## COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:
AN EXAMINATION BY THE PUBLIC SERVICE ) COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF KENTUCKY UTILITIES COMPANY FOR THE SIX-MONTH BILLING PERIOD ENDING OCTOBER 31, 2015
)
) CASE NO.
) 2015-00411
)

## CORRECTED

RESPONSE OF KENTUCKY UTILITIES COMPANY TO<br>COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO APPENDIX B OF COMMISSION'S ORDER<br>DATED DECEMBER 21, 2015<br>AND<br>AMENDED ORDER DATED JANUARY 7, 2016

FILED: JANUARY 19, 2016

## KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information<br>To Appendix B of Commission's Order Dated December 21, 2015<br>and Amended Order Dated January 7, 2016

Case No. 2015-00411
CORRECTED QUESTION AND ATTACHMENT
Question No. 1
Witness: Derek A. Rahn / 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 KU cost of debt, preferred stock, accounts receivable financing (if applicable), or changes in KU jurisdictional capital structure as of August 31, 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. Provide all exhibits and schedules of your response in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.

A-1. See the attachment being provided in Excel format.
KU calculated the true-up adjustment to recognize changes in the cost of debt and capital structure in two steps, shown on Pages 1 and 2 of the attachment to this response. Page 1 reflects the true-up required due to the changes between the Rate Base as filed and the Rate Base as Revised through the Monthly Filings. However, during the period under review there were no revisions to reflect. Page 2 represents the true-up in the Rate of Return as filed compared to the actual Rate of Return calculations, which impacted the true-up adjustment for the period under review in this case. No further revisions to Rate Base were identified in preparation of this response.

Page 3 provides the adjusted weighted average cost of capital for the expense period ending June 30, 2015 to true-up the months in the review period utilizing the return on equity of $10.25 \%$ as agreed to for all ECR Plans and approved by the Commission in its December 20, 2012 Order in Case No. 2012-00221. Page 4 provides the adjusted weighted average cost of capital for the expense period ending August 31, 2015 to true-up the months in the review period utilizing the 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. 2014-00371. KU calculated the short- and long-term debt rates using average daily balances and daily interest rates pursuant to the Commission’s Order in Case No. 2011-00161.

KU recommends using an effective tax rate of $38.6660 \%$ in the gross-up revenue factor used in the rate of return calculation for the expense periods ended June 30, 2015 and August 31, 2015. KU will incur a tax loss in 2015 as a result of bonus depreciation and will be unable to take the Internal Revenue Code §199 manufacturing tax deduction.

Page 5 provides detail for short- and long-term debt for the expense period ending June 30, 2015. Page 6 provides detail for short- and long-term debt for the expense period ending August 31, 2015.



## KENTUCKY UTILITIES

## Adjusted Electric Rate of Return on Common Equity - ECR Plans <br> As of June 30, 2015

1. Short Term Debt
2. Long Term Debt
3. Common Equity
4. Total Capitalization



| Adjusted <br> Capital <br> Structure <br> $(13)$ |
| ---: |
| $3.78 \%$ |
| $42.58 \%$ |
| $53.64 \%$ |
| $100.000 \%$ |


|  | Cost |
| :---: | :---: |
| Annual | of |
| Cost | Capital |
| Rate <br> (14) | (Col $13 \times$ Col 14) <br> (15) |
| 0.52\% | 0.02\% |
| 3.68\% | 1.57\% |
| 10.25\% | 5.50\% |
|  | 7.09\% |
|  | 10.56\% |

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

## KENTUCKY UTILITIES

## Adjusted Electric Rate of Return on Common Equity - ECR Plans <br> As of August 31, 2015

1. Short Term Debt
2. Long Term Debt
3. Common Equity
4. Total Capitalization



| Adjusted <br> Capital <br> Structure <br> $(13)$ |
| ---: |
| $3.99 \%$ |
| $42.25 \%$ |
| $53.76 \%$ |
| $100.000 \%$ |


|  | Cost |
| :---: | :---: |
| Annual | of |
| Cost | Capital |
| Rate <br> (14) | (Col $13 \times \operatorname{Col} 14$ ) <br> (15) |
| 0.50\% | 0.02\% |
| 3.68\% | 1.55\% |
| 10.00\% | 5.38\% |
|  | 6.95\% |
|  | 10.34\% |

5. Weighted Cost of Capital Grossed up for Income Tax Effect \{ROR + (ROR - DR $) \mathrm{x}[\mathrm{TR} /(1-\mathrm{TR})]\}$
(a) Average daily balance per Settlement Agreement in Case No. 2011-00161.

KENTUCKY UTILITIES COMPANY
CORRECTED Attachment to Response to Question No. 1
Page 5 of 6 Rahn / Garrett August 31, 2015


** Debt discount shown on separate line.
1 Call premium and debt expense is being amortized in accordance with ASC 980, Regulated Operations
2 Includes setup fees for Wells Fargo and Bank of America amended July 28, 2014 with a five year term. (Royal Bank of Scotland written off July 2015.)
a - Letter of credit fee $=$ (principal bal +45 days interest)$)^{\star} .75 \%$. Rate based on company credit rating. Remarketing Fee $=10$ basis points
b-Remarketing fee $=10$ basis points
c - Remarketing fee $=25$ basis points ( 25 bp on $\$ 43.7 \mathrm{M}$; 5 bp on $\$ 52.3 \mathrm{M}$; avg 14bp $+\$ 97,728$ Annual Ins. Premium)
d - Revolving Credit facility fee $=12.5$ basis points

