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PUBLIC SERVICE

Kentucky Utilities Company

State Regulation and Rates 220 West Main Street PO Box 32010 Louisville, Kentucky 40232 www.eon-us.com

Robert M. Conroy Director - Rates T 502-627-3324 F 502-627-3213 robert.conroy@eon-us.com

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

August 4, 2010

# RE: AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF KENTUCKY UTILITIES COMPANY FOR THE SIX-MONTH BILLING PERIOD ENDING APRIL 30, 2010 CASE NO. 2010-00241

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 Kentucky Utilities Company to the Information Requested in Appendix B of the Commission's Order dated July 13, 2010, in the above-referenced matter.

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

Sincerely,

Robert M Canney by DAL

Robert M. Conroy

Enclosures

cc: Parties of Record

# 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	)	CASE NO.
UTILITIES COMPANY FOR THE SIX-MONTH	)	2010-00241
BILLING PERIOD ENDING APRIL 30, 2010	)	

# DIRECT TESTIMONY OF

ROBERT M. CONROY DIRECTOR - RATES E.ON U.S. SERVICES INC.

Filed: August 4, 2010

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Q.

#### Please state your name, title, and business address.

A. My name is Robert M. Conroy. I am the Director – Rates for E.ON U.S. Services
Inc., which provides services to Kentucky Utilities Company ("KU") and Louisville
Gas and Electric Company ("LG&E") (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.

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### Q. Have you previously testified before this Commission?

- 8 A. Yes. I have previously testified before this Commission in proceedings concerning
  9 the Companies' most recent rate cases, fuel adjustment clauses, and environmental
  10 cost recovery ("ECR") surcharge mechanisms.
- 11 Q. What is the purpose of this proceeding?
- A. The purpose of this proceeding is to review the past operation of KU's environmental surcharge during the six-month billing period ending April 30, 2010 (expense months of September 2009 through February 2010) and determine whether the surcharge amounts collected during the period are just and reasonable.
- 16 Q. What is the purpose of your testimony?
- A. The purpose of my testimony is to review the operation of KU's environmental surcharge during the billing period under review, demonstrate the amounts collected during the period were just and reasonable, present and discuss KU'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 review the operation of the environmental surcharge for the billing period
 included in this review.

A. KU billed an environmental surcharge to its customers from November 1, 2009 3 4 through April 30, 2010. For purposes of the Commission's examination in this case, the monthly KU environmental surcharges are considered as of the six-month billing 5 period ending April 30, 2010. In each month of the period, KU calculated the 6 7 environmental surcharge factors by using the costs incurred as recorded on its books and records for the expense months of September 2009 through February 2010, and in 8 accordance with the requirements of the Commission's previous orders concerning 9 KU's environmental surcharge. 10

# 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 KU
from September 2009 through February 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 KU'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.

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# Q. Has the Commission recently approved changes to the environmental surcharge mechanism and the monthly ES Forms?

In Case No. 2009-00310, KU's most recent ECR two-year review, the 3 A. Yes. 4 Commission approved changes to the environmental surcharge mechanism that include the calculation of the monthly billing factor using a revenue requirement 5 method instead of a percentage method (eliminating the use of the Base 6 7 Environmental Surcharge Factor ("BESF")), the elimination of the monthly true-up adjustment, and revisions to the monthly reporting forms to reflect the approved 8 changes. Pursuant to the Commission's December 2, 2009 Order in that case, the 9 changes were implemented with the December 2009 expense month that was billed in 10 February 2010. The approved changes only impact the timing and accuracy of the 11 revenue collection, not the total revenues KU is allowed to collect through the ECR. 12 This six-month review covers three expense months (September 2009, October 2009 13 and November 2009) which were calculated under the previous percentage method 14 and three expense months (December 2009, January 2010 and February 2010) under 15 the new revenue requirement method. 16

# Q. What is the primary difference between the previous percentage method using a BESF and the new revenue requirement method?

A. As explained in detail during past review proceedings and informal conferences, the
 primary difference is the utilization of <u>actual</u> ECR revenues collected through base
 rates in the <u>expense</u> month instead of <u>estimated</u> ECR revenues collected through base
 rates in the <u>billing</u> month (two months later). Under the previous percentage method,
 the monthly ECR revenue requirement was recovered in the <u>billing</u> month two

1 months after the expense month through a component in base rates (using BESF as an 2 estimate) and through a billing factor. Under the current revenue requirement 3 method, the monthly ECR revenue requirement is recovered in the <u>expense</u> month 4 through a component in base rates (using actual revenues) and in the <u>billing</u> month 5 two months after the expense month through a billing factor. The change in 6 methodology allows for more timely and accurate recovery of expenses associated 7 with approved ECR projects.

