PPL company
Mr. Jeff DeRouen
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40602

January 12, 2011
RE: AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR THE SIXMONTH BILLING PERIOD ENDING OCTOBER 31, 2010 CASE NO. 2010-00475

Dear Mr. DeRouen:
Please find enclosed and accept for filing the original and ten (10) copies of the Direct Testimony of Robert M. Conroy and the Response of Louisville Gas and Electric Company to the Information Requested in Appendix B of the Commission's Order dated December 27, 2010, in the above-referenced matter.

Should you have any questions concerning the enclosed, please contact me at your convenience.


## Robert M. Conroy

## Enclosures

cc: Parties of Record

## Louisville Gas and

 Electric CompanyState Regulation and Rates 220 West Main Street PO Box 32010 Louisville, Kentucky 40232 www.lge-ku.com

## 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 | ) |
| CASE NO. |  |
| AND ELECTRIC COMPANY FOR THE SIX-MONTH | ) |
| BILLING PERIOD ENDING OCTOBER 31,2010 | ) |

DIRECT TESTIMONY OF

ROBERT M. CONROY
DIRECTOR - RATES
LG\&E AND KU SERVICES COMPANY

Filed: January 12, 2011
Q. Please state your name, title, and business address.
A. My name is Robert M. Conroy, I am the Director - Rates for LG\&E and KU Services Company, which provides services to Louisville Gas and Electric Company ("LG\&E") and Kentucky Utilities Company ("KU") (collectively "the Companies"). My business address is 220 West Main Street, Louisville, Kentucky, 40202. A complete statement of my education and work experience is attached to this testimony as Appendix A.
Q. Have you previously testified before this Commission?
A. Yes. I have previously testified before this Commission in proceedings concerning the Companies' most recent rate cases, fuel adjustment clauses, and environmental cost recovery ("ECR") surcharge mechanisms.
Q. What is the purpose of this proceeding?
A. The purpose of this proceeding is to review the past operation of LG\&E's environmental surcharge during the six-month billing period ending October 31, 2010 (expense months of March 2010 through August 2010) and determine whether the surcharge amounts collected during the period are just and reasonable.
Q. What is the purpose of your testimony?
A. The purpose of my testimony is to summarize the operation of LG\&E's environmental surcharge during the billing period under review, demonstrate the amounts collected during the period were just and reasonable, present and discuss LG\&E's proposed adjustment to the Environmental Surcharge Revenue Requirement based on the operation of the surcharge during the period and explain how the environmental surcharge factors were calculated during the period under review.
Q. Please summarize the operation of the environmental surcharge for the billing period included in this review.
A. LG\&E billed an environmental surcharge to its customers from May 1, 2010 through October 31, 2010. For purposes of the Commission's examination in this case, the monthly LG\&E environmental surcharges are considered as of the six-month billing period ending October 31, 2010. In each month of the period, LG\&E calculated the environmental surcharge factors in accordance with its tariff ECR and the requirements of the Commission's previous orders concerning LG\&E's environmental surcharge.
Q. What costs were included in the calculation of the environmental surcharge factors for the billing period under review?
A. The capital and operating costs included in the calculation of the environmental surcharge factors for the billing period were the costs incurred each month by LG\&E from March 2010 through August 2010, as detailed in the attachment in response to Question No. 2 of the Commission Staff's Request for Information, incorporating all required revisions.

The monthly environmental surcharge factors applied during the billing period under review were calculated consistent with the Commission's orders in LG\&E's previous applications to assess or amend its environmental surcharge mechanism and plan, as well as orders issued in previous review cases. The monthly environmental surcharge reports filed with the Commission during this time reflect the various changes to the reporting forms ordered by the Commission from time to time.

## Q. Has the Commission recently approved changes to LG\&E's ECR Compliance Plan?

A. Yes. In Case No. 2009-00549, LG\&E's most recent rate case, the Commission approved the elimination of LG\&E's 2001 and 2003 ECR Compliance Plans from the monthly environmental surcharge filings. Effective with the August 2010 expense month, the monthly environmental surcharge includes only costs associated with the 2005, 2006 and 2009 Compliance Plans.
Q. Has the Commission recently approved changes to the environmental surcharge mechanism and the monthly ES Forms?
A. Yes. In Case No. 2009-00311, LG\&E's most recent ECR two-year review, the Commission approved changes to the environmental surcharge mechanism that include the calculation of the monthly billing factor using a revenue requirement method instead of a percentage method (eliminating the use of the Base Environmental Surcharge Factor ("BESF")), the elimination of the monthly true-up adjustment, and revisions to the monthly reporting forms to reflect the approved changes. Pursuant to the Commission's December 2, 2009 Order in that case, the changes were implemented with the December 2009 expense month that was billed in February 2010. The approved changes only impact the timing and accuracy of the revenue collection, not the total revenues LG\&E is allowed to collect through the ECR. The previous six-month review proceeding included the transition from the percentage method to the new revenue requirement method. The six-month period under review is the first to include all months calculated using the new revenue requirement method.
Q. Are there any changes or adjustments in Rate Base from the originally filed expense months?
A. No. During the period under review, there were no changes to Rate Base from the originally filed billing period as summarized in LG\&E's response to the Commission Staff's Request for Information, Question No. 1. In addition, there were no changes identified as a result of preparing responses to the requests for information in this review.
Q. Are there any changes necessary to the jurisdictional revenue requirement ( $\mathrm{E}(\mathrm{m})$ )?
A. Yes. Adjustments to $\mathrm{E}(\mathrm{m})$ are necessary for compliance with the Commission's Order in Case No. 2000-00386, to reflect the actual changes in the overall rate of return on capitalization that is used in the determination of the return on environmental rate base. The details of and support for this calculation are shown in LG\&E's response to Question No. 1 of the Commission Staff's Request for Information.
Q. As a result of the operation of the environmental surcharge during the billing period under review, is an adjustment to the revenue requirement necessary?
A. Yes. LG\&E experienced a cumulative over-recovery of $\$ 1,419,514$ for the billing period ending October 31, 2010. LG\&E's response to Question No. 2 of the Commission Staff's Request for Information shows the calculation of the cumulative over-recovery. However, LG\&E is adjusting this over-recovery position for a correction made in the review period in this proceeding that affected the February 2010 expense month. A prior period adjustment of $\$ 941,134$ was included in the

April 2010 expense month filing submitted to the Commission on May 17, 2010. The net over-recovery position which LG\&E is submitting in this proceeding is $\$ 478,380$. Therefore, an adjustment to the revenue requirement is necessary to reconcile the collection of past surcharge revenues with actual costs for the billing period under review.