KENTUCKY UTILITIES COMPANY
ANALYSIS OF THE EMBEDDED COST OF CAPITAL AT
June 30, 2015
CORRECTED Attachment to Response to Question No. 1
Page 6 of 6 Rahn/Garrett
USING AVERAGE DAILY BALANCES AND INTEREST RATES FOR ECR FILINGS LONG-TERM DEBT

|  |  |  |  |  | ON | ERM DEBT |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Ann | Cost |  |  |  |  |  |  |
|  | Due | Rate |  | Principal |  | nterest |  | tized Debt <br> suance <br> Discount |  | zed Loss- <br> cquired Debt |  | er of Credit other fees |  |  | Total | $\begin{gathered} \text { Embedded } \\ \text { Cost } \\ \hline \end{gathered}$ |
| Pollution Control Bonds - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mercer Co. 2000 Series A | 05/01/23 | 0.065\% | \$ | 12,900,000 | \$ | 8,427 | \$ | 11,065 |  | 35,975 | \$ | 111,176 | a | \$ | 166,643 | 1.292\% |
| Carroll Co. 2002 Series A | 02/01/32 | 0.308\% |  | 20,930,000 |  | 64,506 |  | 4,003 |  | 36,387 |  | 20,993 | b |  | 125,889 | 0.601\% |
| Carroll Co. 2002 Series B | 02/01/32 | 0.308\% |  | 2,400,000 |  | 7,397 |  | 2,772 |  | 4,166 |  | 2,407 | b |  | 16,742 | 0.698\% |
| Muhlenberg Co. 2002 Series A | 02/01/32 | 0.309\% |  | 2,400,000 |  | 7,426 |  | 1,115 |  | 12,935 |  | 2,407 | b |  | 23,883 | 0.995\% |
| Mercer Co. 2002 Series A | 02/01/32 | 0.309\% |  | 7,400,000 |  | 22,898 |  | 3,082 |  | 12,784 |  | 7,422 | b |  | 46,186 | 0.624\% |
| Carroll Co. 2002 Series C | 10/01/32 | 0.218\% |  | 96,000,000 |  | 209,075 |  | 72,761 |  | 186,499 |  | 232,532 | c |  | 700,867 | 0.730\% |
| Carroll Co. 2004 Series A | 10/01/34 | 0.062\% |  | 50,000,000 |  | 30,943 |  | 10,153 |  | 95,166 |  | 432,771 | a |  | 569,033 | 1.138\% |
| Carroll Co. 2006 Series B | 10/01/34 | 0.066\% |  | 54,000,000 |  | 35,675 |  | 47,822 |  | - |  | 467,893 | a |  | 551,390 | 1.021\% |
| Carroll Co. 2007 Series A | 02/01/26 | 5.750\% |  | 17,875,000 |  | 1,027,813 |  | 10,963 |  | 22,458 |  |  |  |  | 1,061,233 | 5.937\% |
| Trimble Co. 2007 Series A | 03/01/37 | 6.000\% |  | 8,927,000 |  | 535,620 |  | 5,284 |  | 10,830 |  | - |  |  | 551,733 | 6.181\% |
| Carroll Co. 2008 Series A | 02/01/32 | 0.067\% |  | 77,947,405 |  | 52,327 |  | 34,393 |  |  |  | 675,390 | a |  | 762,111 | 0.978\% |
| Called Bonds |  |  |  |  |  | - |  | - | 1 | 110,542 |  |  |  |  | 110,542 |  |
| First Mortgage Bonds - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010 due 2015 | 11/01/15 | 1.625\% |  | 250,000,000 |  | 4,062,500 |  | 469,261 |  |  |  | - |  |  | 4,531,761 | 1.813\% |
| Debt discount on FMB | 11/01/15 | 1.625\% |  | $(86,463)$ |  |  |  | 176,884 |  |  |  |  |  |  | 176,884 | -204.577\% |
| 2010 due 2020 | 11/01/20 | 3.250\% |  | 500,000,000 |  | 16,250,000 |  | 421,194 |  |  |  | - |  |  | 16,671,194 | 3.334\% |
| Debt discount on FMB | 11/01/15 | 3.250\% |  | $(1,039,182)$ |  |  |  | 190,194 |  |  |  |  |  |  | 190,194 | -18.302\% |
| 2010 due 2040 | 11/01/40 | 5.125\% |  | 750,000,000 |  | 38,437,500 |  | 250,538 |  |  |  | - |  |  | 38,688,038 | 5.158\% |
| Debt discount on FMB | 11/01/40 | 5.125\% |  | $(6,917,108)$ |  |  |  | 272,240 |  |  |  |  |  |  | 272,240 | -3.936\% |
| 2013 due 2043 | 11/15/43 | 4.650\% |  | 250,000,000 |  | 11,625,000 |  | 92,523 |  |  |  |  |  |  | 11,717,523 | 4.687\% |
| Debt discount on FMB | 11/15/43 | 4.650\% |  | $(1,710,089)$ |  |  |  | 60,137 |  |  |  |  |  |  | 60,137 | -3.517\% |
| Regulatory Liability - Swap Hedging FMB | 11/15/43 |  |  |  |  | $(1,438,018)$ |  |  |  |  |  |  |  |  | $(1,438,018)$ | -3.342\% |
| S-3 SEC Shelf Registration | 03/27/15 |  |  |  |  |  |  | 473 |  |  |  |  |  |  | 473 |  |
| Revolving Credit Facility | 07/28/19 |  |  |  |  |  |  | 538,108 | 2 | 53,578 |  | 501,505 | d |  | 1,093,190 |  |
| Letter of Credit Facility | 04/29/14 |  |  |  |  |  |  | 221,571 |  | 104,246 |  |  |  |  | 325,816 |  |
| Total External Debt |  |  | \$ | 2,091,026,563 | \$ | 70,939,089 | \$ | 2,896,535 |  | 685,564 | \$ | 2,454,498 |  | \$ | 76,975,686 | 3.681\% |
| Notes Payable to PPL |  |  | \$ | - | \$ | - | \$ | - |  | - | \$ | - |  | \$ | - |  |
| Total Internal Debt |  |  | \$ | - | \$ | - | \$ | - |  | - | \$ | - |  | \$ | - | 0.000\% |
|  |  |  | \$ | 2,091,026,563 | \$ | 70,939,089 | \$ | 2,896,535 |  | 685,564 | \$ | 2,454,498 |  | \$ | 76,975,686 | 3.681\% |


