Operating Expenses |  |  |  |  |  |
| 12 Month Depreciation and Amortization Expense | See Support Schedule A | \$ | 1,637,704 | \$ | 1,484,505 |
| 12 Month Taxes Other than Income Taxes | See Support Schedule A |  | 604,852 |  | 548,271 |
| 12 Month Operating and Maintenance Expense, net of amt. in base rates | See Support Schedule A |  | 1,947,344 |  | 1,765,180 |
| 12 Month Emission Allowance Expense | See Support Schedule A |  | 278,509 |  | 252,456 |
| 12 Month Beneficial Reuse Expense, net of amounts in base rates | See Support Schedule A |  | $(229,330)$ |  | $(207,877)$ |
| 12 Month KPSC Consultant Expense | See Support Schedule A |  | 36,681 |  | 33,250 |
| Total Pollution Control Operating Expenses |  | \$ | 4,275,760 | \$ | 3,875,784 |
| Gross Proceeds from Allowance Sales | See Support Schedule B | \$ | 10,832 | \$ | 9,818 |
| Total Company Environmental Surcharge Gross Revenue Requirement -- Roll In Amount |  |  |  |  |  |
| Return on Environmental Compliance Rate Base |  | \$ | 77,000,008 | \$ | 69,797,043 |
| Pollution Control Operating Expenses |  |  | 4,275,760 |  | 3,875,784 |
| Less Gross Proceeds from Allowance Sales |  |  | 10,832 |  | 9,818 |
| Roll In Amount |  | \$ | 81,264,937 | \$ | 73,663,008 |
| Jurisdictional Allocation Ratio -- Roll In | See Support Schedule C |  | 90.6455\% |  |  |
| Jurisdictional Revenues for 12 Months for Roll In | See Support Schedule C | \$ | 1,004,702,278 |  |  |
| Roll In Jurisdictional Environmental Surcharge Factor: |  |  |  |  |  |
| Total Company Environmental Surcharge Gross Revenue Requirement -- Roll In Amount |  | \$ | 81,264,937 |  |  |
| Jurisdictional Allocation Ratio -- Roll In |  |  | 90.6455\% |  |  |
| Jurisdictional Environmental Surcharge Gross Revenue Requirement -- Gross Roll In Amount Less Jurisdictional Environmental Revenue Previously Rolled In |  | \$ | 73,663,008 |  |  |
|  |  |  | 13,088,937 |  |  |
| Jurisdictional Environmental Surcharge Gross Revenue Requirement -- Net Roll In Amount |  | \$ | 60,574,071 |  |  |

## Louisville Gas And Electric Company

## Calculation of ECR Roll-in At February 28, 2015



Support Schedule B
12 Month Balances for Allowance Sales

|  | Total Proceeds <br> from Allowance <br> Sales |
| :--- | ---: |
| Mar-14 | ES Form 2.00 |
| Apr-14 | 427 |
| May-14 | - |
| Jun-14 | - |
| Jul-14 | - |
| Aug-14 | - |
| Sep-14 | 1,595 |
| Oct-14 | 2,720 |
| Nov-14 | 1,227 |
| Dec-14 | 3,493 |
| Jan-15 | 1,370 |
| Feb-15 | - |
|  | - |
| Totals | 10,832 |

Support Schedule C
12 Month Balances for Jurisdictional Revenues and Allocation Ratio

| KY Retail | Total Company |  |
| :---: | :---: | :---: |
| Revenues, Excl. | Revenues, Excluding |  |
| Envir. Surch. | Envir. Surch. | KY Retail |
| Revenues | Revenues | Allocation Ratio |
|  |  | KY Retail/ Total |
| ES Form 3.10 | ES Form 3.10 | Company |