## Q. Why is LG\&E making the adjustment discussed above to the recovery position contained in this review period?

A. In the April 2010 expense month filing submitted to the Commission on May 17, 2010, LG\&E identified an error in the amount of ECR revenue reported as collected through base rates for the February 2010 expense month filing. This reporting error resulted in an under-collection of $\$ 941,134$ of February 2010 expenses through the April 2010 ECR billing factor. This under-collection was included in the April 2010 expense month filing and recovered through the June 2010 billing factor. Because LG\&E made an adjustment to its monthly filings, the effect of the reporting error must be eliminated from the calculation of the current over-recovery position.
Q. Did LG\&E include an adjustment in its previous six-month review case?
A. Yes. In Case No. 2010-00242, LG\&E included an adjustment as part of the calculation of the under-recovery in that proceeding. As previously stated, because LG\&E made an adjustment to its monthly filings, the effect of the reporting error must be eliminated from both the previous and current recovery positions.

Without an adjustment in the previous and current review periods, the correction amount would have over-stated the under-recovery position in the previous
review period and over-stated the over-recovery position in the current review period as shown on the following table.

|  | Six-Month Review <br> Expense Period <br> Sep09-Feb10 | Six-Month Review <br> Expense Period <br> Mar10-Aug10 |
| :---: | :---: | :---: |
| Cumulative Over/(Under) Recovery | $(\$ 5,714,763)$ | $\$ 1,419,514$ |
| Feb10 Expense Month Correction | $\$ 941,134$ | $(\$ 941,134)$ |
| Net Over/(Under) Recovery | $(\$ 4,773,629)$ | $\$ 478,380$ |

## Q. Has LG\&E identified the causes of the net over-recovery during the billing period under review?

A. Yes. LG\&E has identified the components that make up the net over-recovery during the billing period under review. The components are (1) changes in overall rate of return as previously discussed, and (2) the use of 12 month average revenues to determine the billing factor. In addition, as discussed above, the error contained in the February 2010 expense month filing that was identified in April 2010 and considered in the previous review proceeding is contributing to the over-recovery position in this period. The details and support of the components that make up the net over-recovery during the billing period under review are shown in LG\&E's response to Question No. 2 of the Commission Staff's Request for Information.

With the transition to the revenue requirement method in the previous review period, the BESF is no longer impacting the calculation of the over/(under) recovery position. As previously discussed, the monthly billing factors for the billing period under review were calculated using the revenue requirement method.
Q. Please explain how the function of the ECR mechanism contributes to the net over-recovery in the billing period under review?
A. The use of 12 -month average revenues to calculate the monthly billing factor and then applying that same billing factor to the actual monthly revenues will result in an over or under-collection of ECR revenues. Typically it will result in an overcollection during the summer or winter months when actual revenues will generally be greater than the 12 -month average and an under-collection during the shoulder months when actual revenues will generally be less than the 12-month average. The use of 12 -month average revenues contributed to the net over-recovery as shown in LG\&E's response to Question No. 2 of the Commission Staff's Request for Information.

During the period under review, LG\&E's actual revenues were significantly greater than the 12 -month historical average due to the warmer than normal temperatures during the summer period. The table below shows a comparison of the 12-month average revenues used in the monthly filings to determine the ECR billing factor and the actual revenues which the ECR billing factor was applied in the billing month.

| Expense Month | 12-month Average <br> Revenue | Billing Month | Actual Revenue <br> ECR applied to |
| :--- | :---: | :--- | :---: |
| March 2010 | $\$ 63,776,579$ | May 2010 | $\$ 56,850,605$ |
| April 2010 | $\$ 64,004,468$ | June 2010 | $\$ 80,270,508$ |
| May 2010 | $\$ 64,093,415$ | July 2010 | $\$ 93,021,435$ |
| June 2010 | $\$ 64,794,282$ | August 2010 | $\$ 90,875,356$ |
| July 2010 | $\$ 65,947,483$ | September 2010 | $\$ 88,756,203$ |
| August 2010 | $\$ 67,236,254$ | October 2010 | $\$ 69,773,058$ |

Q. What kind of adjustment is LG\&E proposing in this case as a result of the operation of the environmental surcharge during the billing period?
A. LG\&E is proposing that the net over-recovery be refunded in one month following the Commission's Order in this proceeding. Specifically, LG\&E recommends that the Commission approve a decrease to the Environmental Surcharge Revenue Requirement of $\$ 478,380$ for one month, beginning in the second full billing month following the Commission's Order in this proceeding. This method is consistent with the method of implementing previous over- or under-recovery positions in prior ECR review cases.
Q. What is the bill impact on a residential customer for the proposed refund of the over-recovery?
A. The inclusion of the refund in the determination of the ECR billing factor will decrease the billing factor by approximately $0.68 \%$. For a residential customer using $1,000 \mathrm{kWh}$ the ECR billing factor will decrease by approximately $\$ 0.57$ per month for one month (using rates and adjustment clause factors in effect for the January 2011 billing month).
Q. What rate of return is LG\&E proposing to use for all ECR Plans upon the Commission's Order in this proceeding?
A. LG\&E is recommending an overall rate of return on capital of $11.31 \%$, including the currently approved $10.63 \%$ return on equity and adjusted capitalization, to be used to calculate the environmental surcharge. This is based on capitalization as of August 31, 2010 and the Commission's Order of July 30, 2010 in Case No. 2009-00549.
Q. What is your recommendation to the Commission in this case?
A. LG\&E makes the following recommendations to the Commission in this case:
a) The Commission should approve the proposed decrease to the Environmental Surcharge Revenue Requirement of $\$ 478,380$ for one month beginning in the second full billing month following the Commission's decision in this proceeding;
b) The Commission should determine environmental surcharge amount for the six-month billing period ending October 31, 2010 to be just and reasonable;
c) The Commission should approve the use of an overall rate of return on capital of $11.31 \%$ using a return on equity of $10.63 \%$ beginning in the second full billing month following the Commission's Order in this proceeding.
Q. Does this conclude your testimony?
A. Yes.