# 8 Q. Does the change in method discussed above result in a transition period during 9 this review proceeding?

The transition period includes the expense months of December 2009 and 10 Α. Yes. January 2010. Under the new revenue requirement method, the monthly ECR filings 11 for the December 2009 and January 2010 expense months consider the ECR revenues 12 collected through base rates in those two months when determining the billing factor 13 for the billing months of February 2010 and March 2010, respectively. However, 14 under the previous percentage method, those same ECR revenues collected through 15 base rates in the months of December 2009 and January 2010 were also considered in 16 the monthly ECR filings for the expense months of October 2009 and November 17 2009, respectively, to determine the ECR billing factor. Therefore, the ECR revenue 18 collected through base rates for the months of December 2009 and January 2010 were 19 considered twice in determining the ECR billing factors but only received once by 20 KU. The impact of this transition period on the recovery position in this review 21 proceeding is further discussed below. 22

О. Has the Commission recently approved changes to KU's ECR Compliance Plan? 1 2 A. Yes. In Case No. 2009-00197, the Commission approved KU's 2009 ECR Compliance Plan that included six new projects and associated operation and 3 maintenance costs and amended the 2006 Plan to include operation and maintenance 4 costs associated with the Air Quality Control System equipment for Trimble County 5 Unit 2 (Project 23). Pursuant to the Commission's December 23, 2009 Order, KU 6 7 began including the approved projects in the monthly filing for the December 2009 8 expense month that was billed in February 2010.

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# expense months?

A. During the period under review, there were no changes to Rate Base from the originally filed billing period as summarized in KU'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.

Are there any changes or adjustments in Rate Base from the originally filed

# Q. Are there any changes necessary to the jurisdictional revenue requirement (E(m))?

A. Yes. Adjustments to E(m) are necessary for compliance with the Commission's Order in Case No. 2000-00439 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 changes in the actual cost of long term debt and capital structure resulted in a decrease to cumulative E(m) of \$672,576. The details of and

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- support for this calculation are shown in KU's response to Question No. 1 of the Commission Staff's Request for Information.
- Q. With the change in method discussed above, how did KU determine the
   cumulative total over/(under) recovery position for the period under review?

A. In determining the cumulative total over/(under) recovery position shown in KU's 5 6 response to Question No. 2 of the Commission Staff's Request for Information, the calculations for the three expense months of September 2009, October 2009 and 7 November 2009 (corresponding to the billing months of November 2009, December 8 2009 and January 2010) are consistent with those contained in prior review 9 proceedings. For each of the expense months, Retail E(m) (allowed ECR revenue 10 requirement) contained in Column 4, page 2 of 3, was compared to the ECR revenue 11 12 collected in the corresponding billing month contained in Column 12 (base rate 13 revenues) and Column 13 (ECR billing factor revenue) to determine the over/(under) recovery position in Column 14. 14

Under the new revenue requirement method, the comparison of the Retail 15 E(m) (allowed ECR revenue requirement) to the revenues received changes. 16 17 Beginning with the expense month of December 2009 through February 2010, Retail E(m) contained in Column 4 is compared to the ECR revenue collected in the expense 18 month contained in Column 10 (base rate revenues) and the ECR revenue collected in 19 the corresponding billing month contained in Column 13 (ECR billing factor revenue) 20 to determine the over/(under) recovery position in Column 14. As previously 21 discussed, for the transition period (the December 2009 and January 2010 expense 22 months), the amount in Column 10 for the base rate revenues is zero since it was 23

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already included as revenue in Column 12 of the October 2009 and November 2009 expense months.

# 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. KU experienced a cumulative under-recovery of \$4,546,491 for the billing 5 period ending April 30, 2010. KU's response to Question No. 2 of the Commission 6 7 Staff's Request for Information shows the calculation of the \$4,546,491 cumulative However, KU is adjusting this under-recovery position for a under-recovery. 8 correction made outside of the review period in this proceeding that affected the 9 February 2010 expense month. A \$3,931,660 prior period adjustment was included 10 in the April 2010 expense month filing submitted to the Commission on May 17, 11 12 2010. The net under-recovery position which KU is requesting in this proceeding is \$632,831. Therefore, an adjustment to the revenue requirement is necessary to 13 reconcile the collection of past surcharge revenues with the actual cost for the billing 14 period under review. 15

# Q. Why is KU 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, KU identified an error in the amount of ECR revenue collected through base
rates for the February 2010 expense month filing that resulted in an under-collection
for February 2010 expenses. The February 2010 expense month filing included
\$16,950,373 as the amount collected through base rates; however, the correct amount
is \$13,036,713 as shown in Column 10, page 2 of 3, of KU's response to Question

No. 2 of the Commission Staff's Request for Information. This overstatement resulted in an under-collection of \$3,931,660 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. Therefore, KU is adjusting this out of the cumulative over/(under) recovery position for this review proceeding.

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# Q. Has KU identified the causes of the net under-recovery during the billing period under review?

Yes. Consistent with the issues discussed in the past several review proceedings, KU 8 Α. has identified four components that make up the net under-recovery during the billing 9 period under review. The components are (1) changes in overall rate of return, (2) the 10 difference between the calculation of BESF in the review case and application of 11 BESF in the monthly filings beginning with the March 2008 expense month, (3) the 12 use of the BESF percentage in determining the amount collected in base rates, and (4) 13 the use of 12 month average revenues to determine the billing factor. In addition, as 14 15 discussed above KU has identified two additional components contributing to the under-recovery position in this period. The first is the "transition period" resulting 16 from the change in methodology and the second is the error contained in the February 17 2010 expense month filing that was identified in April 2010. The details and support 18 of the components that make up the net under-recovery during the billing period 19 under review are shown in KU's response to Question No. 2 of the Commission 20 21 Staff's Request for Information. The table below summarizes the components of the under-recovery position. 22

<b>OVER/UNDER RECONCILIATION</b>		
Combined Over/Under Recovery		(4,546,491)
Due to BESF Calculation Differences	(840,943)	
Due to use of BESF %	(1,460,847)	
Due to Change in ROR	672,576	
Use of 12-Month Average Revenues	10,290,045	
Due to Feb10 Expense Mo. Correction	(3,913,660)	
Transition Months	(9,293,661)	
Subtotal		(4,546,491)
Unreconciled Difference		-

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#### **3 Q.** Please explain the change in rate of return.