| Mar-14 | $\$$ | $77,346,289$ | $\$$ |
| :---: | ---: | ---: | ---: |
| Apr-14 | $70,699,573$ | $93,561,573$ | $82.6689 \%$ |
| May-14 | $77,878,075$ | $82,310,774$ | $85.8935 \%$ |
| Jun-14 |  | $94,089,594$ | $100,548,515$ |
| Jul-14 |  | $100,427,350$ | $88.2106 \%$ |
| Aug-14 | $91,098,278$ | $105,489,328$ | $93.5760 \%$ |
| Sep-14 | $99,078,498$ | $96,728,956$ | $95.2014 \%$ |
| Oct-14 | $80,722,983$ | $104,683,662$ | $94.1789 \%$ |
| Nov-14 | $65,245,968$ | $72,849,397$ | 94.92462 |
| Dec-14 | $81,755,229$ | $87,052,850$ | $89.5722 \%$ |
| Jan-15 | $86,284,890$ | $95,576,718$ | $93.9145 \%$ |
| Feb-15 | $80,075,552$ | $96,265,979$ | $83.181 \%$ |
|  |  |  |  |

[^0]
# LOUISVILLE GAS AND ELECTRIC COMPANY 

## Response to the Commission Staff's First Request for Information Dated July 10, 2015

Case No. 2015-00222
Question No. 6

## Witness: Christopher M. Garrett

Q-6. In Case No. 2000-00439, the Commission ordered that LG\&E'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 February 28, 2015:
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. LG\&E's calculation of its weighted average cost of capital for environmental surcharge purposes.

A-6. a. Please see the attachments for the period ended February 28, 2015 under review. There was no preferred stock outstanding as of February 28, 2015; therefore, it is not listed in the attached schedules.
b. For the period ended February 28, 2015, LG\&E proposes utilizing a return on equity of $10.00 \%$ as agreed to for all ECR Plans and approved by the Commission in its June 30, 2015 Order in Case No. 2014-00372.
c. LG\&E 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 February 28, 2015. As discussed in response to Question No. 1, LG\&E expects to incur a tax loss in both 2014 and 2015 as a result of bonus depreciation and will be unable to take the Internal Revenue Code § 199 manufacturing tax deduction.

## LOUISVILLE GAS AND ELECTRIC COMPANY

Adjusted Electric Rate of Return on Common Equity - ECR Plans As of February 28, 2015

ELECTRIC
2. Long Term Debt
3. Common Equity
4. Total Capitalization

| Per Books |
| :---: |
| $02-28-15$ |
| $(1)$ |


|  | Electric | Electric | Adjustments to |
| :---: | :---: | :---: | :---: |
| Capital | Rate Base | Capitalization | Capitalization |
| Structure <br> (2) | Percentage <br> (3) | $(\operatorname{Col} 1 \times \operatorname{Col} 3)$ <br> (4) | (Col 18) (5) |


| Adjusted |  |  |
| :---: | :---: | :---: |
| Electric | Adjusted | Annual |
| Capitalization | Capital | Cost |
| (Col4+ Col 5$)$ | Structure | Rate |
| $(6)$ | $(7)$ | $(8)$ |
|  |  |  |
|  |  |  |


| Cost <br> of <br> Capital <br> $($ Col $8 \times$ Col7) <br> $(9)$ |
| :---: |
|  |
| $0.04 \%$ |
| $1.44 \%$ |
| $5.22 \%$ |
| $6.70 \%$ |