** Debt discount shown on separate line.
1 Call premium and debt expense is being amortized in accordance with ASC 980, Regulated Operations
2 Includes setup fees for Wells Fargo, Bank of America and Royal Bank of Scotland amended July 28, 2014 with a five year term.
a - Letter of credit fee $=$ (principal bal +45 days interest)*. $75 \%$. Rate based on company credit rating. Remarketing Fee $=10$ basis points
$b$ - Remarketing fee $=10$ basis points
c - Remarketing fee $=25$ basis points (25bp on $\$ 43.7 \mathrm{M} ; 5 \mathrm{bp}$ on $\$ 52.3 \mathrm{M}$; avg 14bp $+\$ 97,728$ Annual Ins. Premium)
d - Revolving Credit facility fee $=12.5$ basis points

## Attachment in Excel

$$
\begin{gathered}
\text { The attachment(s) } \\
\text { provided in separate } \\
\text { file(s) in Excel format. }
\end{gathered}
$$

## KENTUCKY UTILITIES COMPANY

# Response to Commission Staff's First Request for Information <br> To Appendix B of Commission's Order Dated December 21, 2015 and Amended Order Dated January 7, 2016 

Case No. 2015-00411

## CORRECTED ATTACHMENT

## Question No. 2

Witness: Derek A. Rahn

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

A-2. See the attachment provided in Excel format. For the period under review, KU experienced a net under-recovery of $\$ 1,309,732$.



## Kentucky Utilities Company

Reconciliation of Combined Over/(Under) Recovery
Summary Schedule for Expense Months March 2015 through August 2015

CORRECTED Attachment to Response to Question No. 2 Rahn

| (1) | (2) | (3) | (4) | (5) |  | (6) | (7) | (8) |  | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 <br> (5) * (6) / 12 | Jurisdictional <br> Allocation, ES Form 1.10 |  | Jurisdictional Impact (Over)/Under $(7) *(8)$ |
| May-15 | Mar-15 | 10.22\% | 10.56\% | 0.34\% | \$ | 1,011,330,612 | \$ 286,544 | 84.87\% | \$ | 243,190 |
| Jun-15 | Apr-15 | 10.22\% | 10.56\% | 0.34\% |  | 1,028,733,727 | 291,475 | 88.58\% |  | 258,188 |
| Jul-15 | May-15 | 10.22\% | 10.56\% | 0.34\% |  | 1,035,180,880 | 293,301 | 86.10\% |  | 252,532 |
| Aug-15 | Jun-15 | 10.15\% | 10.56\% | 0.41\% |  | 1,042,656,936 | 356,241 | 86.03\% |  | 306,474 |
| Sep-15 | Jul-15 | 9.95\% | 10.34\% | 0.39\% |  | 1,062,420,272 | 345,287 | 86.13\% |  | 297,395 |
| Oct-15 | Aug-15 | 9.95\% | 10.34\% | 0.39\% |  | 1,073,710,930 | 348,956 | 86.94\% |  | 303,382 |
|  |  |  |  |  |  |  | \$ 1,921,803 |  |  | 1,661,162 |

(2)
(3)
(4)
(5)

Recovery Position Explanation - Over/(Under)
$\left.\begin{array}{cccccc}\text { Billing } & \text { Expense } \\ \text { Month } \\ \text { Month }\end{array} \begin{array}{c}\text { Combined Total } \\ \text { Over/(Under) } \\ \text { Recovery } \\ \text { (Q2, pg 2, Col 11) }\end{array} \begin{array}{c}\text { Rate of Return } \\ \text { True-up as } \\ \text { Originally Filed }\end{array} \quad \begin{array}{c}\text { Use of 12 Month } \\ \text { Average } \\ \text { Revenues }\end{array}\right\}$

OVER/(UNDER) RECONCILIATION
Combined Over/(Under) Recovery
\$ (1,309,732)
Due to Change in ROR in Current 6-month Period \$ $(1,661,162)$
Use of 12 Month Average Revenues \$ 351,431
Subtotal
\$ $(1,309,732)$
Unreconciled Difference
\$
0

## Attachment in Excel

$$
\begin{gathered}
\text { The attachment(s) } \\
\text { provided in separate } \\
\text { file(s) in Excel format. }
\end{gathered}
$$

## KENTUCKY UTILITIES COMPANY

# Response to Commission Staff's First Request for Information <br> To Appendix B of Commission's Order Dated December 21, 2015 and Amended Order Dated January 7, 2016 

Case No. 2015-00411
Question No. 3

## Witness: Christopher M. Garrett

Q-3. Provide the calculations, assumptions, work papers, and other supporting documents used to determine the amounts KU has reported during each billing period under review for Pollution Control Deferred Income Taxes. Provide all exhibits and schedules of your response in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.

A-3. 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.

KU calculates Deferred Income Taxes as the taxable portion of the difference between book depreciation, using straight line depreciation, and tax depreciation, generally using 20 year MACRS accelerated depreciation, bonus depreciation or 5 or 7 year rapid amortization. Accelerated depreciation results in a temporary tax savings to the Company and the Accumulated Deferred Tax balance reflects the value of those temporary savings as a reduction to environmental rate base.

## Kentucky Utilities Company <br> Deferred Tax Calculations <br> Environmental Compliance Plans, by Approved Project

2009-Plan
Project 28 - Brown 3 SCR

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Deferred <br> Taxes on <br> Reterements |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Beg Balance |  |  |  |  |  |  | Accumulated <br> Deferred Taxes |
| Mar-15 | $95,225,403$ | 185,702 | 629,147 | 443,445 | $38.9000 \%$ | 172,500 | $21,480,081$ |
| Apr-15 | $97,516,809$ | 188,727 | 662,084 | 473,357 | $38.9000 \%$ | 184,136 | $21,652,581$ |
| May-15 | $97,516,809$ | 190,970 | 664,328 | 473,358 | $38.9000 \%$ | 184,136 | $22,020,853$ |
| Jun-15 | $97,603,942$ | 191,056 | 664,721 | 473,665 | $38.9000 \%$ | 184,256 | $22,205,109$ |
| Jul-15 | $97,603,942$ | 191,141 | 664,809 | 473,668 | $38.9000 \%$ | 184,257 | $22,389,365$ |
| Aug-15 | $97,603,942$ | 191,141 | 664,809 | 473,668 | $38.9000 \%$ | 184,257 | $22,573,621$ |