A. As previously stated, the cumulative impact of the revised rate of return resulted in a
decrease to the jurisdictional revenue requirement and an over-recovery of \$672,576.

6 Q. Please explain the components related to the BESF.

A. The use of the BESF only affects the first three months of the review period. As
discussed in prior review proceedings, one component is the result of a difference
between the calculation of the BESF in the previous 2-year review case and the
application of the BESF in the monthly filings. This component contributed to the
under-recovery in the amount of \$840,943. In addition use of the BESF percentage to
estimate the amount collected through base rates resulted in an under-recovery of
\$1,460,847.

1 2 Q.

# Please explain how the function of the ECR mechanism contributes to the net under-recovery in the billing period under review?

A. The use of 12-month average revenues to calculate the monthly billing factor and 3 then applying that same billing factor to the actual monthly revenues will result in an 4 over or under-collection of ECR revenues. Typically it will result in an over-5 collection during the summer or winter months when actual revenues will generally 6 be greater than the 12-month average and an under-collection during the shoulder 7 months when actual revenues will generally be less than the 12-month average. In 8 9 the billing period under review, the use of 12-month average revenues resulted in an over-recovery of \$10,290,045. 10

During the period under review, KU's actual revenues were significantly greater than the 12-month historical average due to the colder than normal temperatures during the winter 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	Billing Month	Actual Revenue
	Revenue		ECR applied to
September 2009	\$89,134,078	November 2009	\$73,415,291
October 2009	\$89,232,955	December 2009	\$92,696,877
November 2009	\$88,436,502	January 2010	\$107,485,109
December 2009	\$88,073,789	February 2010	\$109,231,663
January 2010	\$88,430,092	March 2010	\$105,289,075
February 2010	\$88,947,230	April 2010	\$90,105,554

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Q. What is the amount of the recovery position related to the two additional
 components discussed above?

A. As shown in the summary table above and on page 3 of KU's response to Question
 No. 2 of the Commission Staff's Request for Information, the under-recovery from
 the transition period was \$9,293,661 and as previously discussed, the error in the
 February 2010 expense month resulted in an under-recovery of \$3,913,000.

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Q.

# What kind of adjustment is KU proposing in this case as a result of the operation of the environmental surcharge during the billing period?

7 Α. KU is proposing that the net under-recovery position of \$632,831 be recovered in one month following the Commission's Order in this proceeding. Specifically, KU 8 recommends that the Commission approve an increase to the Environmental 9 Surcharge Revenue Requirement of \$632,831 for one month, beginning in the second 10 full billing month following the Commission's Order in this proceeding. This method 11 is consistent with the method of implementing previous over- or under- recovery 12 positions in prior ECR review cases. 13

# Q. What is the bill impact on a residential customer for the proposed collection of the under-recovery?

A. KU is proposing to collect the under-recovery of \$632,831 in a one month period.
The inclusion of \$632,831 in the determination of the ECR billing factor will increase
the billing factor by approximately 0.68%. For a residential customer using 1,000
kWh the ECR billing factor will increase by approximately \$0.48 per month for one
month (using rates and adjustment clause factors in effect for the August 2010 billing
month).

# Q. What rate of return is KU proposing to use for all ECR Plans upon the Commission's Order in this proceeding?

A. KU is recommending an overall rate of return on capital of 10.86%, 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 February
 28, 2010 and the Commission's Order of July 30, 2010 in Case No. 2009-00548.

## 5 Q. What is your recommendation to the Commission in this case?

6 A. KU makes the following recommendations to the Commission in this case:

7 a) The Commission should approve the proposed increase to the Environmental
8 Surcharge Revenue Requirement of \$632,831 for one month beginning in the
9 second full billing month following the Commission's Order in this
10 proceeding;

- b) The Commission should determine environmental surcharge amount for the six-month billing period ending April 30, 2010 to be just and reasonable;
- c) The Commission should approve the use of an overall rate of return on capital
  of 10.86% using a return on equity of 10.63% beginning in the second full
  billing month following the Commission's Order in this proceeding.
- 16 Q. Does this conclude your testimony?

17 A. Yes.

#### VERIFICATION

COMMONWEALTH OF KENTUCKY ) ) SS: COUNTY OF JEFFERSON )

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Director - Rates for E.ON U.S. Services, Inc., 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.