5. Weighted Cost of Capital Grossed up for Income Tax Effect \{ROR + (ROR - DR) $x[T R /(1-\mathrm{TR})]\}$

|  | Electric <br> Capitalization <br> (Col4) <br> $(10)$ | Capital Structure (11) | Trimble County Inventories (a) (Col $11 \times \operatorname{Col} 12$ Line 4) (12) |  | Investments in OVEC \& Other (Col $11 \times$ Col 13 Line 4) (13) |  |  |  | Environmental <br> Compliance Rate Base (Col $11 \times \operatorname{Col} 15$ Line 4) <br> (15) |  | DSM <br> Rate Base <br> (Col $11 \times$ Col 16 Line 4) <br> $(16)$ |  | Advanced Coal Investment Tax Credit (b) (Col $11 \times$ Col 17 Line 4) (17) |  | Total Adjustments To Capital (Sum of $\mathrm{Col} 12-\mathrm{Col} 17$ ) (18) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ELECTRIC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Short Term Debt | \$ 242,916,919 | 8.54\% | \$ | $(365,031)$ | \$ | $(99,220)$ | \$ | 1,192,025 | \$ | $(63,046,987)$ | \$ | $(186,378)$ | \$ | 1,844,107 | \$ | $(60,661,484)$ |
| 2. Long Term Debt | 1,115,676,568 | 39.22\% |  | $(1,676,405)$ |  | $(455,666)$ |  | 5,474,384 |  | (289,543,655) |  | $(855,943)$ |  | 8,469,073 |  | (278,588,212) |
| 3. Common Equity | 1,486,077,026 | 52.24\% |  | $(2,232,927)$ |  | $(606,935)$ |  | 7,291,735 |  | (385,664,471) |  | $(1,140,094)$ |  | 11,280,582 |  | (371,072,110) |
| 4. Total Capitalization | \$ 2,844,670,513 | 100.000\% | \$ | (4,274,363) | \$ | $\underline{(1,161,821)}$ | \$ | 13,958,144 | \$ | (738,255,113) | \$ | $(2,182,415)$ | \$ | 21,593,762 | \$ | $\underline{(710,321,806)}$ |


| (a) Trimble County Inventories | As of February 28, 2015 |  |
| :---: | :---: | :---: |
| Materials and Supplies |  | \$ 9,719,560 |
| Stores Expense |  | 1,799,347 |
| Coal |  | 5,177,152 |
| Limestone |  | 227,535 |
| Fuel Oil |  | 168,425 |
| Emission Allowances |  | 5,432 |
| Total Trimble County Inventories |  | \$ 17,097,451 |
| Multiplied by Disallowed Portion |  | 25.00\% |
| Trimble County Inv. Disallowed |  | \$ 4,274,363 |