Due to Bonus Depreciation for tax purposes taken on certain components of Project 28, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 50\% bonus depreciation, which reduces the Federal tax basis to $50 \%$ of the plant balance. A sample calculation of deferred taxes for Aug 2015 is shown below:

| Federal Basis | Book Depr. | Federal Tax Dep Fed. Differencı Fed Tax Rate | Fed Def Tax |  |  |
| :---: | :---: | ---: | :---: | :---: | :---: |
| $18,534,899$ | 190,801 | 95,408 | $(95,393)$ | $35.0000 \%$ | $(33,387)$ |
| $27,538,078$ |  | 458,967 | 458,967 | $35.0000 \%$ | 160,639 |
| $(176,214)$ |  | $(981)$ | $(981)$ | $35.0000 \%$ | $(343)$ |
| 526,898 |  | 3,170 | 3,170 | $35.0000 \%$ | 1,109 |
| 790,348 |  | 13,173 | 13,173 | $35.0000 \%$ | 4,610 |
| 797,485 |  | 2,991 | 2,991 | $35.0000 \%$ | 1,047 |
| 255,705 |  | 28,412 | 28,412 | $35.0000 \%$ | 9,944 |
| $2,122,835$ |  | 8,482 | 8,482 | $35.0000 \%$ | 2,969 |
| 87,134 |  | 467 | 467 | $35.0000 \%$ | 163 |
| State Basis | Book Depr. | State Tax Depr | St. Difference State Tax Rate | St Def Tax |  |
| $37,069,798$ | 190,801 | 190,817 | 16 | $6.0000 \%$ | 1 |
| $55,076,054$ |  | 917,934 | 917,934 | $6.0000 \%$ | 55,076 |
| $(352,428)$ | $(1,961)$ | $(1,961)$ | $6.0000 \%$ | $(118)$ |  |
| $1,053,797$ |  | 6,340 | 6,340 | $6.0000 \%$ | 380 |
| $1,580,696$ |  | 26,345 | 26,345 | $6.0000 \%$ | 1,581 |
| 797,485 |  | 9,991 | 2,991 | $6.0000 \%$ | 179 |
| $2,291,406$ |  | 467 | 9,548 | $6.0000 \%$ | 573 |
| 87,134 |  | 467 | $6.0000 \%$ | 28 |  |
|  |  |  |  |  | St. Offset for Fed Taxes not Owed |
|  |  |  |  |  | $(20,195)$ |
|  |  |  |  |  | Total Deferred Tax |
|  |  |  |  |  | 184,256 |

## Kentucky Utilities Company <br> Deferred Tax Calculations <br> Environmental Compliance Plans, by Approved Project

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

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Deferred <br> Taxes on <br> Deferred Tax | Accumulated <br> Deferred Taxes |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Reg Balance |  |  |  |  |  |  | $3,929,352$ |
| Mar-15 | $16,622,587$ | 32,523 | 110,333 | 77,810 | $38.9000 \%$ | 30,268 | $3,959,620$ |
| Apr-15 | $19,347,703$ | 35,192 | 261,657 | 226,465 | $38.9000 \%$ | 88,095 | $4,047,715$ |
| May-15 | $19,347,703$ | 37,860 | 264,328 | 226,468 | $38.9000 \%$ | 88,096 | $4,135,810$ |
| Jun-15 | $19,347,703$ | 37,860 | 264,328 | 226,468 | $38.9000 \%$ | 88,096 | $4,223,906$ |
| Jul-15 | $19,347,703$ | 37,860 | 264,328 | 226,468 | $38.9000 \%$ | 88,096 | $4,312,001$ |
| Aug-15 | $19,347,703$ | 37,860 | 264,328 | 226,468 | $38.9000 \%$ | 88,096 | - |
|  |  |  |  |  | $-400,096$ | - |  |

Due to Bonus Depreciation for tax purposes taken on certain components of Project 29, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 50\% bonus depreciation, which reduces the Federal tax basis to $50 \%$ of the plant balance. A sample calculation of deferred taxes for Aug 2015 is shown below:

| Federal Basis | Book Depr. | Federal Tax Def Fed. Differencl Fed Tax Rate | Fed Def Tax |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $3,199,833$ | 37,563 | 16,471 | $(21,092)$ | $35.0000 \%$ | $(7,382)$ |
| $4,799,749$ |  | 79,996 | 79,996 | $35.0000 \%$ | 27,999 |
| 124,684 |  | 694 | 694 | $35.0000 \%$ | 243 |
| 187,027 |  | 3,117 | 3,117 | $35.0000 \%$ | 1,091 |
| $1,362,662$ |  | 151,384 | 151,384 | $35.0000 \%$ | 52,984 |
| $1,362,662$ |  | 15,898 | 15,898 | $35.0000 \%$ | 5,564 |
| State Basis | Book Depr. | State Tax Depr | St. Difference State Tax Rate | St Def Tax |  |
| $6,399,666$ | 37,563 | 32,942 | $(4,621)$ | $6.0000 \%$ | $(277)$ |
| $9,599,498$ |  | 159,992 | 159,992 | $6.0000 \%$ | 9,600 |
| 249,369 | 1,388 | 1,388 | $6.0000 \%$ | 83 |  |
| 374,053 | 6,234 | 6,234 | $6.0000 \%$ | 374 |  |
| $2,725,116$ |  |  |  |  |  |
|  |  |  |  |  | St. Offset for Fed Taxes not Owed |
|  |  |  |  | $(4,090)$ |  |
|  |  |  |  |  | Total Deferred Tax |

## Kentucky Utilities Company <br> Deferred Tax Calculations Environmental Compliance Plans, by Approved Project

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

| Month | Plant Balance | Book <br> Depreciation | Tax Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beg Balance |  |  |  |  |  |  | 54,771,394 |  |
| Mar-15 | 311,581,083 | 580,030 | 1,266,256 | 686,226 | 38.9000\% | 266,942 | 55,038,335 |  |
| Apr-15 | 311,581,083 | 580,030 | 1,266,256 | 686,226 | 38.9000\% | 266,942 | 55,305,276 | - |
| May-15 | 311,581,083 | 580,030 | 1,266,258 | 686,228 | 38.9000\% | 266,943 | 55,572,218 | - |
| Jun-15 | 311,581,083 | 580,030 | 1,266,258 | 686,228 | 38.9000\% | 266,943 | 55,839,159 | - |
| Jul-15 | 311,581,083 | 580,030 | 1,266,256 | 686,226 | 38.9000\% | 266,942 | 56,106,100 | - |
| Aug-15 | 318,341,151 | 586,532 | 1,616,079 | 1,029,547 | 38.9000\% | 400,494 | 56,506,593 | - |