**Robert M. Conroy** 

Subscribed and sworn to before me, a Notary Public in and before said County and State, this  $29^{\text{th}}$  day of  $\frac{1}{2010}$ 

a B. Houper (SEAL) Notary Public

My Commission Expires:

sept 20,2010

# **APPENDIX A**

### **Robert M. Conroy**

Director – Rates E.ON U.S. Services Inc. 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	April 2004 – Feb. 2008
Manager, Generation Systems Planning	Feb. 2001 – April 2004
Group Leader, Generation Systems Planning	Feb. 2000 – Feb. 2001
Lead Planning Engineer	Oct. 1999 – Feb. 2000
Consulting System Planning Analyst	April 1996 – Oct. 1999
System Planning Analyst III & IV	Oct. 1992 - April 1996
System Planning Analyst II	Jan. 1991 - Oct. 1992
Electrical Engineer II	Jun. 1990 - Jan. 1991
Electrical Engineer I	Jun. 1987 - Jun. 1990

# **Professional/Trade Memberships**

Registered Professional Engineer in Kentucky, 1995.

# **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	) CASE NO.
UTILITIES COMPANY FOR THE SIX-MONTH	) 2010-00241
BILLING PERIOD ENDING APRIL 30, 2010	)

# RESPONSE OF KENTUCKY UTILITIES COMPANY TO INFORMATION REQUESTED IN APPENDIX B OF COMMISSION'S ORDER DATED JULY 13, 2010

FILED: August 4, 2010

#### VERIFICATION

# COMMONWEALTH OF KENTUCKY ) ) SS: COUNTY OF JEFFERSON )

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Director - Rates for E.ON U.S. Services, Inc., 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.

én **Robert M. Conroy** 

Subscribed and sworn to before me, a Notary Public in and before said County and State, this  $29^{44}$  day of \_\_\_\_\_\_2010.

na B. Hayper (SEAL)

My Commission Expires:

Sept 20, 2010

#### 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 E.ON U.S. Services, Inc., 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.

anna & Charnas Shannon L. Charnas

Subscribed and sworn to before me, a Notary Public in and before said County and State, this <u>3rd</u> day of <u>deequest</u> 2010.

<u>Vietura</u> <u>B. Hayper</u> (SEAL) Notary Public

My Commission Expires:

upt 20,2010

### KENTUCKY UTILITIES COMPANY

### Response to Information Requested in Appendix B of Commission's Order Dated July 13, 2010

#### Case No. 2010-00241

#### 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 KU's cost of debt, preferred stock, accounts receivable financing (if applicable), or changes in KU's jurisdictional capital structure. Include all assumptions and other supporting documentation used to make this calculation. Any true-up adjustment is to be included in the determination of the over- or under-recovery of the surcharge for the corresponding billing period under review.

#### A-1. Please see the attachment.

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. 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.

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

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

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

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Billing Month	Expense Month	Rate of Return as Filed	Rate Base as Filed	Rate Base As Revised	Change in Rate Base	True-up Adjustment	Jurisdictional Allocation, ES Form 1 10	Jursidictional True up Adjustment
					(5) - (4)	(3) * (6) / 12		(7) * (8)
Nov-09	Sep-09	11.12%	\$1,286,590,705	\$1,286,590,705	\$ -	\$ -	87.86%	\$ -
Dec-09	Oct-09	11.12%	1,297,196,155	1,297,196,155	-	-	87.44%	-
Jan-10	Nov-09	11 12%	1,305,616,597	1,305,616,597	~	-	85.53%	-
Feb-10	Dec-09	11 00%	1,317,124,291	1,317,124,291	-	-	83.85%	-
Mar-10	Jan-10	11.00%	1,322,992,882	1,322,992,882	•	-	84.36%	-
Apr-10	Feb-10	11.00%	1,330,252,270	1,330,252,270	-	-	81.71%	~
						\$-		\$ -

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Billing Month	Expense Month	Rate of Return as Filed	Rate of Return as Revised	Change in Rate of Return	Rate Base as Revised	True-up Adjustment	Jurisdictional Allocation, ES Form 1 10	Jursidictional True up Adjustment
				(4) - (3)		(5) * (6) / 12		(7) * (8)
Nov-09	Sep-09	11.12%	10.94%	-0.18%	\$ 1,286,590,705	(192,989)	87.86%	(169,560)
Dec-09	Oct-09	11.12%	10.94%	-0.18%	1,297,196,155	(194,579)	87.44%	(170,140
Jan-10	Nov-09	11.12%	10.94%	-0 18%	1,305,616,597	(195,842)	85.53%	(167,504)
Feb-10	Dec-09	11.00%	10.94%	-0.06%	1,317,124,291	(65,856)	83 85%	(55,220)
Mar-10	Jan-10	11.00%	10.94%	-0.06%	1,322,992,882	(66,150)	84.36%	(55,804
Apr-10	Feb-10	11.00%	10.94%	-0 06%	1,330,252,270	(66,513)	81.71%	(54,347
						(781,929)		(672,576
				lating langet of Chr	Pate of Datum	¢ (781.070)		e ((75.57)
			Cum	native impact of Cha	inges in Rate of Return	\$ (781,929)		\$ (672,576