(b) Reflects Investment Tax Credit treatment per Case No. 2007-00179

|  |  |  |  |  |  | NG-T | TER | DEBT |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | Ann | ed |  |  |  |  |  |  |  |
|  | Due |  | Rate |  | Principal |  |  | est/(Income) |  |  | rtized Debt ssuance o/Discount |  |  | ortized LossReacquired Debt |  | etter of Credit and other fees |  |  | Total | Embedded |
| Pollution Control Bonds - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jefferson Co. 2000 Series A | 05/01/27 |  | 0.784\% | \$ | 25,000,000 | 4 | \$ | 196,106 | b | \$ | 49,146 |  |  | 97,500 | \$ |  |  | \$ | 342,752 | 1.371\% |
| Trimble Co. 2000 Series A | 08/01/30 |  | 0.160\% |  | 83,335,000 |  |  | 133,336 | b |  | 34,772 |  |  | 132,229 |  | 254,997 | b |  | 555,334 | 0.666\% |
| Jefferson Co. 2001 Series A | 09/01/27 |  | 0.120\% |  | 10,104,000 |  |  | 12,125 | b |  | 18,246 |  |  | - |  | 30,403 | b |  | 60,774 | 0.601\% |
| Jefferson Co. 2001 Series A | 09/01/26 |  | 0.200\% |  | 22,500,000 |  |  | 45,000 | b |  | 9,038 |  |  | 71,251 |  | 22,500 | a |  | 147,789 | 0.657\% |
| Trimble Co. 2001 Series A | 09/01/26 |  | 1.050\% |  | 27,500,000 |  |  | 288,750 | b |  | 49,061 |  |  | 70,107 |  |  |  |  | 407,918 | 1.483\% |
| Jefferson Co. 2001 Series B | 11/01/27 |  | 1.350\% |  | 35,000,000 |  |  | 472,500 | b |  | 46,820 |  |  | 55,260 |  |  |  |  | 574,580 | 1.642\% |
| Trimble Co. 2001 Series B | 11/01/27 |  | 1.350\% |  | 35,000,000 |  |  | 472,500 | b |  | 46,776 |  |  | 55,092 |  |  |  |  | 574,368 | 1.641\% |
| Trimble Co. 2002 Series A | 10/01/32 |  | 0.200\% |  | 41,665,000 |  |  | 83,330 | b |  | 33,587 |  |  | 51,359 |  | 146,578 | b |  | 314,854 | 0.756\% |
| Louisville Metro 2003 Series A | 10/01/33 |  | 1.650\% |  | 128,000,000 |  |  | 2,112,000 | b |  | 139,258 |  |  | 288,658 |  |  |  |  | 2,539,916 | 1.984\% |
| Louisville Metro 2005 Series A | 02/01/35 |  | 2.200\% |  | 40,000,000 | 3 |  | 880,000 | b |  | 61,252 |  |  | 77,843 |  |  |  |  | 1,019,095 | 2.548\% |
| Trimble Co. 2007 Series A | 06/01/33 |  | 4.600\% |  | 60,000,000 |  |  | 2,760,000 | b |  | 43,727 |  |  | 6,087 |  |  |  |  | 2,809,814 | 4.883\% |
| Louisville Metro 2007 Series A | 06/01/33 |  | 1.150\% |  | 31,000,000 | 3 |  | 356,500 | b |  | 58,149 |  |  | 28,359 |  |  |  |  | 443,008 | 1.429\% |
| Louisville Metro 2007 Series B | 06/01/33 |  | 1.600\% |  | 35,200,000 |  |  | 563,200 | b |  | 49,683 |  |  | 25,333 |  |  |  |  | 638,216 | 1.813\% |
| Called Bonds |  |  |  |  |  |  |  |  |  |  |  |  |  | 62,991 |  |  |  |  | 62,991 |  |
| First Mortgage Bonds . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010 due 2015 | 11/15/15 |  | 1.625\% |  | 250,000,000 |  |  | 4,062,500 | b |  | 479,803 | ** |  | - |  |  |  |  | 4,542,303 | 1.817\% |
| Debt discount on FMB | 11/15/15 |  | 1.625\% |  | $(125,405)$ |  |  |  | a |  | 162,477 | ** |  |  |  |  |  |  | 162,477 | -129.562\% |
| 2010 due 2020 | 11/15/40 |  | 5.125\% |  | 285,000,000 |  |  | 14,606,250 | b |  | 109,678 | ** |  | - |  | - |  |  | 14,715,928 | 5.163\% |
| Debt discount on FMB | 11/15/40 |  | 5.125\% |  | $(2,657,477)$ |  |  |  | a |  | 95,087 | * |  |  |  |  |  |  | 95,087 | -3.578\% |
| 2013 due 2043 | 11/15/43 |  | 4.650\% |  | 250,000,000 |  |  | 11,625,000 | b |  | 83,934 | ** |  |  |  |  |  |  | 11,708,934 | 4.884\% |
| Debt discount on FMB | 11/15/43 |  | 4.650\% |  | $(1,722,614)$ |  |  |  | a |  | 55,193 | ** |  |  |  |  |  |  | 55,193 | -3.204\% |
| Regulatory Liability - Swap Hedging FMB | 11/15/43 |  |  |  |  |  |  | $(1,319,793)$ |  |  |  |  |  |  |  |  |  |  | (1,319,793) | -3.067\% |
| S-3 SEC Shelf Registration | 03/27/15 |  |  |  |  |  |  |  | b |  | 2,095 |  |  |  |  |  |  |  | 2,095 |  |
| Revolving Credit Facility | 07/28/19 |  |  |  |  |  |  |  |  |  | 541,586 | 5 |  | 52,585 |  | 625,000 | c |  | 1,219,171 |  |
| Total External Debt |  |  |  | \$ | 1,354,798,504 |  | \$ | 37,349,304 |  | \$ | 2,169,369 |  |  | 1,074,654 | \$ | 1,079,478 |  | \$ | 41,672,805 | 3.076\% |
| Interest Rate Swaps: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| JP Morgan Chase Bank 5.495\% - Trimble Co. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2000 Series A | 11/01/20 | 1 |  |  |  |  | \$ | 4,563,915 |  | \$ | - |  |  | - | \$ | \$ - |  | \$ | 4,563,915 |  |
| Morgan Stanley Capital Services 3.657\% - Louisville Metro 2003 Series A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Louisville Metro 2003 Series A | 10/01/33 | 1 |  |  |  |  |  | 1,135,531 |  |  | - |  |  | - |  | - |  |  | 1,135,531 |  |
| Morgan Stanley Capital Services $3.645 \%$ - Louisville Metro 2003 Series A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Louisville Metro 2003 Series A | 10/01/33 | 1 |  |  |  |  |  | 1,131,691 |  |  | - |  |  | - |  | - |  |  | 1,131,691 |  |
| Bank of America - Louisville Metro 2003 Series A | 10/01/33 | 1 |  |  |  |  |  | 1,147,691 |  |  | - |  |  | . |  | - |  |  | 1,147,691 |  |
| Interest Rate Swaps External Debt |  |  |  |  |  |  | \$ | 7,978,828 |  | \$ | - |  |  | - | \$ | - |  | \$ | 7,978,828 | 0.589\% |
| Notes Payable to PPL |  |  |  | \$ | - |  | \$ | - |  | \$ | - |  |  | - | \$ | \$ |  | \$ | - |  |
| Total Internal Debt |  |  |  | \$ | - |  | \$ | - |  | \$ | - |  |  | - | \$ | - |  | \$ | - | 0.000\% |
|  |  |  | Total | \$ | 1,354,798,504 |  | \$ | 45,328,132 |  | \$ | 2,169,369 |  |  | 1,074,654 | \$ | 1,079,478 |  | \$ | 49,651,633 | 3.665\% |


