## a PPL company

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

March 4, 2013
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, 2012
CASE NO. 2012-00547

Dear Mr. DeRouen:
Please find enclosed and accept for filing the original and seven (7) copies of the Response of Louisville Gas and Electric Company to the Questions Raised at the February 26, 2013 Technical Conference.

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

Sincerely,


Enclosures

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

## In the Matter of:


#### Abstract

AN EXAMINATION BY THE PUBLIC SERVICE ) COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF LOUISVILLE GAS ) CASE NO. AND ELECTRIC COMPANY FOR THE SIX-MONTH ) 2012-00547 BILLING PERIOD ENDING OCTOBER 31, 2012 )


RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO
COMMISSION STAFF'S QUESTIONS RAISED AT THE FEBRUARY 26, 2013 TECHNICAL CONFERENCE

FILED: March 4, 2013

## VERIFICATION

## COMMONWEALTH OF KENTUCKY ) SS : COUNTY OF JEFFERSON

The undersigned, Robert M. Convoy, 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 4 th day of
 2013.


My Commission Expires:
1/21/8015

## LOUISVILLE GAS AND ELECTRIC COMPANY

## Response to Commission Staff's Questions Raised at the February 26, 2013 Technical Conference

Case No. 2012-00547
Question No. 1

## Witness: Robert M. Conroy

Q-1. Explain how the ECR monthly billing factor is displayed on a customer's bills.

A-1. Please see the attached sample bill for a customer who receives service under Rate GS (subject to the Group 2 ECR billing factor) and also receives service under Rate LS (subject to the Group 1 ECR billing factor).

For customers receiving service on a rate schedule subject to the Group 2 ECR billing factor, additional information explaining the Environmental Surcharge calculation is provided in the Billing Information section of the bill.
a PPL company

Customer Service: Telephone Payments:

Walk-In Center: Online Customer Self-Service:

| DUE DATE | Pay This Amount |
| :---: | :---: |
| $02 / 28 / 13$ | $\$ 1,197.56$ |

Current due date applies to the current bill only. Previous amount due may be subject to disconnection.

| Averages for <br> Billing Period | This <br> Year | Last <br> Year |
| :--- | :--- | :--- |
| Average Temperature | $39^{\circ}$ | $40^{\circ}$ |
| Number of Days Billed | 29 | 29 |
| Electric/kwh per day | 110.7 | 110.2 |
| Gas/ccf per day | 11.5 | 8.9 |


| ACCOUNT INFORMATION |  |
| :--- | :--- |
| Account Number: |  |
| Account Name: |  |
| Service Address: |  |
|  |  |
| Next Read Will Occur: | LOUISVILLE KY |
| 03/01/13-03/05/13 |  |
| Date Bill Mailed: | $02 / 01 / 13 \quad$ (Meter Read Portion 02) |


| BILLING SUMMARY |  |  |
| :--- | ---: | ---: |
| Previous Balance |  | $1,077.47$ |
| Payment(s) Received $1 / 4-2 / 1$ | -514.00 |  |
| Balance as of $2 / 1$ | 563.47 |  |
| Current Electric Charges | 270.49 |  |
| Current Gas Charges | 15.71 |  |
| Current Unmetered Charges | 35.39 |  |
| Current Taxes and Fees |  | 625.11 |
| Current Charges as of 2/1 | 8.98 |  |
| Other Charges (See Other Charges Box) | $\mathbf{1 , 1 9 7 . 5 6}$ |  |
| Total Amount Due |  |  |

## ELECTRIC CHARGES

| Rate Type: General Service Single Phase |  | Meter Reading Information |  |
| :---: | :---: | :---: | :---: |
| Basic Service Charge | 20.00 | Meter \# 868430 |  |
| nergy Charge ( $\$ 0.08466 \times 3,037 \mathrm{kWh}$ ) | 257.11 | Actual Reading on 1/31/13 | 32331 |
| Electric DSM ( $\$ 0.00184 \times 3,037 \mathrm{kWh}$ ) | 5.59 | Previous Reading on 1/2/13 | $\underline{29294}$ |
| Environmental Surcharge ( $1.80 \% \times(\$ 282.70-\$ 67.27)$ ) | 3.88 | Current kwh Usage | 3037 |
| Electric Fuel Adjustment ( $\$ 0.00560 \times 3,037 \mathrm{kWh}$ ) | 17.01 | Meter Multiplier | 1 |
| Total Electric Charges | \$303.59 | Metered kwh Usage | 3037 |
| GAS CHARGES |  |  |  |
| Rate Type: Firm Commercial Gas Service |  | Meter Reading Information |  |