## VERIFICATION

## COMMONWEALTH OF KENTUCKY ) <br> ) SS: <br> 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 foregoing testimony, and that 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 $1^{\text {th }}$ day of Sameary 2011.


My Commission Expires:

September 22,2014

## APPENDIX A

## Robert M. Conroy

Director - Rates
LG\&E and KU Services Company
220 West Main Street
Louisville, Kentucky 40202
(502) 627-3324

## Education

Masters of Business Administration
Indiana University (Southeast campus), December 1998. GPA: 3.9.
Bachelor of Science in Electrical Engineering;
Rose Hulman Institute of Technology, May 1987. GPA: 3.3
Essentials of Leadership, London Business School, 2004.
Center for Creative Leadership, Foundations in Leadership program, 1998.
Registered Professional Engineer in Kentucky, 1995.

## Previous Positions

Manager, Rates
Manager, Generation Systems Planning
Group Leader, Generation Systems Planning
Lead Planning Engineer
Consulting System Planning Analyst
System Planning Analyst III \& IV
System Planning Analyst II
Electrical Engineer II
Electrical Engineer I

April 2004 - Feb. 2008
Feb. 2001 - April 2004
Feb. 2000 - Feb. 2001
Oct. 1999 - Feb. 2000
April 1996 - Oct. 1999
Oct. 1992 - April 1996
Jan. 1991 - Oct. 1992
Jun. 1990 - Jan. 1991
Jun. 1987 - Jun. 1990

## Professional/Trade Memberships

Registered Professional Engineer in Kentucky, 1995.

## COMMONWEALTH OF KENTUCKY <br> BEFORE THE PUBLIC SERVICE COMMISSION

## In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE )
COMMISSION OF THE ENVIRONMENTAL )
SURCHARGE MECHANISM OF LOUISVILLE GAS ) CASE NO.
AND ELECTRIC COMPANY FOR THE SIX-MONTH ) 2010-00475
BILLING PERIOD ENDING OCTOBER 31, 2010 )

RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
INFORMATION REQUESTED IN APPENDIX B OF COMMISSION'S ORDER

DATED DECEMBER 27, 2010

FILED: January 12, 2011

## VERIFICATION

## COMMONWEALTH OF KENTUCKY )

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 $11^{\text {th }}$ day of Ganuany 2011.


My Commission Expires:
September 22,2014

## VERIFICATION

## COMMONWEALTH OF KENTUCKY )

) SS :
COUNTY OF JEFFERSON

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


Subscribed and sworn to before me, a Notary Public in and before said County and State, this $1^{\text {th }}$ day of Ganuauy_ 2011.


My Commission Expires:


# LOUISVILLE GAS AND ELECTRIC COMPANY 

# Response to Information Requested in Appendix B of Commission's Order Dated December 27, 2010 

Case No. 2010-00475
Question No. 1

Witness: Robert M. Conroy / Shannon L. Charnas

Q-1. Concerning the rate of return on the five 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. 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. No further revisions to Rate Base were identified during this review period.

Page 3 provides the adjusted weighted average cost of capital for the period under review.

LG\&E did not engage in accounts receivable financing or have any preferred stock during the period under review.

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

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |  | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Billing <br> Month | Expense Month | Rate of Return as Filed | Rate Base as Filed | Rate Base As Revised | Change in Rate Base (5) - (4) | True-up Adjustment $(3) *(6) / 12$ | Jurisdictional <br> Allocation, ES <br> Form 1.00 |  | Jursidictional True up Adjustment <br> $(7) *(8)$ |
| May 10 | Mar-10 | 1118\% | \$239,208,510 | \$239,208,510 | \$ | \$ | 88.90\% | \$ |  |
| Jun-10 | Apr-10 | 1118\% | 238,586,409 | 238,586,409 | - | . | 84.15\% |  | - |
| Jul-10 | May-10 | 1097\% | 238,012,541 | 238,012,541 | - | - | 85.36\% |  | - |
| Aug-10 | Jum-10 | 1097\% | 238,182,734 | 238,182,734 | - | - | 93.53\% |  | - |
| Sep-10 | Jul-10 | 1097\% | 237,736,661 | 237,736,661 | - | $\checkmark$ | 92.29\% |  | - |
| Oct-10 | Aug-10 | 1097\% | 69,783,654 | 69,783,654 | - | - - | 9256\% |  |  |
|  |  |  |  |  |  | \$ |  | \$ | - |
|  |  |  |  | Cumulative Impact of Changes in Rate Base $\$$ |  |  |  | 8 | - |