Due to Bonus Depreciation for tax purposes taken on certain components of Project 30, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 50\% bonus depreciation, which reduces the Federal tax basis to $50 \%$ of the plant balance. A sample calculation of deferred taxes for Aug 2015 is shown below:

| Federal Basis | Book Depr. | Federal Tax Dep Fed. Differenci Fed Tax Rate | Fed Def Tax |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 17,069 | 591,732 | 273 | $(591,459)$ | $35.0000 \%$ | $(207,011)$ |
| 863,123 |  | 4,803 | 4,803 | $35.0000 \%$ | 1,681 |
| 172,625 |  | 2,877 | 2,877 | $35.0000 \%$ | 1,007 |
| 115,083 |  | 640 | 640 | $35.0000 \%$ | 224 |
| $19,219,939$ |  | 115,624 | 115,624 | $35.0000 \%$ | 40,468 |
| $3,391,754$ | 56,529 | 56,529 | $35.0000 \%$ | 19,785 |  |
| $108,964,236$ |  | 655,511 | 655,511 | $35.0000 \%$ | 229,429 |
| $18,955,939$ | 315,932 | 315,932 | $35.0000 \%$ | 110,576 |  |
| $1,715,642$ |  | 343,128 | 343,128 | $35.0000 \%$ | 120,095 |
| $4,287,763$ |  | 32,158 | 32,158 | $35.0000 \%$ | 11,255 |
| 756,664 |  | 12,611 | 12,611 | $35.0000 \%$ | 4,414 |
| State Basis | Book Depr. | State Tax Depr | St. Difference State Tax Rate | St Def Tax |  |
| 34,138 | 591,732 | 546 | $(591,186)$ | $6.0000 \%$ | $(35,471)$ |
| $1,726,247$ |  | 9,605 | 9,605 | $6.0000 \%$ | 576 |
| 345,249 | 5,754 | 5,754 | $6.0000 \%$ | 345 |  |
| 230,166 | 1,281 | 1,281 | $6.0000 \%$ | 77 |  |
| $32,248,976$ |  | 194,005 | 194,005 | $6.0000 \%$ | 11,640 |
| $6,449,795$ |  | 107,497 | 107,497 | $6.0000 \%$ | 6,450 |
| $4,299,864$ | 25,867 | 25,867 | $6.0000 \%$ | 1,552 |  |
| $217,696,385$ |  | $1,309,625$ | $1,309,625$ | $6.0000 \%$ | 78,578 |
| $38,143,965$ |  | 635,733 | 635,733 | $6.0000 \%$ | 38,144 |
| $5,746,058$ |  | 16,900 | 43,095 | $6.0000 \%$ | 2,586 |
| $1,014,010$ |  | 16,900 | $6.0000 \%$ | 1,014 |  |
|  |  |  |  |  | St. Offset for Fed Taxes not Owed |
|  |  |  |  | $(36,922)$ |  |
|  |  |  |  |  | Total Deferred Tax |
|  |  |  |  | 400,493 |  |

## Kentucky Utilities Company

Deferred Tax Calculations
Environmental Compliance Plans, by Approved Project
2009 - Plan
Project 31 - Trimble County Ash Treatment Basin (BAP/GSP)

| Month | Plant Balance | Book <br> Depreciation | Tax Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beg Balance |  |  |  |  |  |  | 627,037 |  |
| Mar-15 | 9,031,671 | 15,782 | 42,911 | 27,129 | 38.9000\% | 10,553 | 637,589 | 71,277 |
| Apr-15 | 9,031,671 | 15,782 | 42,911 | 27,129 | 38.9000\% | 10,553 | 648,142 | 71,277 |
| May-15 | 9,031,671 | 15,782 | 42,910 | 27,128 | 38.9000\% | 10,553 | 658,694 | 71,277 |
| Jun-15 | 9,031,671 | 15,782 | 42,910 | 27,128 | 38.9000\% | 10,553 | 669,247 | 71,277 |
| Jul-15 | 9,031,671 | 15,782 | 42,910 | 27,128 | 38.9000\% | 10,553 | 679,799 | - |
| Aug-15 | 9,031,671 | 15,782 | 42,913 | 27,131 | 38.9000\% | 10,554 | 690,352 | - |

## Kentucky Utilities Company <br> Deferred Tax Calculations <br> Environmental Compliance Plans, by Approved Project

2009 - Plan
Project 32 - Trimble County CCP Storage (Landfill - Phase I)

| Month | Plant Balance | Book <br> Depreciation | Tax Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred <br> Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beg Balance |  |  |  |  |  |  | - |  |
| Mar-15 | 3,760,136 | 3,274 | 173,971 | 170,697 | 38.9000\% | 66,401 | 66,400 | - |
| Apr-15 | 3,760,136 | 6,548 | 177,242 | 170,694 | 38.9000\% | 66,400 | 132,800 |  |
| May-15 | 3,760,136 | 6,548 | 177,244 | 170,696 | 38.9000\% | 66,401 | 199,200 |  |
| Jun-15 | 3,760,136 | 6,548 | 177,244 | 170,696 | 38.9000\% | 66,401 | 265,601 | - |
| Jul-15 | 3,760,136 | 6,548 | 177,245 | 170,697 | 38.9000\% | 66,401 | 332,001 | - |
| Aug-15 | 3,760,136 | 6,548 | 177,245 | 170,697 | 38.9000\% | 66,401 | 398,401 | - |