Please see reverse side for additional charges
Customer Service 1-502-627-3313
PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

| Account Number. |
| :---: |
|  |


| Payment <br> Due Date | Pay This <br> Amount | Amount Due <br> After Due Date | Winter Help <br> Donation | Amount <br> Enclosed |
| :---: | :---: | :---: | :---: | :---: |
| $02 / 28 / 13$ | $\$ 1,197.56$ | $\$ 1,215.81$ |  | $\$$ |

OFFICE USE ONLY:
MRU02837700, G000000
P1,077.47
PF:Y eB:P



Check here if plan(s) requested on back of stub

PO BOX 9001960
LOUISVILLE, KY 40290-1960


New enrollment only - Please check box(es) below and on front of stub.Auto Pay (voided check must be provided). Please note that any past due balance on your LG\&E account will be debited from your bank account immediately upon enrollment in the Auto Pay program. To avoid unintended debits to your bank account, please make sure your LG\&E account balance is current before enrolling in Auto Pay.

## Please deduct my Auto Pay Payment from my Checking Account.

I hereby authorize LG\&E to debit my bank account for payment of my monthly bill. This authorization applies to all my current and future LG\&E accounts, and will remain in effect until revoked by me or $\angle G \& E$.

Signature $\qquad$
Date: $\qquad$
Processing Auto Pay requests can take up to two billing cycles. Please continue making regular payments until you receive a bill that indicates the amount due will be deducted from your bank account on the payment due date.

## BILLING INFORMATION (cont)

invironmental Surcharge: A monthly charge or credit passed on to customers to pay for the cost of pollution-control equipment needed to meet government-mandated air emission reduction requirements.

## IMPORTANT INFORMATION

You now have more time to pay your bill. Effective Jan. 1, 2013, you have at least 22 days from the date your LG\&E bill is issued to make your payment. Late payment fees will be added only if full payment is not received by the payment due date.

For a copy of your rate schedule, visit www.Ige-ku.com or call our Customer Service Department.

# LOUISVILLE GAS AND ELECTRIC COMPANY 

# Response to Commission Staff's Questions Raised at the February 26, 2013 Technical Conference 

Case No. 2012-00547
Question No. 2

Witness: Robert M. Conroy

Q-2. Refer to the Response to Commission Staff's First Information Request, Question No. 1. Please provide an explanation and additional details for the calculation of the short- and long-term debt rates using average daily balances and daily interest rates.

A-2. The calculation of the average daily balance and interest rates is performed on each debt issuance for each day of the six month period under review. Such calculation and documentation is voluminous. The average daily interest rate for each debt issuance is utilized in the Analysis of the Embedded Cost of Capital report to develop the annual cost rate for short-term and long-term debt shown in the Attachment to Response to Question No. 1, pages 3 and 4 of the Commission Staff's First Request for Information in Appendix B of Commission's Order dated January 2, 2013. Please see page 1 of the attached for the Analysis of the Embedded Cost of Capital at October 31, 2012. As a sample, pages 2 through 6 of the attachment also includes supporting calculations for the Rate as shown for the Jefferson Co. 2000 Series A pollution control bond utilizing the Embedded Cost of Capital report. A similar calculation is performed for each bond and debt issuance listed on the Embedded Cost of Capital report. In addition, voluminous documentation is maintained as source material for each of the supporting calculations.

LOUISVILLE GAS AND ELECTRIC COMPANY
ANALYSIS OF THE EMBEDDED COST OF CAPITAL AT
October 31, 2012
USING AVERAGE DAILY BALANCES AND INTEREST RATES FOR ECR FILINGS