## Louisville Gas \& Electric Company

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

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

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Billing <br> Month | Expense Month | Rate of Retum as Filed | Rate of Retumn as Revised | Change in Rate of Retum $\text { (4) }-(3)$ | Rate Base as Revised | True-up Adjustment $(5) *(6) / 12$ | Jurisdictional <br> Allocation, ES <br> Form 100 | Jursidictional True up Adjustment $(7) *(8)$ |
| May-10 | Mar-10 | 11.18\% | 11.22\% | 0.04\% | 239,208,510 | 7,974 | 88.90\% | 7,089 |
| Jun-10 | Apr-10 | 11.18\% | $1122 \%$ | 0.04\% | 238,586,409 | 7,953 | 84.15\% | 6,692 |
| .tul-10 | May-10 | 1097\% | $1122 \%$ | 0.25\% | 238,012,541 | 49,586 | 85.36\% | 42,327 |
| Aug-10 | Jun-10 | 1097\% | $1122 \%$ | 0.25\% | 238,182,734 | 49,621 | 93.53\% | 46,411 |
| Sep-10 | Jul-10 | 1097\% | $1122 \%$ | 025\% | 237,736,661 | 49,528 | 92.29\% | 45,710 |
| Oct-10 | Aug-10 | 1097\% | 1122\% | 025\% | 69,783,654 | 14,538 | 92.56\% | 13,457 |
|  |  |  |  |  |  | 179,201 |  | 161,685 |
| Cumulative Impact of Changes in Rate of Return \$ 179,201 |  |  |  |  |  |  |  | \$ 161,685 |

# LOUISVILLE GAS AND ELECTRIC COMPANY 

## Response to Information Requested in Appendix B of Commission's Order Dated December 27, 2010

Case No. 2010-00475

## 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. 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 six-month review. Include all supporting calculations and documentation for any such additional over- or underrecovery.

A-2. Please see the attachment to this response for the summary schedule and cumulative components which make up the net over-recovery.

For the period under review, LG\&E experienced a cumulative over-recovery of $\$ 1,419,514$. However LG\&E is adjusting this over-recovery position for a correction made in this review period that affected the February 2010 expense month as shown on page 2 of 3 on the attached schedule. The original February 2010 expense month filing included an overstatement of the ECR revenue collected through base rates, resulting in an under-recovery of $\$ 941,134$. The adjustment to correct the overstatement was shown as a prior period adjustment in the April 2010 expense month filing and was recovered through the June 2010 billing factor. Since an adjustment was made in the monthly filings, LG\&E made an adjustment in the previous review period (Case No. 2010-00242) and a corresponding adjustment in this review period to eliminate the effect of the correction. The result is a net over-recovery of $\$ 478,380$ for the 6 -month billing period under review.
Louisville Gas \& Electric Company
Calculation of E(m) and Jurisdictional Surcharge Billing Factor
Summary Schedule for Expense Months March 2010 through Oct
Page lo of 3
Conroy

Louisville Gas \＆Electric Company
Calculation of E（m）and Jurisdictional Surcharge Billing Factor
Attachment to Response to Question No． 2
Page 2 of 3
Conroy

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Louisville Gas \& Electric Company
Reconciliation of Combined Over/(Under) Recovery
Summary Schedule for Expense Months March 2010 through August 2010

(I)
(2)
(3)
(4)
(5)
(6)

Recovery Position Explanation - Over/(Under)
$\begin{array}{cc} \\ & \begin{array}{c}\text { Correction to Feblo } \\ \text { Expense Month Filing } \\ \text { - }\end{array} \\ \text { Use of } 12 \text { Month } \\ \text { Included in Apr } 10 \\ \text { verage Revenues } \\ \text { Expense Month }\end{array}$

$\begin{array}{cc} \\ & \begin{array}{c}\text { Correction to Feblo } \\ \text { Expense Month Filing } \\ \text { - }\end{array} \\ \text { Use of } 12 \text { Month } \\ \text { Included in Apr } 10 \\ \text { verage Revenues } \\ \text { Expense Month }\end{array}$
$\begin{array}{cc} \\ & \begin{array}{c}\text { Correction to Feblo } \\ \text { Expense Month Filing } \\ \text { - }\end{array} \\ \text { Use of } 12 \text { Month } \\ \text { Included in Apr } 10 \\ \text { verage Revenues } \\ \text { Expense Month }\end{array}$
Billing Expense
Month Month
Combined Total
Over/(Under)
Recovery
$(\mathrm{Q} 2, \mathrm{pg} 2, \operatorname{Col} 10)$
(4)


478,380

## OVERUNDER RECONCILIATION

Combined Over/(Under) Recovery
$1,419.514$
Due to Change in ROR $\quad(161,685)$
Use of 12 Month Average Revenues 640,065 Due to Feblo Expense Mo Correction 941,134

| Subtotal | $1,419,514$ |
| ---: | ---: |
| Unreconciled Difference |  |

# LOUISVILLE GAS AND ELECTRIC COMPANY 

# Response to Information Requested in Appendix B of Commission's Order Dated December 27, 2010 

Case No. 2010-00475
Question No. 3

Witness: Shannon L. Charnas

Q-3 Provide the calculations, assumptions, workpapers, 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. 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 or 5 or 7 year rapid amortization. Accelerated depreciation results in a temporary tax savings to the Company and the Accumulated Deferred Tax balance reflects the value of those temporary savings as a reduction to environmental rate base.

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

In LG\&E's most recent rate case, Case No. 2009-00549, the Commission approved the elimination of the 2001 and 2003 ECR Compliance Plans effective with the August 2010 expense month. Therefore, the attachment includes the calculation of Deferred Income Taxes and the balance of Accumulated Deferred Income Taxes for the 2001 and 2003 projects as reported each month through the July 2010 expense month.