| SHORT-TERM DEBT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | d | Cost |  |  |  |  |  |
|  | Maturity | Rate |  | Principal |  | $\underline{\text { Interest }}$ |  | Expense |  | Loss |  | Premium |  | Total | Cost |
| Notes Payable to Associated Company | NA | 0.420\% |  | \$0.00 | \$ | - | \$ |  | \$ | \$ - | \$ | - | \$ | \$ | 0.000\% |
| Revolving Credit Faciility Payable |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0.000\% |
| Commercial Paper Program | Varies | 0.448\% |  | 294,981,079 |  | 1,321,615 |  | - |  | - |  | - |  | 1,321,615 | 0.448\% |
|  |  | Total | \$ | 294,981,079 | \$ | 1,321,615 | \$ | - - | \$ | \$ . | \$ | - - |  | \$ 1,321,615 | 0.448\% |
| Embedded Cost of Total Debt |  |  | \$ | 1,649,779,583 | \$ | 46,649,747 |  | 2,169,369 | \$ | 1,074,654 | \$ | 1,079,478 |  | \$ 50,973,248 | 3.090\% |
| ** Debt discount shown on separate line. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Additional interest due to Swap Agreements: |  |  |  |  |  |  |  | Expiration of Swap |  | Fixed LG\&E Swap |  | Fixed G\&E Swap |  | Variable Counterparty |  |
|  | Underlying De | dged |  |  |  | ional Amount |  | Agreement |  | Position |  | Position |  | Swap Position |  |
|  | Series Z-PCB |  |  |  |  | 83,335,000 |  | 11/01/20 |  | 5.495\% |  | 5.495\% |  | MA Index |  |
|  | Series CC, D |  |  |  |  | 32,000,000 |  | 10/01/33 |  | 3.657\% |  | 3.657\% |  | $8 \%$ of 1 mo LIBOR |  |
|  | Series CC, D |  |  |  |  | $32,000,000$ |  | 10/01/33 |  | 3.645\% |  | 3.645\% |  | $8 \%$ of 1 mo LIBOR |  |
|  | Series CC, D |  |  |  |  | $\begin{array}{r} 32,000,000 \\ \hline 179,335,000 \end{array}$ |  | 10/01/33 |  | 3.695\% |  | 3.695\% |  | $8 \%$ of 1 mo LIBOR |  |