Kentucky Utilities 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

KENTUCKY UTILITIES

# <u>Adjusted Electric Rate of Return on Common Equity</u> <u>As of April 30, 2010</u>

Kentucky Jursdictional Capitalization (cal 7 × cal 8)	\$ 49,312,839	1,465,667,735	1,739,959,787	<b>\$</b> 3,254,940,361
Jurisdictional Rate Base Percentage (8)	87.19%	87.19%	87.19%	
Adjusted Total Company Capitalization (col 1 + col 6) (7)	\$ 56,557,907	1,681,004,398	1,995,595,581	\$ 3,733,157,886
Adjustments to Total Co. Capitalization (Sum of Col 3 - Col 5) (6)	(26,047)	(775,007)	(9,000,351)	<u>(9,801,405)</u>
Investments in OVEC and Other (col 2 x col 5 Line 4) (5)	(6,480) \$	(192,804)	(229,837)	(429,121) 5
Investment in EEI (col 2 x Col 4 Line 4) (4)	(19,567) \$	(582,203)	(694,030)	(1,295,800) 8
Indistributed Subsidiary Earnings (3)	۶۹ י	I	(8,076,484)	(8,076,484) \$
U Capital Structure (2)	1.51% S	44.93%	53.56%	100.000% \$
Per Books 04-30-10 (1)	\$ 56,583,954	1,681,779,405	2,004,595,932	\$ 3,742,959,291
	1. Short Term Debt	2. Long Term Debt	3. Common Equity	4. Total Capitalization

	Cost of	Capital	(Col 14 x Col 13) (15)	0.00%	2.11%	5.68%	7.79%
	Annual	Cost	Rate (14)	0.21%	4.69%	10.63%	
	Adjusted	Capital	Structure (13)	1.51%	45.03%	53.46%	100.000%
Adjusted	Kentucky Jurisdictional	Capítalization	(Cal 9 + Cal 11) (12)	\$ 47,128,065	1,400,943,802	1,663,133,356	<b>\$</b> 3,111,205,223
	Environmental Surcharge	(Net of ECR Roll-in)	(Col 10 x Col 11 Line 4) (11)	S (2,184,774)	(64,723,933)	(76,826,431)	\$ (143,735,138)
		Capital	Structure (10)	1.52%	45.03%	53.45%	100.000%
	Kentucky	Jurisdictional	Capitalization (9)	\$ 49,312,839	1,465,667,735	1,739,959,787	<b>\$</b> 3,254,940,361
				Short Term Debt	2. Long Term Debt	3. Common Equity	4. Total Capitalization
				l.	2.	ŕ	4.

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

10.93%

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Attachment to Response to Question No. 1 Page 3 of 3 Charnas

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### KENTUCKY UTILITIES COMPANY

# Response to Information Requested in Appendix B of Commission's Order Dated July 13, 2010

### Case No. 2010-00241

# Question No. 2

### Witness: Robert M. Conroy

- Q-2. Prepare a summary schedule showing the calculation of Total E(m), Net Retail E(m), and the surcharge factor for the expense months covered by the applicable billing period. Include the two expense months subsequent to the billing period in order to show the over- and 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 a calculation of any additional over- or under-recovery amount KU believes needs to be recognized for the sixmonth review. Include all supporting calculations and documentation for any such additional over- or under-recovery.
- A-2. Please see the attachment to this response for the summary schedule and cumulative components which make up the net under-recovery.

In Case No. 2009-00310, KU'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 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, the changes were implemented with the December 2009 expense month that was billed in February 2010.

In determining the cumulative total over/(under) recovery position, the calculations for the three expense months of September 2009, October 2009 and November 2009 (corresponding to the billing months of November 2009, December 2009 and January 2010) are consistent with those contained in prior review proceedings. For each of the expense months, Retail E(m) contained in Column 4 of page 2 of 3 was compared to the ECR revenue collected in the corresponding billing month contained in Column 12 (base rate revenues) and Column 13 (ECR billing factor revenue) to determine the over/(under) recovery position in Column 14.

Under the new revenue requirement method, the comparison of the Retail E(m) (allowed ECR revenue requirement) to the revenues received changes. Beginning with the expense month of December 2009 through February 2010, Retail E(m) contained in Column 4 is compared to the ECR revenue collected in the <u>expense</u> month contained in Column 10 (base rate revenues) and the ECR revenue collected in the corresponding <u>billing</u> month contained in Column 13 (ECR billing factor revenue) to determine the over/(under) recovery position in Column 14. For the transition period (the December 2009 and January 2010 expense months), the amount in Column 10 for the base rate revenues is zero since it was already included as revenue in Column 12 of the October 2009 and November 2009 expense months.

The approved changes only impact the timing and accuracy of the revenue collection, not the total revenues KU is allowed to collect through the ECR as a result of the changes.

For the period under review, KU experienced a cumulative under-recovery of \$4,546,491. However, KU is adjusting this under-recovery position for a correction made outside of the 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 \$3,913,660. 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 the two months at issue are in different six-month periods, KU included the adjustment in this review period to avoid compounding the over/under recovery for its customers. The result is a net under-recovery of \$632,831 for the 6-month billing period under review.