| LONG-TERM DEBT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | See pages 2 through 6 for the calculation of this rate based on the daily interest rates for the 6 -mo period |  |  |  |  | Annualized Cost |  |  |  |  |  |  |  |  |  |  | Embedded <br> Cost |
| Pollution Confrol Bonds Jefferson Co 2000 Series A |  | Rate |  | Principal | InteresV(Ifincome) |  |  | $\begin{gathered} \text { Amorized Debt } \\ \text { Issuance } \\ \text { Exp/Discount } \end{gathered}$ |  | Amortized LossReacquired Debt |  | $\qquad$ |  |  | Total |  |  |
|  | 05/01/27 | 0.833\% | \$ | 25,000,000 | 4 | \$ | 208,233 | \$ | - | \$ | 135,301 | \$ | - |  | \$ | 343,534 | 1.374\% |
| Trimble Co 2000 Series A | 08/01/30 | $0228 \%$ * |  | 83.335 .000 |  |  | 190,004 |  | 38,707 |  | 143.700 |  | 305,898 | d |  | 678,309 | 0814\% |
| Jefferson Co 2001 Series A | 09/01/27 | 0240\% ${ }^{\text {* }}$ |  | 10,104,000 |  |  | 24,250 |  | 20,393 |  | - |  | 35,546 | d |  | 80,189 | 0794\% |
| Jefferson Co 2001 Series A | 09/01/26 | 0350\% * |  | 22,500,000 |  |  | 78,750 |  | 9.924 |  | 77,424 |  | 22,500 | b |  | 188,598 | 0838\% |
| Trimble Co 2001 Series A | 09/01/26 | 0382\% * |  | 27,500.000 |  |  | 105,050 |  | 10,790 |  | 85,400 |  | 27,500 | $b$ |  | 208,740 | 0759\% |
| Jefferson Co 2001 Series B | 11/01/27 | 0.421\% * |  | 35,000.000 |  |  | 147,350 |  | 10,995 |  | 49,056 |  | 35,000 | b |  | 242,401 | 0693\% |
| Trimble Co 2001 Series B | 11/01/27 | 0.420\% ${ }^{\text {- }}$ |  | 35,000,000 |  |  | 147,000 |  | 10,997 |  | 48.864 |  | 35,000 | b |  | 241,861 | 0691\% |
| Trimble Co 2002 Series A | 10101/32 | $0265 \%$ * |  | 41,665,000 |  |  | 110,412 |  | 37,221 |  | 55,8:2 |  | 176,268 | d |  | 379,713 | 0911\% |
| Louisville Metro 2003 Series A | 10/01/33 | $1650 \%$ |  | 128,000,000 | 3 |  | 2,112,000 |  | 53.146 |  | 313,727 |  |  | a |  | 2,478,873 | 1937\% |
| Louisville Metro 2005 Series A | 02101/35 | 5750\% |  | 40,000,000 | 4 |  | 2,300,000 |  | - |  | 96,444 |  | - |  |  | 2,396,444 | 5991\% |
| Trimble Co 2007 Series A | 06/01/33 | 4600\% |  | 60.000,000 |  |  | 2,760,000 |  | 47,534 |  | 6,615 |  | 18.270 | a |  | 2,832,419 | 4.721\% |
| Louisville Metro 2007 Series A | 06/01/33 | $5625 \%$ |  | 31,000,000 | 4 |  | 1,743,750 |  | - |  | 41,718 |  | - |  |  | 1,785,468 | $5760 \%$ |
| Loulsville Metro 2007 Series B | 06/01/33 | 1.600\% |  | 35,200,000 | 3 |  | 563,200 |  | 17,975 |  | 27,526 |  |  | a |  | 608,701 | 1.729\% |
| Called Bonds |  |  |  | - |  |  | - |  | - |  | 167,868 |  |  |  |  | 167,868 |  |
| First Mortgage Bonds - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010 due 2015 | 11/15/15 | 1625\% |  | 250,000,000 |  |  | 4,062.500 |  | 522,243 |  | - |  | - |  |  | 4,584,743 | 1834\% |
| Debt discount on FMB | 11/15/15 | 1625\% |  | $(573,625)$ |  |  |  |  | 176,500 |  |  |  |  |  |  | 176,500 | -30769\% |
| 2010 due 2020 | 11/15/40 | 5.125\% |  | 285,000,000 |  |  | 14,606,250 |  | 119,249 |  | - |  | - |  |  | 14,725,499 | 5.167\% |
| Debt discount on FMB | 11/45/40 | 5125\% |  | $(2,919,920)$ |  |  |  |  | 103,360 |  |  |  |  |  |  | 103,360 | -3540\% |
| S-3 SEC Shell Registration | 03/27/15 |  |  |  |  |  |  |  | 2,084 |  |  |  |  |  |  | 2,084 |  |
| Revolving Credit Facilily | 10/19/16 |  |  |  |  |  |  |  | 782.880 |  |  |  | 500,000 |  |  | 1,282,880 |  |
| Total External Debt |  |  | \$ | 1.105,810,455 |  | 5 | 29,158,749 | 5 | 1,963,999 | \$ | 1,229,455 | \$ | 1,155,982 |  | 5 | 33,508,185 | 3.030\% |
| Interest Rate Swaps: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| JP Morgan Chase Bank 5.495\% | 11/01/20 |  |  |  |  | \$ | 4,409,124 | \$ | - | \$ | - | \$ | - |  | 5 | 4,409,124 |  |
| Morgan Stanley Capital Services 3.657\% | 10/01/33 |  |  |  |  |  | 1,111,715 |  | - |  | - |  | - |  |  | 1,111,715 |  |
| Morgan Stanley Capital Services $3.645 \%$ | 10/01/33 |  |  |  |  |  | 1,107,896 |  | - |  | - |  | - |  |  | 1,107,896 |  |
| Bank of America | 10/01/33 |  |  |  |  |  | 1,123,809 |  | - |  | - |  | - |  |  | 1,123,809 |  |
| Interest Rate Swaps External Debt |  |  |  | . |  | 5 | 7,752,545 | \$ | - | \$ | - | S | - |  | \$ | 7,752,545 | 0.701\% |
| Notes Payable to PPL |  |  | \$ | - |  | \$ | - | \$ | - | \$ | - | \$ | * |  | \$ | - |  |
| Total Internal Debt |  |  | \$ | $\stackrel{-}{+}$ |  | \$ | - | 5 | - | \$ | - | \$ | - |  | \$ | - | 0.000\% |
|  | Total |  | 5 | 1,105.810.455 |  | \$ | 36,911.294 | S | 1,963,999 | \$ | 1.229.455 | S | 1,155.982 |  | \$ | 41,260,730 | 3.731\% |