[^1]ECR - Gross-up Revenue Factor \& Composite Income Tax Calculation 2015

| Assume pre-tax income of | \$ | 100.0000 |  |
| :---: | :---: | :---: | :---: |
| State income tax (see below) |  | 5.6400 | (40) |
| Taxable income for Federal income tax before production credit <br> a. Production Rate <br> b. Allocation to Production Income <br> c. Allocated Production Rate (a x b) |  | $\begin{array}{r} 94.3600 \\ 0 \% \\ 100 \% \\ 0.00 \% \end{array}$ | (1)-(3) |
| Less: Production tax credit |  | - | (6)* ${ }^{(9)}$ |
| Taxable income for Federal income tax |  | 94.3600 | (6)-(11) |
| Federal income tax |  | 33.0260 | (13)*35\% |
| Total State and Federal income taxes | \$ | 38.6660 | (3)+(15) |
| Gross-up Revenue Factor | \$ | 61.3340 | 100-(18) |
| Therefore, the composite rate is: <br> Federal <br> State <br> Total |  | $\begin{array}{r} 33.0260 \% \\ 5.6400 \% \\ \hline 38.6660 \% \\ \hline \end{array}$ | $\begin{gathered} (15) / 100 \\ (3) / 100 \\ (23)+(24) \end{gathered}$ |
| State Income Tax Calculation |  |  |  |
| Assume pre-tax income of | \$ | 100.0000 |  |
| Less: Production tax credit @ 6\% |  | 6.0000 |  |
| Taxable income for State income tax |  | 94.0000 | (32)-(34) |
| State Tax Rate |  | 6.0000\% |  |
| State Income Tax | \$ | 5.6400 | (36)*(38) |

## LOUISVILLE GAS AND ELECTRIC COMPANY

# Response to the Commission Staff's First Request for Information Dated July 10, 2015 

Case No. 2015-00222
Question No. 7

## Witness: Robert M. Conroy

Q-7. 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.

A-7. The actual average residential customer's usage for the 12-months ending May 31, 2015 is 973 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 collecting the cumulative under-recovered position of $\$ 1,959,324$ over three months ( $\$ 653,108$ per month) the ECR billing factor will be increased by approximately $0.77 \%$ for each month. For a residential customer using 973 kWh per month the impact of the adjusted ECR billing factor would be an increase of approximately $\$ 0.74$ on each month's bill, using rates and adjustment clause factors in effect for the July 2015 billing month.

| INPUTS: |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Expense Month for calculatio |  | May-15 |
| ECR Monthly Filing - Expense Month for calculations |  |  |  |
| Form 1.10-Lin | Adjusted Net Juris E(M) as filed | \$ | 6,915,959 |
| Form 1.10-Lin | Group 1 Rev as \% 12-mo Total Rev |  | 41.82\% |
| Form 1.10-Lin | Group $1 \mathrm{E}(\mathrm{m})$ | \$ | 2,892,254 |
| Form 1.10-Lin | Group 1 12-month avg revenue | \$ | 35,317,186 |
| Form 1.10-Lin | Billing Factor filed |  | 8.19\% |
| Financial Reports - Year Ended Current Month |  |  | May-15 |
| Page 30 | Residential Sales (kWh) |  | 06,653,615 |
| Page 18 | Residential Avg Customers Year Ended |  | 351,641 |
|  | times 12 for 12-month number |  | 4,219,692 |
| Response to DR | Adjustment for (Over)/Under Collection | \$ | 1,959,324 |
|  | Number of Months to collect/distribute |  | 3 |
|  | Monthly Adj for (Over)/Under Collection | \$ | 653,108 |
|  | Position for Review Period Collection |  | UNDER |
| Billing Factors |  |  |  |
| Tariff | Basic Service Charge | \$ | 10.75 |
| Tariff | Base Rate |  | 0.08082 |
| Monthly Filing | FAC for May-15 |  | 0.00241 |
| Tariff | DSM |  | 0.00520 |

## Residential Bill Impact Calculations

Adjusted Net Juris E(M) as filed \$ 6,915,959 Adjustment for (Over)/Under Collection 653,108
Adjusted Net Juris E(M) as adjusted for (Over)/Under Collection \$7,569,067



[^0]:    Totals \$ 1,004,702,278 \$ 1,108,386,404
    90.6455\%

[^1]:    Call premium and debt expense is being amortized in accordance with ASC 980, Regulated Operations
    3 Remarketed bonds, issued at long term fixed rate
    Remarketed bonds, issued at a variable rate.
    5 Includes setup fees for Wells Fargo, Bank of America and Royal Bank of Scotland amended July 28, 2014 with
    a five year term.
    a - Remarketing fee $=10$ basis points

    - Remarketing fee $=25$ basis points