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

```
2001 Plan
Project 6 -- NOx
```

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Accumulated <br> Deferred <br> Taxes | Deferred <br> Taxes on <br> Retirements |  |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mar-10 | $192,860,844$ | 617,234 | 788,995 | 171,761 | $38.9000 \%$ | 66,815 | $13,788,507$ |  |
| Apr-10 | $192,860,844$ | 617,234 | 788,995 | 171,761 | $38,9000 \%$ | 66,815 | $13,922,137$ | $1,053,265$ |
| May-10 | $192,860,844$ | 617,234 | 788,995 | 171,761 | $38,9000 \%$ | 66,815 | $13,988,952$ | $1,053,265$ |
| Jun-10 | $192,860,844$ | 617,234 | 788,995 | 171,761 | $38,9000 \%$ | 66,815 | $14,055,767$ | $1,053,265$ |
| Jul-10 | $192,860,844$ | 617,234 | 788,995 | 171,761 | $38,9000 \%$ | 66,815 | $14,122,584$ | $1,053,265$ |
| Aug-10 |  |  |  |  |  |  |  |  |

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

2003 - Plan
Project 7 -- Mill Creek FGD Scrubber Conversion

| Month | Plant Balance | Book Depreciation | Tax Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred <br> Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 1,049,218 |  |
| Mar-10 | 30,861,686 | 103,474 | 121,993 | 18,519 | 38.9000\% | 7,204 | 1,056,422 | 516,073 |
| Apr-10 | 30,861,686 | 103,474 | 121,993 | 18,519 | 38.9000\% | 7,204 | 1,063,626 | 516,073 |
| May-10 | 30,861,686 | 103,474 | 121,993 | 18,519 | 38.9000\% | 7,204 | 1,070,830 | 516,073 |
| Jun-10 | 30,861,686 | 103,474 | 121,993 | 18,519 | 38.9000\% | 7,204 | 1,078,034 | 516,073 |
| Jul-10 | 30,861,686 | 103,474 | 121,993 | 18,519 | 38.9000\% | 7,204 | 1,085,235 | 516,073 |
| Aug-10 |  |  |  |  |  |  |  |  |

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

2003 - Plan
Project 8 -- Precipitators

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Accumulated <br> Deferred <br> Taxes | Deferred <br> Taxes on <br> Retirements |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mar-10 | $11,929,133$ | 47,792 | 46,612 | $(1,180)$ | $38.9000 \%$ | $(459)$ | 940,713 |
| Apr-10 | $11,929,133$ | 47,792 | 46,612 | $(1,180)$ | $38,9000 \%$ | $(459)$ | 939,254 |
| May-10 | $11,929,133$ | 47,792 | 46,612 | $(1,180)$ | $38,9000 \%$ | $(459)$ | 939,336 |
| Jun-10 | $11,929,133$ | 47,792 | 46,612 | $(1,180)$ | $38,9000 \%$ | $(459)$ | 938,877 |
| Jul-10 | $11,929,133$ | 47,792 | 46,612 | $(1,180)$ | $38,9000 \%$ | $(459)$ | 938,252 |
| Aug-10 |  |  |  |  |  |  | 275,252 |

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

2003-Plan
Project 9 -- Clearwell Water System

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Accumulated <br> Deferred <br> Taxes | Deferred <br> Taxes on <br> Retirements |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  | 29,424 |  |
| Mar-10 | $1,197,310$ | 3,702 | 4,512 | 810 | $38,9000 \%$ | 315 | 29,739 |
| Apr-10 | $1,197,310$ | 3,702 | 4,512 | 810 | $38.9000 \%$ | 315 | 30,054 |
| May-10 | $1,197,310$ | 3,702 | 4,512 | 810 | $38.9000 \%$ | 315 | 30,369 |
| Jun-10 | $1,197,310$ | 3,702 | 4,512 | 810 | $38.9000 \%$ | 315 | 30,684 |
| Jul-10 | $1,197,310$ | 3,702 | 4,512 | 810 | $38.9000 \%$ | 315 | 31,000 |
| Aug-10 |  |  |  |  |  |  | 4,716 |

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

2003-Plan
Project 10 -- Absorber Trays

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Accumulated <br> Deferred <br> Taxes | Deferred <br> Taxes on <br> Retirements |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Mar-10 | $2,734,620$ | 8,614 | 10,164 | 1,550 | $38.9000 \%$ | 603 | 78,153 |  |
| Apr-10 | $2,734,620$ | 8,614 | 10,164 | 1,550 | $38.9000 \%$ | 603 | 79,359 | - |
| May-10 | $2,734,620$ | 8,614 | 10,164 | 1,550 | $38.9000 \%$ | 603 | 79,962 | - |
| Jun-10 | $2,734,620$ | 8,614 | 10,164 | 1,550 | $38.9000 \%$ | 603 | 80,565 | - |
| Jul-10 | $2,734,620$ | 8,614 | 10,164 | 1,550 | $38.9000 \%$ | 603 | 81,172 | - |
| Aug-10 |  |  |  |  |  |  |  | - |

# Attachment to Response to Question No. 3 

Page 6 of 15 Charnas

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

2005 - Plan
Project 11 -- Special Waste Landfill Expansion - MC

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Accumulated <br> Deferred <br> Taxes | Deferred <br> Taxes on <br> Retirements |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Mar-10 | $4,607,107$ | 9,741 | 24,037 | 14,296 | $38,9000 \%$ | 5,561 | 191,948 | 197,509 |
| Apr-10 | $4,607,107$ | 9,741 | 24,037 | 14,296 | $38,9000 \%$ | 5,561 | 203,070 | 22,369 |
| May-10 | $4,607,107$ | 9,741 | 24,037 | 14,296 | $38,9000 \%$ | 5,561 | 208,631 | 22,369 |
| Jun-10 | $4,607,107$ | 9,741 | 24,037 | 14,296 | $38,9000 \%$ | 5,561 | 214,192 | 22,369 |
| Jul-10 | $4,607,107$ | 9,741 | 24,037 | 14,296 | $38,9000 \%$ | 5,561 | 219,753 | 22,369 |
| Aug-10 | $4,607,107$ | 9,741 | 24,037 | 14,296 | $38,9000 \%$ | 5,561 | 225,313 | 22,369 |