Due to Bonus Depreciation for tax purposes taken on certain components of Project 32, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 50\% bonus depreciation, which reduces the Federal tax basis to $50 \%$ of the plant balance. A sample calculation of deferred taxes for Aug 2015 is shown below:

| Federal Basis | Book Depr. | Federal Tax Der Fed. Differencı Fed Tax Rate | Fed Def Tax |  |
| :---: | :---: | ---: | :---: | :---: |
| $1,880,068$ | 6,220 | 195,057 | 188,837 | $35.0000 \%$ |
| 66,093 |  |  |  |  |
| State Basis | Book Depr. | State Tax Depr | St. Difference | State Tax Rate |
| St Def Tax |  |  |  |  |
| $3,760,136$ | 6,220 | 14,101 | 7,881 | $6.0000 \%$ |
|  |  |  |  | 473 |
|  |  |  |  | St. Offset for Fed Taxes not Owed |

Total Deferred Tax 66,400

## Kentucky Utilities Company <br> Deferred Tax Calculations <br> Environmental Compliance Plans, by Approved Project

2009-Plan
Project 33 - Beneficial Reuse

| Month | Plant Balance | Book <br> Depreciation | Tax Depreciation | Temporary Difference | Income Tax Rate | Deferred Tax | Accumulated Deferred Taxes | Deferred Taxes on Retirements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beg Balance |  |  |  |  |  |  | 841,216 |  |
| Mar-15 | 4,193,823 | 7,303 | 11,964 | 4,661 | 38.9000\% | 1,813 | 843,029 | 11,253 |
| Apr-15 | 4,193,823 | 7,118 | 11,778 | 4,660 | 38.9000\% | 1,813 | 844,842 | 11,253 |
| May-15 | 4,193,823 | 7,118 | 11,778 | 4,660 | 38.9000\% | 1,813 | 846,655 | 11,253 |
| Jun-15 | 4,193,823 | 7,118 | 11,779 | 4,661 | 38.9000\% | 1,813 | 848,468 | 11,253 |
| Jul-15 | 4,193,823 | 7,118 | 11,781 | 4,663 | 38.9000\% | 1,814 | 850,281 | - |
| Aug-15 | 4,193,823 | 7,118 | 11,784 | 4,666 | 38.9000\% | 1,815 | 852,095 | - |

Due to Bonus Depreciation for tax purposes taken on certain components of Project 33, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 50\% bonus depreciation, which reduces the Federal tax basis to $50 \%$ of the plant balance. A sample calculation of deferred taxes for Aug 2015 is shown below:

| Federal Basis | Book Depr. | Federal Tax Der Fed. Differencı Fed Tax Rate | Fed Def Tax |  |
| :---: | :---: | ---: | :---: | :---: |
| $2,054,113$ | 7,190 | 10,747 | 3,557 | $35.0000 \%$ |
| State Basis | Book Depr. | State Tax Depr | St. Difference | State Tax Rate | St Def Tax

Total Deferred Tax

## Kentucky Utilities Company <br> Deferred Tax Calculations <br> Environmental Compliance Plans, by Approved Project

2011 - Plan
Project 35 - Ghent Station Air Compliance

| Month | Plant Balance | Book <br> Depreciation | Tax <br> Depreciation | Temporary <br> Difference | Income Tax <br> Rate | Deferred <br> Taxes on <br> Deferred Tax | Accumulated <br> Deferred Taxes |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Beg Balance |  |  |  |  |  | $56,730,706$ |  |
| Mar-15 | $328,564,371$ | 558,377 | $2,091,688$ | $1,533,311$ | $38.9000 \%$ | 596,458 | $57,327,164$ |
| Apr-15 | $328,564,371$ | 573,441 | $2,106,755$ | $1,533,314$ | $38.9000 \%$ | 596,459 | $57,923,623$ |
| May-15 | $483,873,724$ | 739,533 | $10,585,199$ | $9,845,666$ | $38.9000 \%$ | $3,829,964$ | $61,753,587$ |
| Jun-15 | $483,873,724$ | 905,264 | $10,752,129$ | $9,846,865$ | $38.9000 \%$ | $3,830,430$ | $65,584,017$ |
| Jul-15 | $483,873,724$ | 905,264 | $10,752,129$ | $9,846,865$ | $38.9000 \%$ | $3,830,430$ | $69,414,448$ |
| Aug-15 | $497,713,572$ | 918,551 | $10,879,302$ | $9,960,751$ | $38.9000 \%$ | $3,874,732$ | $73,289,179$ |

Due to Bonus Depreciation for tax purposes taken on certain components of Project 35, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets received 50\% bonus depreciation, which reduces the Federal tax basis to $50 \%$ of the plant balance. A sample calculation of deferred taxes for Aug 2015 is shown below:


## Attachment in Excel

$$
\begin{gathered}
\text { The attachment(s) } \\
\text { provided in separate } \\
\text { file(s) in Excel format. }
\end{gathered}
$$

KENTUCKY UTILITIES COMPANY
Response to Commission Staff's First Request for Information
To Appendix B of Commission's Order Dated December 21, 2015
and Amended Order Dated January 7, 2016
Case No. 2015-00411
Question No. 4
Witness: Christopher M. Garrett

Q-4. Refer to ES Form 2.50, Pollution Control - Operations \& Maintenance Expenses, for the March 2015 through August 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 March 2015 through August 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 testing expenses.

2009 Plan
Monthly variances in the NOx operation expenses, account 506154 reflect normal SCR operations at E.W. Brown Unit 3 (BR3). The variances for account 506154 are driven by the purchase and delivery timing of the raw consumable material (ammonia), as well as variations in generation and coal quality. BR3 was offline for a maintenance outage in April 2015.

Fluctuations in the NOx maintenance expenses, account 512151, are the result of routine monthly maintenance on the SCR at BR3. The increases in March, April and May 2015, are the result of maintenance required to correct the BR3 NOx outlet and excessive vibration on the air compressor.

Landfill maintenance, account 512107, reflect landfill operations at Ghent. Increases in July and August 2015, are the result of corrective maintenance on pumps and a transformer.

## 2011 Plan

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

Fluctuations in sorbent injection reactant (hydrated lime) expenses, account 506152, are the result of on-going operations of all Ghent and E.W. Brown Units. 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 expenses, account 512152, are the result of normal system maintenance.