- Composite rate at end of current month for Embedded Cost of Capital report and daily average rate for ECR filings
** Debt discount shown on separate line
1 Addilional interest due to Swap Agreements:

|  |
| ---: |
| Notional Amount |
| $83,335,000$ |
| $32.000,000$ |
| $32.000,000$ |
| $32,000,000$ |
| $179,335,000$ |


| Expiration of <br> Swap | Fixed <br> LG\&E Swap | Fixed <br> LG\&E Swap | Variable <br> Counterparty |
| :---: | :---: | :---: | :---: |
| Agreement | Position | Position | Swap Position |
| $11 / 1 / 20$ | $5495 \%$ | $5495 \%$ | BMA Index |
| $10 / 1 / 1 / 33$ | $3.657 \%$ | $3.657 \%$ | $68 \%$ of 1 mo LIBOR |
| $101 / 1 / 33$ | $3645 \%$ | $3645 \%$ | $68 \%$ of 1 mo LBOR |
| $10 / 1 / 1 / 33$ | $3695 \%$ | $3695 \%$ | $68 \%$ of 1 mo LIBOR |

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 Reacquired bonds were reissued $1 / 13 / 11$.
4 Remarkeled bonds, issued at lorg term fixed rate
5 Fidelia Notes Payable were paid off on 11/1/2010 with PPL Notes Payable that were paid off with the new FMB issues on 11/16/2010.
6 Included selup fees for the Wachovla Credit Facility in Long-term Debt due to 4 year credit arrangement
7 Credit Facilly amended effective October 19, 2011 New term of 5 years al lower interest rate
a - insurance premiums annualized - based on actual invoices
b- Remarkeling fee $=10$ basis points
$c-$ Remarkeling fee $=25$ basis poink
d-Combination of a and $c$.

2000 SERIES A JEFFERSON COUNTY BONDS VARIABLE INTEREST RATE CALCULATION $\$ 25,000,000$ 237128

| May-12 |  | DAILY INTEREST RATE | DAILY INTEREST | MONTHLY INTEREST | AVG MTHLY INT RATE | AVG INT RATE - YTD | AVG INT RATE Beginning 05/01/12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 2-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 3-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 4-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 5-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 6-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 7-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 8-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 9-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 10-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 11-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 12-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 13-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 14-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 15-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 16-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 17-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 18-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 19-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 20-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 21-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 22-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 23-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 24-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 25-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 26-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 27-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 28-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 29-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 30-May-12 | 0.835 | 580.08 |  |  |  |  |
|  | 31-May-12 |  | 0.00 | 17,402.34 | 0.835 | 0.676 | 0.835 |
| Jun-12 | 1-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 2-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 3-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 4-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 5-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 6-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 7-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 8-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 9-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 10-Jun-12 | 0.835 | 580.08 |  |  |  |  |

## \$25,000,000

237128

|  |  | DAILY INTEREST RATE | DAILY INTEREST | MONTHLY INTEREST | AVG MTHLY INT RATE | AVG INT <br> RATE - YTD | AVG INT RATE Beginning 05/01/12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 11-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 12mJun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 13-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 14-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 15-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 16-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 17-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 18-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 19-Jun-12 | 0.835 | 580.08 |  |  | - |  |
|  | 20-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 21-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 22-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 23-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 24-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 25-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 26-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 27-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 28-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 29-Jun-12 | 0.835 | 580.08 |  |  |  |  |
|  | 30-Jun-12 | 0.835 | 580.08 | 17,402.34 | 0.835 | 0.842 | 0.835 |
| Jul-12 | 1-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 2-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 3-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 4-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 5-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 6-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 7-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 8-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 9-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 10-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 11-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 12-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 13-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 14-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 15-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 16-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 17-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 18-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 19-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 20-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 21-Jul-12 | 0.840 | 583.46 |  |  |  |  |