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

2005 - Plan
Project 12 -- Special Waste Landfill Expansion - CR

| Month | Plant Balance | Book Depreciation | Tax Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 214,148 |  |
| Mar-10 | 4,730,568 | 8,397 | 24,966 | 16,569 | 38.9000\% | 6,445 | 220,593 | 536 |
| Apr-10 | 4,730,568 | 8,397 | 24,966 | 16,569 | 38.9000\% | 6,445 | 227,038 | 536 |
| May-10 | 4,730,568 | 8,397 | 24,966 | 16,569 | 38.9000\% | 6,445 | 233,483 | 536 |
| Jun-10 | 4,730,568 | 8,397 | 24,966 | 16,569 | 38.9000\% | 6,445 | 239,928 | 536 |
| Jul-10 | 4,730,568 | 8,397 | 24,966 | 16,569 | 38.9000\% | 6,445 | 246,373 | 536 |
| Aug-10 | 4,730,568 | 8,397 | 24,966 | 16,569 | 38.9000\% | 6,445 | 252,819 | 536 |

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

2005-Plan
Project 13 -- Scrubber Refurbishment - TC1

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Accumulated <br> Deferred <br> Taxes | Deferred <br> Taxes on <br> Retirements |  |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mar-10 | 850,100 | 2,564 |  | 7,840 | 5,276 | $38,9000 \%$ | 2,052 | 63,104 |
| Apr-10 | 850,100 | 2,564 | 7,840 | 5,276 | $38,9000 \%$ | 2,052 | 67,208 | 73,550 |
| May-10 | 850,100 | 2,564 | 7,840 | 5,276 | $38,9000 \%$ | 2,052 | 69,260 | 73,550 |
| Jun-10 | 850,100 | 2,564 | 7,840 | 5,276 | $38,9000 \%$ | 2,052 | 71,312 | 73,550 |
| Jul-10 | 850,100 | 2,564 | 7,840 | 5,276 | $38,9000 \%$ | 2,052 | 73,364 | 73,550 |
| Aug-10 | 850,100 | 2,564 | 7,840 | 5,276 | $38,9000 \%$ | 2,052 | 75,420 | 73,550 |

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

2005 - Plan
Project 14 -. Scrubber Refurbishment - CR6

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | income Tax <br> Rate | Accumulated <br> Deferred <br> Taxes | Deferred <br> Daxes on <br> Retirements |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Mar-10 | 308,507 | 1,147 |  | 1,587 | 440 | $38,9000 \%$ | 171 | 17,006 |

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

2005 - Plan
Project 15-- Scrubber Refurbishment - CR5

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Mar-10 | - | - | - | $38.9000 \%$ | - | - |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Apr-10 | - | - | - | $38.9000 \%$ | - | - |
| May-10 | - | - | - | $38.9000 \%$ | - | - |
| Jun-10 | - | - | - | $38.9000 \%$ | - | - |
| Jul-10 | - | - | - | - | - |  |
| Aug-10 | - | - | - | - | - |  |

# Attachment to Response to Question No. 3 

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

2005 - Plan
Project 16 -- Scrubber Improvements - TC1

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Accumulated <br> Deferred <br> Taxes | Deferred <br> Taxes on <br> Retirements |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Mar-10 | $7,361,078$ | 22,206 | 65,986 | 43,780 | $38.9000 \%$ | 17,030 | 913,706 | 230,736 |
| Apr-10 | $7,361,078$ | 22,206 | 65,986 | 43,780 | $38,9000 \%$ | 17,030 | 947,766 | 26,166 |
| May-10 | $7,361,078$ | 22,206 | 65,986 | 43,780 | $38,9000 \%$ | 17,030 | 964,796 | 26,166 |
| Jun-10 | $7,361,078$ | 22,206 | 65,986 | 43,780 | $38,9000 \%$ | 17,030 | 981,826 | 26,166 |
| Jul-10 | $7,361,078$ | 22,206 | 65,986 | 43,780 | $38,9000 \%$ | 17,030 | 998,856 | 26,166 |
| Aug-10 | $7,361,078$ | 22,206 | 65,986 | 43,780 | $38,9000 \%$ | 17,030 | $1,015,890$ | 26,166 |

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

2006-Plan
Project 18 -- Trimble County 2 AQCS

| Month | Plant Balance | Book Depreciation | Tax Depreciation | Temporary Difference | $\underset{\substack{\text { Income Tax } \\ \text { Rate }}}{ }$ | Deferred Tax | Accumulated Deferred Taxes | Deferred <br> Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | - |  |
| Mar-10 | - | - | - | - | 38.9000\% | - | - |  |
| Apr-10 | - | $\cdots$ | - | - | 38.9000\% | - | - |  |
| May-10 | - | - | - | - | 38.9000\% | - | - |  |
| Jun-10 | - | - | - | - | 38.9000\% | - | - |  |
| Jul-10 | - | - | - | - | 38.9000\% | - | - |  |
| Aug-10 | - | - | - | - | 38.9000\% | - | - | - |

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

2006 - Plan
Project 19 -- Sorbent Injection, Mill Creek \& Trimble 1

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Accumulated <br> Deferred <br> Taxes | Deferred <br> Raxes on <br> Retirements |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  | 158,040 |  |
| Mar-10 | $3,440,076$ | 9,777 | 32,090 | 22,313 | $38,9000 \%$ | 8,680 | 166,720 | - |
| Apr-10 | $3,440,076$ | 9,777 | 32,090 | 22,313 | $38,9000 \%$ | 8,680 | 175,400 | - |
| May-10 | $3,440,076$ | 9,777 | 32,090 | 22,313 | $38.9000 \%$ | 8,680 | 184,080 | - |
| Jun-10 | $3,440,076$ | 9,777 | 32,090 | 22,313 | $38,9000 \%$ | 8,680 | 192,760 | - |
| Jul-10 | $3,440,076$ | 9,777 | 32,090 | 22,313 | $38.9000 \%$ | 8,680 | 201,440 | - |
| Aug-10 | $3,440,076$ | 9,777 | 32,090 | 22,313 | $38,9000 \%$ | 8,680 | 210,118 | - |