Kentucky Ui Calculation Summary Sc	Kentucky Utilities Company Calculation of E(m) and Jurisdictional Surcharge Billing Factor Summary Schedule for Expense Months September 2009 through February 2010	al Surcharge Billing Fa 1ths September 2009 th	ictor rough Februa	ıry 2010				Attachment to Response to Question No. 2 Page 1 of 3 Conroy
(1)	(2)	(3)	(4)	(5)	(9)	(1)	(8)	
Expense Month	Rate Base as Revised	Monthly Rate Base as Revised	Rate of Return as Revised	Operating Expenses (net of allowance proceeds)	Total E(m)	Retail Allocation Ratio	Retail E(m)	Comments: As Revised in This Review
Lines	ES Form 2.00	(2)/12		ES Form 2.00	(3) * (4) + (5)	(3) * (4) + (5) ES Form 1.10	(6) * (7)	
Sep-09		107,215,892	10.94%	4,072,334	15,801,753	87.86%	13,883,420	
Oct-09	1,297,196,155	108,099,680	10.94%	4,116,193	15,942,298	87.44%	13,939,945	
Nov-09		108,801,383	10.94%	4,071,680	15,974,551	85.53%	13,663,034	
Dec-09	1,317,124,291	109,760,358	10.94%	4,300,116	16,307,899	83.85%	13,674,173	
Jan-10	-	110,249,407	10.94%	4,263,933	16,325,218	84.36%	13,771,954	
Feb-10	1,330,252,270	110,854,356	10.94%	4,226,741	16,354,208	81.71%	13,363,023	
	7,859,772,900	654,981,075						

Kentucky Utilities Company Calculation of E(m) and Jurisdictional Surcharge Billing Factor	Summary Schedule for Expense Months September 2009 through February 2010
Kentucky Utilities Company Calculation of E(m) and Jurisdiction	Summary Schedule for Expense Mo

(1)	(1)	(2)	(4)	(2)	(9)	(1)	(8)	(6)	(01)	(11)	(12)	(13)	(14)
3	171	2		i.			Monthly				ECR Revenue		
		Adjustment to Retail	Retail E(m) Including		Current Environmental	m	Environmental		ECR Revenue		Recovered	ECD Diff C. Har	Combined Total
Fynanse		Efm) for Under-	all Adjustments to be	Average Monthly	Surcharge Factor	Surcharge Factor	Surcharge Factor	Monthly	Recovered I hrough	Bulling	I mough base	ECK DIIIING FACIOI	
March.	Datail Elmi	Collection	hilled as FCR		(CESF)	(BESF)	(MESF)		Base Rates	Period	Kates	Kevenues	Over/Onder ) Necovery
INIIOIAI	VCIAIL LINE										Revenue		(4) - (12) - (13)
									Percentage Method		Requirement See		or
		Case No. U8-220 & U3-	×-		A = Citad		(1) - (1)	As Filed	See Note 1 & 2		Note 1 & 2		(4) - (10) - (13)
		310		C2 FOITT 1.10		5 510/	7000 11			Nov-09	3.351.618	8,221,127	(2,968,892)
Scp-09	13,883,420	658,217		87,1,44,078		0/1/				00-200	277 325 1	11 176 810	
Oct-09	13.939.945	658.216	5 14,598,161	89,232,955		%1C.C	12.0376			(n-m)(1	0 L 1 0 2 0 2	11 011	
00				88 436 502	19.46%	5.51%	13.95%			Jan-IU	8C4,8CU,C	216,106,41	
60-30N	~			100 110 100				17 25%		Fcb-10		13,417,060	
Dec-09	-	_		681.610.88				101 2.40/		Mar-10		11 257 977	
Jan-10	13,771,954	636,994		88,430,092				0/10/01	CIT 100 CI			1270 535 ()	(777 777)
Fcb-10	13,363,023	636,994	4 14,000.017	88,947,230				-5.0070	c1 / 'ncn'c1	n1-idv			
							Cuth Tatel		13 036 713		12.645.279	56.610.914	(4,546,491)
	82,295,549		86,839,396				IEIO I ONC		CT 1.0 CH(CT				
							- 10 TT - TT						3.913.660
					Correction to Feb1	Correction to Feb10 expense month lited with Apr10 monuny tilling	in Aprio monuiy ming						
							Groud Total						(632,831)

Note 1: Beginning with the Dec09 expense month, KU transitioned to the Revenue Requirement methodology approved in Case No. 2009-00310

Note 2: The ECR Revenue recovered through Base Rates in February 2010 was revised from the onginally filed amount.

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

#### Kentucky Utilities Company Reconciliation of Combined Over/(Under) Recovery Summary Schedule for Expense Months September 2009 through February 2010