Fluctuations in activated carbon expenses, account 506151 are driven by the purchase and delivery timing of the raw consumable material as well as variations in generation and coal quality. Increases in April and July 2015, were the result of increases in compliance costs at Ghent Unit 4. Beginning in July 2015, two different types of activated carbon were purchased for system/unit testing and product evaluation.

## KENTUCKY UTILITIES COMPANY

## ENVIRONMENTAL SURCHARGE REPORT

Pollution Control - Operations \& Maintenance Expenses

|  |  |  | \% Change from Prior Period |  | \% Change from Prior Period |  | \% Change from Prior Period |  | \% Change from Prior Period |  | \% Change from Prior Period |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| O\&M Expense Account | Mar-15 | Apr-15 | Period | May-15 | Period | Jun-15 |  | Jul-15 |  | Aug-15 |  |


| 2009 Plan |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 506154 NOx Operation -- Consumables | 35,941.52 | 11,536.87 | -68\% | 58,431.80 | 406\% | 34,665.69 | -41\% | 68,459.81 | 97\% | 23,216.95 | -66\% |
| 506155 NOx Operation -- Labor and Other | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 512151 NOx Maintenance | 40,152.03 | 39,018.66 | -3\% | 40,598.05 | 4\% | 25,981.61 | -36\% | 16,597.82 | -36\% | 8,434.51 | -49\% |
| 502013 ECR Landfill Operations | 320,387.41 | 325,956.81 | 2\% | 325,284.58 | 0\% | 327,021.19 | 1\% | 325,932.80 | 0\% | 328,914.46 | 1\% |
| 512107 ECR Landfill Maintenance | 42,251.51 | 44,883.61 | 6\% | 41,269.11 | -8\% | 59,662.64 | 45\% | 78,940.98 | 32\% | 112,633.45 | 43\% |
| Adjustment for CCP Disposal in Base Rates (ES Form 2.51) | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| Total 2009 Plan O\&M Expenses | 438,732.47 | 421,395.95 | -4\% | 465,583.54 | 10\% | 447,331.13 | -4\% | 489,931.41 | 10\% | 473,199.37 | -3\% |
| 2011 Plan |  |  |  |  |  |  |  |  |  |  |  |
| 506159 ECR Sorbent Injection Operation | 86,921.86 | 70,689.01 | -19\% | 117,976.57 | 67\% | 93,961.21 | -20\% | 108,446.90 | 15\% | 85,286.69 | -21\% |
| 506152 ECR Sorbent Reactant - Reagent Only | 665,460.31 | 631,274.76 | -5\% | 657,898.82 | 4\% | 753,039.54 | 14\% | 796,921.73 | 6\% | 769,532.82 | -3\% |
| 512152 ECR Sorbent Injection Maintenance | 27,021.22 | 29,514.80 | 9\% | 30,855.32 | 5\% | 36,451.77 | 18\% | 46,009.91 | 26\% | 19,447.30 | -58\% |
| 506156 ECR Baghouse Operations | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 512156 ECR Baghouse Maintenance | - | - | 0\% | - | 0\% | - | 0\% | - | 0\% | - | 0\% |
| 506151 ECR Activated Carbon | 44,647.60 | 231,876.60 | 419\% | 283,484.00 | 22\% | 265,096.80 | -6\% | 511,592.20 | 93\% | 410,173.60 | -20\% |
| Total 2011 Plan O\&M Expenses | 824,050.99 | 963,355.17 | 17\% | 1,090,214.71 | 13\% | 1,148,549.32 | 5\% | 1,462,970.74 | 27\% | 1,284,440.41 | -12\% |

## Attachment in Excel

$$
\begin{gathered}
\text { The attachment(s) } \\
\text { provided in separate } \\
\text { file(s) in Excel format. }
\end{gathered}
$$

## KENTUCKY UTILITIES COMPANY

# Response to Commission Staff's First Request for Information To Appendix B of Commission's Order Dated December 21, 2015 and Amended Order Dated January 7, 2016 

Case No. 2015-00411
Question No. 5

## Witness: Christopher M. Garrett

Q-5. In Case No. 2000-00439, ${ }^{6}$ the Commission ordered KU cost of debt and preferred stock to be reviewed and reestablished during the 6-month review cases. Provide the following information as of August 31, 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. KU calculation of its weighted average cost of capital for environmental surcharge purposes.
d. Provide all exhibits and schedules of your response in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.

A-5. a-d. Please see the attachments being provided in Excel format for the period ended August 31, 2015 under review. There was no preferred stock outstanding as of August 31, 2015; therefore, it is not listed in the attached schedules. KU is 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. 2014-00371.

KU recommends the continued use of an effective tax rate of $38.6660 \%$ in the grossup revenue factor used in the rate of return calculation for the period ended August 31, 2015. As discussed in the response to Question No. 1, KU will incur a tax loss in 2015 as a result of bonus depreciation and will be unable to take the Internal Revenue Code §199 manufacturing tax deduction.

[^0]
## KENTUCKY UTILITIES

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

As of August 31, 2015


|  |  | (8) |  | (9) | (10) |  | (11) |  | (12) |  | (13) | (14) | (15) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Short Term Debt | \$ | 190,017,256 | 4.31\% | \$ | $(41,103,179)$ | \$ | $(183,841)$ | \$ | 148,730,236 | 4.31\% | 0.41\% | 0.02\% |
| 2. | Long Term Debt |  | 1,856,975,837 | 42.11\% |  | $(401,590,457)$ |  | $(1,796,178)$ |  | 1,453,589,202 | 42.11\% | 3.68\% | 1.55\% |
| 3. | Common Equity |  | 2,362,548,613 | 53.58\% |  | $(510,976,412)$ |  | $(2,285,423)$ |  | 1,849,286,778 | 53.58\% | 10.00\% | 5.36\% |
| 4. | Total Capitalization | \$ | 4,409,541,706 | 100.000\% | \$ | (953,670,048) | \$ | $(4,265,442)$ | \$ | 3,451,606,216 | 100.000\% |  | 6.93\% |
| 5. | Weighted Cost of Ca | r | come Tax Effect | - DR) x [ | R / |  |  |  |  |  |  |  | 10.31\% |