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

2006 - Plan
Project 20 -- Mercury Monitors, all plants

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Accumulated <br> Deferred <br> Taxes | Deferred Tax <br> Taxes on <br> Retirements |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Mar-10 | $2,050,346$ | 8,867 | 13,500 | 4,633 | $38.9000 \%$ | 1,802 | 31,018 |  |
| Apr-10 | $2,050,346$ | 8,867 | 13,500 | 4,633 | $38.9000 \%$ | 1,802 | 34,622 | - |
| May-10 | $2,050,346$ | 8,867 | 13,500 | 4,633 | $38.9000 \%$ | 1,802 | 36,424 | - |
| Jun-10 | $2,050,346$ | 8,867 | 13,500 | 4,633 | $38.9000 \%$ | 1,802 | 38,226 | - |
| Jul-10 | $2,050,346$ | 8,867 | 13,500 | 4,633 | $38.9000 \%$ | 1,802 | 40,028 | - |
| Aug-10 | $2,050,346$ | 8,867 | 13,500 | 4,633 | $38.9000 \%$ | 1,802 | 41,835 | - |
|  |  |  |  |  |  |  |  | - |

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

2006-Plan
Project 21 -- Particulate Monitors, Mill Creek

| Month | Plant Balance | Book <br> Depreciation | Tax Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred <br> Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 63,057 |  |
| Mar-10 | 397,151 | 1,361 | 4,027 | 2,666 | 38.9000\% | 1,037 | 64,094 | - |
| Apr-10 | 397,151 | 1,361 | 4,027 | 2,666 | 38.9000\% | 1,037 | 65,131 |  |
| May-10 | 397,151 | 1,361 | 4,027 | 2,666 | 38.9000\% | 1,037 | 66,168 | - |
| Jun-10 | 397,151 | 1,361 | 4,027 | 2,666 | 38.9000\% | 1,037 | 67,205 | - |
| Jul-10 | 397,151 | 1,361 | 4,027 | 2,666 | 38.9000\% | 1,037 | 68,242 | - |
| Aug-10 | 397,151 | 1,361 | 4,027 | 2,666 | 38.9000\% | 1,037 | 69,282 | - |

# LOUISVILLE GAS AND ELECTRIC COMPANY 

# Response to Information Requested in Appendix B of Commission's Order Dated December 27, 2010 

Case No. 2010-00475
Question No. 4

## Witness: Shannon L. Charnas

Q-4. Refer to ES Form 2.50, Pollution Control - Operations \& Maintenance Expenses, for the March 2010 through August 2010 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. Please find the attached schedule showing the changes in the operations and maintenance expense accounts for March 2010 through August 2010 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.

Monthly variances within accounts 506104 and 506105, NOx operation expenses, reflect normal SCR operations. The variances for account 506104 are caused by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality.

Fluctuations in the NOx maintenance expenses, account 512101, are the result of routine SCR monthly maintenance. Expenses in April 2010 and June 2010 are higher than typical months due to annual NOx testing at Trimble County and the timing of preventative maintenance on the SCR, respectively.

The 2001 Plan was eliminated from the ECR beginning August 2010 per Kentucky Commission Order No. 2009-00549.

Fluctuations in the scrubber operation expenses, account 502006, are the result of regular operation of the Trimble County Unit 1 FGD. These are variable production expenses and will fluctuate with generation, coal quality and the $\mathrm{SO}_{2}$ removal rate.

Expenses for Mill Creek ashpond dredging, account 501201, were fully amortized in April 2010. No additional expenses will be included in the ECR for this account.

Fluctuations in sorbent injection operation expenses, account 506109, result from ongoing system operation of Trimble County Unit 1. April 2010 is higher due to extra deliveries received in preparation for the start up of Trimble County Unit 2.

Fluctuations in sorbent injection maintenance expenses, account 512102, are the result of normal system maintenance.

The Mercury Monitor Maintenance Account 512103 includes expenses in June and July for the purchase of a 12 -month maintenance support agreement to provide post installation service at Mill Creek (June) and Cane Run (July).
LOUISVILLE GAS AND ELECTRIC COMPANY ENVIRONMENTAL SURCHARGE REPORT
Pollution Control-Operations \& Maintenance Expenses

| O\&M Expense Account | Mar-10 | Apr-10 | \% Change from Pror Penod | May-10 | \% Change from Prior Period | Jun-10 | \% Change from Pror Period | Jul-10 | \% Change from Pror Penod | Aug-10 | \% Change from Pror Period |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2001 Plan |  |  |  |  |  |  |  |  |  |  |  |
| 506104 NOx Operation -- Consumables | 165.409.88 | 266,861.95 | 61\% | 240,421.45 | -10\% | 202,659.86 | - $16 \%$ | 259,200.06 | 28\% | - | -100\% |
| 506105 NOx Operation - - Labor and Other | 8,344.43 | 14,559.01 | 74\% | 9,248.84 | -36\% | 9,841.76 | 6\% | 9,850.36 | 0\% | - | -100\% |
| 512101 NOx Maintenance | 36,040.91 | 80,169.32 | 122\% | 14,346.57 | -82\% | 58,705.96 | 309\% | 7,696.74 | -87\% | - | -100\% |
| Total 2001 Plan O\&M Expenses | 209,795.22 | 361,590.28 | 72\% | 264,016.86 | -27\% | 271,207.58 | 3\% | 276,747.16 | 2\% | . | -100\% |
| 2005 Plan |  |  |  |  |  |  |  |  |  |  |  |
| 502006 Scrubber Operations | 43.087.59 | 39,926.08 | .7\% | 36,992.82 | -7\% | 19,518.71 | -47\% | 26,881.15 | 38\% | 10,904.45 | -59\% |
| 512005 Scrubber Mantenance | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 501201 Ashpond Dredging Expense | 171,471.16 | 171,471.16 | 0\% | - | -100\% | - | 0\% | - | 0\% | - | 0\% |
| Total 2005 Plan O\&M Expenses | 214.558.75 | 211,397.24 | -1\% | 36.992.82 | -83\% | 19,518.71 | -47\% | 26,881.15 | 38\% | 10,904.45 | -59\% |
| 2006 Plan |  |  |  |  |  |  |  |  |  |  |  |
| 506109 Sorbent Injection Operation | 71,514.31 | 123,147.44 | 72\% | 88,398.15 | -28\% | 94,801.41 | 7\% | 83,161.94 | -12\% | 97,615.56 | 17\% |
| 512102 Sorbent Injection Mantenance | 43.74 | 527.24 | 1105\% | 53.54 | -90\% | 260.79 | 387\% | 2,810.97 | 978\% | 91.58 | -97\% |
| 506110 Mercury Monitors Operation | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 512103 Mercury Montors Maintenance | . | - | $0 \%$ | - | 0\% | 40,271.00 | 100\% | 30,203.00 | -25\% | 2,083.19 | -93\% |
| 502006 Scrubber Operations | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 512005 Scrubber Maintenance | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 506104 Nox Operation - Consumables | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 506105 Nox Operation - Labor and Other | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 512101 Nox Maintenance | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 506001 Precipitator Operation | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 506111 Activated Carbon | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 512011 Precipitator Mantenance | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| Total 2006 Plan O\&M Expenses | 71,558.05 | 123,674.68 | 73\% | 88,451.69 | $-28 \%$ | 135,333.20 | 53\% | 116,175.91 | -14\% | 99,790.33 | -14\% |
| 2009 Plan |  |  |  |  |  |  |  |  |  |  |  |
| 502012 Precipitator Operation | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 512105 Activated Carbon | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| Adjustment for CCP Disposal in Base Rates (ES Form 2.51) | - | - | 0\% | - | $0 \%$ | - | 0\% | - | 0\% | - | 0\% |
| Total 2009 Plan O\&M Expenses | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |