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) Jurisdictional	(9)	
Billing Month	Expense Month	Rate of Return as Filed	Rate of Return as Revised	Change in Rate of Return (4) - (3)	Rate Base as Revised	Impact of change in Rate of Return (5) * (6) / 12	Allocation, ES Form 1 10	Jursidictional Impact (7) * (8)	
Nov-09	Sep-09	11.12%	10 94%	-0 18%	\$1,286,590,705	192,989	87 86%	169,560	
Dec-09	Oct-09	11 12%	10.94%	-0 18%	1,297,196,155	194,579	87 44%	170,140	
Jan-10	Nov-09	11.12%	10 94%	-0 18%	1,305,616,597	195,842	85 53%	167,504	
Feb-10	Dec-09	11 00%	10 94%	-0 06%	1,317,124,291	65,856	83 85%	55,220	
Mar-10	Jan-10	11 00%	10 94%	-0 06%	1,322,992,882	66,150	84 36%	55,804	
Apr-10	Feb-10	11 00%	10 94%	-0 06%	1,330,252,270	66,513	81 71%	54,347	
1441.10					-,,,,,,,,,,,,,				
			Cun	nulative Impact of Ch	anges in Rate of Return	\$ 781,929		\$ 672,576	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		Base Rate Revenues (from ES Form 3 00)	As filed BESF • Base Rates (from ES Form 2 00)	Actual ECR Base Rates (Q2, pg 2, Col 12)	As Filed BESF (from ES Form 1 00)	Recalculated BESF	Recalc BESF * Base Rates (3) * (7)	Recalculation Difference (8) - (4)	BESF % Difference (5) - (8)
	0 00	71 026 176	7 059 119	2 261 (10	6 6 10/	6 308/	1 726 420	(222 (80)	(202 011)
Nov-09	Sep-09	71,835,175	3,958,118	3,351,618	5 51%	5 20%	3,735,429	(222,689)	(383,811)
Dec-09	Oct-09	91,427,506	5,037,656	4,235,223	5 51%	5 20% 5 20%	4,754,230	(283,426)	(519,007)
Jan-10	Nov-09	108,008,979	5,951,295	5,058,438	5 51%	J 20%	5,616,467	(334,828)	(558,029)
Feb-10	Dec-09	-	-	•			-	-	•
Mar-10 Apr-10	Jan-10 Feb-10	-	•	-			•	-	-
Api-10	1.60-10	271,271,660	14,947,069	12,645,279			14,106,126	(840,943)	(1,460,847)
	Actu	al Base Rate Collections	12,645,279		Actual Base	e Rate Collections	12,645,279		
		-	(2,301,790)				(1,460,847)		
(1)	(2)	(3)	(4)	(5) Ree	(6) covery Position Explana	(7) tion - Over/(Under	(8)	(9)	
	_	Combined Total				Use of 12 Month	Correction to	Transition Months -	
Billing Month	Expense Month	Over/(Under) Recovery	ROR True-up	BESF Calculation Differences	Use of BESF %	Average Revenues	Feb10 Expense Month Filing	ECR Rev collected through Base Rates	
		(Q2, pg 2, Col 14)							
Nov-09	Sep-09	(2,968,892)	169,560	(222,689)	(383,811)	(2,531,952)			
Dec-09	Oct-09	763,872	170,140	(283,426)	(519,007)	1,396,165			
Jan-10	Nov-09	5,689,100	167,504	(334,828)	(558,029)	6,414,453			
Feb-10	Dec-09	(1,552,323)	55,220	•	-	2,627,679		(4,235,223)	
Mar-10	Jan-10	(3,150,971)	55,804	•	-	1,851,663		(5,058,438)	
Apr-10	Feb-10	(3,327,277)	54,347	-	~	532,036	(3,913,660)		
		(4,546,491)	672,576	(840,943)	(1,460,847)	10,290,045	(3,913,660)	(9,293,661)	
Feb10 Expens	se Mo. Correction	3,913,660							
Net Over/(	(Under) Recovery	(632,831)							

(4,546,491		Combined Over/(Under) Recovery
	(840,943)	Due to BESF Calculation Differences
	(1,460,847)	Due to use of BESF %
	672,576	Due to Change in ROR
	10,290,045	Use of 12 Month Average Revenues
	(3,913,660)	Due to Feb10 Expense Mo. Correction
	(9,293,661)	Transition Months - ECR Revenue in Base Rates
(4,546,491		Subtotal
		Unreconciled Difference

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### KENTUCKY UTILITIES COMPANY

### Response to Information Requested in Appendix B of Commission's Order Dated July 13, 2010

### Case No. 2010-00241

### Question No. 3

### Witness: Shannon L. Charnas

- Q-3. Provide the calculations, assumptions, workpapers, and other supporting documents used to determine the amounts KU has reported during each billing period under review for Pollution Control Deferred Income Taxes.
- A-3. KU calculates Deferred Income Taxes as the taxable portion of the difference between book depreciation, using straight line depreciation, and tax depreciation, generally using 20 year MACRS accelerated depreciation 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.

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

<u>2001 - Plan</u> Project 16 -- Emission Monitoring

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
							1,143,893	
Sep-09	9,775,541	20,725	36,610	15,885	38 9000%	6,179	1,150,072	18,994
Oct-09	9,775,541	20,725	36,610	15,885	38.9000%	6,179	1,156,251	18,994
Nov-09	9,775,541	20,725	36,610	15,885	38.9000%	6,179	1,162,430	18,994
Dec-09	9,775,541	20,725	36,610	15,885	38.9000%	6,179	1,168,609	18,994
Jan-10	9,775,541	20,725	36,345	15,620	38.9000%	6,076	1,174,685	18,994
Feb-10	9,775,541	20,725	36,345	15,620	38.9000%	6,076	1,180,762	18,994