** Debt discount shown on separate line.
1 Call premium and debt expense is being amortized in accordance with ASC 980, Regulated Operations.
2 Includes setup fees for Wells Fargo and Bank of America amended July 28, 2014 with a five year term. (Royal Bank of Scotland written off July 2015.)
a - Letter of credit fee $=$ (principal bal +45 days interest)$)^{\star} .75 \%$. Rate based on company credit rating. Remarketing Fee $=10$ basis points.
b-Remarketing fee $=10$ basis points
c - Remarketing fee $=25$ basis points (25bp on $\$ 43.7 \mathrm{M}$; 5bp on $\$ 52.3 \mathrm{M}$; avg $14 \mathrm{bp}+\$ 97,728$ Annual Ins. Premium)
d - Revolving Credit facility fee $=12.5$ basis points

ECR - Gross-up Revenue Factor \&

## Composite Income Tax Calculation

2015

| (1) | Assume pre-tax income of | \$ | 100.0000 |  |
| :---: | :---: | :---: | :---: | :---: |
| (2) |  |  |  |  |
| (3) | State income tax (see below) |  | 5.6400 | (40) |
| (4) |  |  |  |  |
| (5) | Taxable income for Federal income tax |  |  |  |
| (6) | before production credit |  | 94.3600 | (1)-(3) |
| (7) | a. Production Rate |  | 0\% |  |
| (8) | b. Allocation to Production Income |  | 100\% |  |
| (9) | c. Allocated Production Rate (a x b) |  | 0.00\% |  |
| (10) |  |  |  |  |
| (11) | Less: Production tax credit |  | - | (6)*(9) |
| (12) |  |  |  |  |
| (13) | Taxable income for Federal income tax |  | 94.3600 | (6)-(11) |
| (14) |  |  |  |  |
| (15) | Federal income tax |  | 33.0260 | (13)*35\% |
| (16) |  |  |  |  |
| (17) |  |  |  |  |
| (18) | Total State and Federal income taxes | \$ | 38.6660 | $(3)+(15)$ |
| (19) |  |  |  |  |
| (20) | Gross-up Revenue Factor | \$ | 61.3340 | 100-(18) |
| (21) |  |  |  |  |
| (22) | Therefore, the composite rate is: |  |  |  |
| (23) | Federal |  | 33.0260\% | (15)/100 |
| (24) | State |  | 5.6400\% | (3)/100 |
| (25) | Total |  | 38.6660\% | (23)+(24) |
| (26) |  |  |  |  |
| (27) |  |  |  |  |
| (28) |  |  |  |  |
| (29) |  |  |  |  |
| (30) |  |  |  |  |
| (31) | State Income Tax Calculation |  |  |  |
| (32) | Assume pre-tax income of | \$ | 100.0000 |  |
| (33) |  |  |  |  |
| (34) | Less: Production tax credit @ 6\% |  | 6.0000 |  |
| (35) |  |  |  |  |
| (36) | Taxable income for State income tax |  | 94.0000 | (32)-(34) |
| (37) |  |  |  |  |
| (38) | State Tax Rate |  | 6.0000\% |  |
| (39) |  |  |  |  |
| (40) | State Income Tax | \$ | 5.6400 | $(36) *$ (38) |

## Attachment in Excel

$$
\begin{gathered}
\text { The attachment(s) } \\
\text { provided in separate } \\
\text { file(s) in Excel format. }
\end{gathered}
$$

KENTUCKY UTILITIES COMPANY

# Response to Commission Staff's First Request for Information <br> To Appendix B of Commission's Order Dated December 21, 2015 and Amended Order Dated January 7, 2016 

Case No. 2015-00411

## CORRECTED ATTACHMENT

Question No. 6
Witness: Derek A. Rahn

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

A-6. See the attachment being provided in Excel format.
The actual average residential customer’s usage for the 12-months ending November 30, 2015 is $1,146 \mathrm{kWh}$ per month. Actual average monthly usage for residential customers will vary from month to month depending upon the time period of the year.

Based upon distributing the under-recovered position of $\$ 1,309,732$ over two months ( $\$ 654,866$ per month), the ECR billing factor will be higher by approximately $0.54 \%$ per month. For a residential customer using $1,146 \mathrm{kWh}$ per month, the impact of the adjusted ECR billing factor would be an increase of approximately $\$ 0.58$ per month for two months, using rates and adjustment clause factors in effect for the November 2015 billing month.

| INPUTS: |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Expense Month for calculations |  | Nov-15 |
| ECR Monthly Filing - Expense Month for calculations |  |  |  |
| Form 1.10 - Line 13 | Adjusted Net Juris E(M) as filed | \$ | 7,444,770 |
| Form 1.10-Line 14 | Group 1 Rev as \% 12-mo Total Rev |  | 41.16\% |
| Form 1.10-Line 15 | Group 1 E(m) | \$ | 3,064,267 |
| Form 1.10-Line 16 | Group 1 12-month avg revenue | \$ | 50,319,679 |
| Form 1.10-Line 17 | Billing Factor filed |  | 6.09\% |
| Financial Reports - Year Ended Current Month |  |  | Nov-15 |
| Page 28.1 | Residential Sales (kWh) |  | 6,153,717,528 |
| Page 17 | Residential Avg Customers Year Ended |  | 447,516 |
|  | times 12 for 12-month number |  | 5,370,192 |
| Response to DR Q2 | Adjustment for (Over)/Under Collection |  | 1,309,732 |
|  | Number of Months to collect/distribute |  | 2 |
|  | Monthly Adj for (Over)/Under Collection |  | 654,866 |
|  | Position for Review Period Collection |  | UNDER |
| Billing Factors |  |  |  |
| Tariff | Basic Service Charge |  | 10.75 |
| Tariff | Base Rate |  | 0.08508 |
| Monthly Filing | FAC for Nov-15 |  | (0.00375) |
| Tariff | DSM |  | 0.00259 |

## Residential Bill Impact Calculations



## Attachment in Excel

$$
\begin{gathered}
\text { The attachment(s) } \\
\text { provided in separate } \\
\text { file(s) in Excel format. }
\end{gathered}
$$


[^0]:    ${ }^{6}$ Case No. 2000-00439, Kentucky Utilities Company (Ky. PSC Apr. 18, 2001).