The 2001 Plan was eliminated from ECR recovery in August 2010 per PSC Order No. 2009-00549.

# LOUISVILLE GAS AND ELECTRIC COMPANY 

# Response to Information Requested in Appendix B of Commission's Order Dated December 27, 2010 

Case No. 2010-00475

## Question No. 5

Witness: Shannon L. Charnas

Q-5. In Case No. 2000-00439, the Commission ordered that LG\&E's cost of debt and preferred stock would be reviewed and reestablished during the six-month review case. Provide the following information as of August 31, 2010:
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-5. LG\&E assumes the Commission is referring to Case No. 2000-00386, where it ordered the cost of debt and preferred stock to be reviewed and reestablished in review cases.
a. Please see the attachment. There was no preferred stock as of August 31, 2010, therefore it is not listed in the attached schedule.
b. Please see the attachment. There was no preferred stock as of August 31, 2010, therefore it is not listed in the attached schedule.
c. Please see the attachment. LG\&E is utilizing a return on equity of $10.63 \%$ as agreed to and approved by the Commission in its July 30, 2010 Order in Case No. 200900549.

# Louisville Gas and Electric Company Outstanding Balances - Capitalization As of August 31, 2010 

2

## 3

Outstanding Balance
Outstanding Balance Electric Only
Total Company 79.54\%

| 1 Long-Term Debt | $896,104,000$ | $712,761,122$ |
| :--- | :--- | ---: | ---: |
| 2 Short-Term Debt | $118,326,400$ | $94,116,819$ |
| 3 Common Equity | $1,304,172,571$ | $1,037,338,863$ |

# Louisville Gas and Electric Company <br> Blended Interest Rates <br> As of August 31, 2010 

Blended Interest Rate
Total Company1 Long-Term Debt5.17\%
2 Short-Term Debt ..... $0.28 \%$

LOUISVILLE GAS AND ELECTRIC COMPANY ANALYSIS OF THE EMBEDDED COST OF CAPITAL AT August 31, 2010



2 Call premium and debt expense is being amortized over the remaining life of bonds due 6/1/15. 7/1/13 and 8/1/17
3 Reacquited bonds. which net to zero as they are also inctuded in Shon Term Debt Notes Payable to Associated Company
4 Remanketed bonds. issued at long ferm fixed rate

ECR - Gross-up Revenue Factor \& Composite Income Tax Calculation 2010
(1) Assume pre-tax income of
(2)
(3) State income tax (see below)
(4)
(5) Taxable income for Federal income tax
(6) before production credit
a. Production Rate
94.3396
(37)
(8)
(9)
b. Allocation to Production Income

9\%
c. Allocated Production Rate ( $a \times b$ )

100\%
Federal \& State
Production Credit
W/ 6\% 2010 State
Tax Rate Included
\$ 100.0000
(10)
(11) Less: Production tax credit
(12)
(13)

Taxable income for Federal income tax
85.8490
(1) - (3)
9.00\%
(14)
(15) Federal income tax
30.0472
(10)*35\%
(16)
(17) Total State and Federal income taxes
(18)
(19)
(20)
(21)
(23)
(24)
(25)
(26)
(27)
(28)
(29)
(30)
(33)
(34)
(35)
(37)
(39)
(22) Therefore, the composite rate is:
(31) State Income Tax Calculation
(32) Assume pre-tax income of
(36) Taxable income for State income tax
(38) State Tax Rate
6.0000\%
(40) State Income Tax
$\$ 35.7076$
64.2924

100-(15)

Federal
State
Total
$\$ \quad 100.0000$

Production credit @ 6\%
5.6604
$(33) *(35)$

# LOUISVILLE GAS AND ELECTRIC COMPANY 

Response to Information Requested in Appendix B of Commission's Order Dated December 27, 2010

Case No. 2010-00475
Question No. 6
Witness: Robert M. Conroy

Q-6. Provide the dollar impact the over-/under-recovery will have on the average residential customer's bill for the requested recovery period.

A-6. Based upon refunding the net over-recovered position of $\$ 478,380$ in one month, the ECR billing factor for a residential customer using $1,000 \mathrm{kWh}$ will decrease by approximately $\$ 0.57$ per month, using rates and adjustment clause factors in effect for the January 2011 billing month.