2000 SERIES A JEFFERSON COUNTY BONDS VARIABLE INTEREST RATE CALCULATION \$25,000,000 237128

|  |  | DAILY INTEREST RATE | DAILY INTEREST | MONTHLY INTEREST | AVG MTHLY INT RATE | AVG INT RATE - YTD | AVG INT RATE Beginning 05/01/12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 22-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 23-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 24-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 25-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 26-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 27-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 28-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 29-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 30-Jul-12 | 0.840 | 583.46 |  |  |  |  |
|  | 31-Jul-12 |  | 0.00 | 17,503.91 | 0.840 | 0.842 | 0.837 |
| Aug-12 | 1-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 2-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 3-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 4-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 5-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 6-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 7-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 8-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 9-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 10-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 11-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 12-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 13-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 14-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 15-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 16-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 17-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 18-Aug-12 | 0.841 | 583.70 | , |  |  |  |
|  | 19-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 20-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 21-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 22-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 23-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 24-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 25-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 26-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 27-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 28-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 29-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 30-Aug-12 | 0.841 | 583.70 |  |  |  |  |
|  | 31-Aug-12 |  | 0.00 | 17,510.94 | 0.841 | 0.842 | 0.838 |

2000 SERIES A JEFFERSON COUNTY BONDS VARIABLE INTEREST RATE CALCULATION

## \$25,000,000

 237128| Sep-12 |  | DAILY INTEREST RATE | DAILY INTEREST | MONTHLY INTEREST | AVG MTHLY INT RATE | AVG INT RATE - YTD | AVG INT RATE Beginning 05/01/12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 2-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 3-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 4-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 5-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 6-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 7-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 8-Sep 12 | 0.829 | 575.78 |  |  |  |  |
|  | 9-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 10-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 11-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 12-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 13-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 14-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 15-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 16-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 17-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 18-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 19-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 20-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 21-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 22-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 23-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 24-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 25-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 26-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 27-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 28-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 29-Sep-12 | 0.829 | 575.78 |  |  |  |  |
|  | 30-Sep-12 | 0.829 | 575.78 | 17,273.44 | 0.829 | 0.8434702 | 0.8360925 |
| Oct-12 | 1-Oct-12 | 0.817 | 567.45 |  |  |  |  |
|  | 2-Oct-12 | 0.817 | 567.45 |  |  |  |  |
|  | 3-Oct-12 | 0.817 | 567.45 |  |  |  |  |
|  | 4-Oct-12 | 0.817 | 567.45 |  |  |  |  |
|  | 5-Oct-12 | 0.817 | 567.45 |  |  |  |  |
|  | 6-Oct-12 | 0.817 | 567.45 |  |  |  |  |
|  | 7-Oct-12 | 0.817 | 567.45 |  |  |  |  |
|  | 8-Oct-12 | 0.817 | 567.45 |  |  |  |  |
|  | 9-Oct-12 | 0.817 | 567.45 |  |  |  |  |
|  | 10-Oct-12 | 0.817 | 567.45 |  |  |  |  |
|  | 11-Oct-12 | 0.817 | 567.45 |  |  |  |  |

2000 SERIES A JEFFERSON COUNTY BONDS
VARIABLE INTEREST RATE CALCULATION \$25,000,000 237128

|  | DAILY <br> INTEREST <br> RATE | DAILY <br> INTEREST | MONTHLY <br> INTEREST | AVG MTHLY INT RATE | $\begin{gathered} \text { AVG INT } \\ \text { RATE - YTD } \end{gathered}$ | AVG INT RATE Beginning 05/01/12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 13-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 14-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 15-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 16-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 17-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 18-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 19-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 20-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 21-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 22-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 23-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 24-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 25-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 26-Oct-12 | 0.817 | 567.45 |  | This is the Rat | e shown on pag | ge 1 of |
| 27-Oct-12 | 0.817 | 567.45 |  | this attachmen | t. It is the ave | age of the |
| 28-Oct-12 | 0.817 | 567.45 |  | Daily Interest | Rates shown | pages |
| 29-Oct-12 | 0.817 | 567.45 |  | 2 through 6 of | this attachmen |  |
| 30-Oct-12 | 0.817 | 567.45 |  |  |  |  |
| 31-Oct-12 |  | 0.00 | 17,023.44 | 0.817 | 0.841 | 0.833 |