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

#### <u>2001 - Plan</u> Project 17 -- NOx

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
							31,346,498	
Sep-09	216,964,277	558,726	1,667,421	1,108,695	38.9000%	62,938	31,409,436	205,174
Oct-09	216,964,277	558,726	1,667,421	1,108,695	38.9000%	62,938	31,472,374	205,174
Nov-09	216,964,277	558,726	1,667,421	1,108,695	38.9000%	62,938	31,535,312	205,174
Dec-09	216,964,277	558,726	1,667,421	1,108,695	38.9000%	62,938	31,598,250	205,174
Jan-10	216,964,277	558,726	1,545,359	986,633	38.9000%	42,504	31,640,754	205,174
Feb-10	216,964,277	558,726	1,545,359	986,633	38.9000%	42,504	31,683,256	205,174

Note: Due to Bonus Depreciation for tax purposes, taken on certain components of Project 17, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets placed in service in 2005 received 30% bonus depreciation, which reduces the Federal tax basis to 70% of the plant balance. A sample calculation of deferred taxes for Feb 2010 is shown below:

Federal Basis	Book Depr.	Federal Tax Depr	Fed Difference Fe	ed Tax Rate	Fed Def Tax
151,874,994	558,726	641,733	83,007	35.0000%	29,052

State Basis	Book Depr.	State Tax Depr	St. Difference	State Tax Rate	St Def Tax
216,964,277	558,726	903,626	344,900	6.0000%	20,694

St. Offset for Fed Taxes not Owed (7,243)

Total Deferred Tax 42,504

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

2003 - Plan Project 18 -- New Ash Storage

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
							2,427,733	
Sep-09	16,148,295	37,545	120,904	83,359	38.9000%	5,593	2,433,326	-
Oct-09	16,148,295	37,545	120,904	83,359	38.9000%	5,593	2,438,919	-
Nov-09	16,148,295	37,545	120,904	83,359	38.9000%	5,593	2,444,512	-
Dec-09	16,148,295	37,545	120,904	83,359	38.9000%	5,593	2,450,105	-
Jan-10	16,148,295	37,545	111,821	74,276	38.9000%	4,076	2,454,181	-
Feb-10	16,148,295	37,545	111,821	74,276	38.9000%	4,076	2,458,258	-

Note: Due to Bonus Depreciation for tax purposes taken on Project 18, the deferred tax calculation for this project is computed separately for Federal and State purposes. Specifically, for Federal taxes, certain assets placed in service in 2005 received 30% bonus depreciation, which reduces the Federal tax basis to 70% of the plant balance. A sample calculation of deferred taxes for Feb 2010 is shown below:

Federal Basis	Book Depr.	•	Fed. Differenc Fed Tax	Rate Fed Def Tax
11,303,807	37,545		8,499 35	0000% 2,975
State Basis	Book Depr.	· · · · · · · · · · · · · · · · · · ·	St. Difference State Ta	ax Rate St Def Tax
16,148,295	37,545		28,232 6	0000% 1,694

St. Offset for Fed Taxes not Owed (593)

Total Deferred Tax 4,076

<u>2005 - Plan</u> Project 19 -- Ash Handling at Ghent 1 and Ghent Station

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
							48,722	
Sep-09	835,046	1,941	5,157	3,216	38.9000%	1,251	49,973	79,280
Oct-09	835,046	1,941	5,157	3,216	38 9000%	1,251	51,224	79,280
Nov-09	835,046	1,941	5,157	3,216	38.9000%	1,251	52,475	79,280
Dec-09	835,046	1,941	5,157	3,216	38.9000%	1,251	53,726	79,280
Jan-10	835,046	1,941	6,234	4,293	38.9000%	1,670	55,396	79,280
Feb-10	835,046	1,941	6,234	4,293	38 9000%	1,670	57,065	79,280

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

<u>2005 - Plan</u> Project 20 -- Ash Treatment Basin (Phase I) at E.W. Brown

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
							1,047,717	
Sep-09	19,697,162	45,960	244,370	198,410	38.9000%	77,181	1,124,898	-
Oct-09	19,697,162	45,960	244,370	198,410	38.9000%	77,181	1,202,080	-
Nov-09	19,697,162	45,960	244,370	198,410	38.9000%	77,181	1,279,261	-
Dec-09	19,697,162	45,960	244,370	198,410	38.9000%	77,181	1,356,443	-
Jan-10	19,697,162	45,960	240,816	194,856	38.9000%	75,799	1,432,242	-
Feb-10	19,697,162	45,960	240,816	194,856	38.9000%	75,799	1,508,042	-

<u>2005 - Plan</u> Project 21 -- FGD's

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
							17,283,817	
Sep-09	592,380,842	1,861,835	5,334,170	3,472,335	38.9000%	1,350,738	18,634,555	761,567
Oct-09	592,380,842	1,861,835	5,318,352	3,456,517	38.9000%	1,344,585	19,979,140	761,567
Nov-09	592,380,842	1,861,835	5,332,889	3,471,054	38.9000%	1,350,240	21,329,380	761,567
Dec-09	592,380,842	1,861,835	5,332,889	3,471,054	38.9000%	1,350,240	22,679,620	761,567
Jan-10	592,380,842	1,861,835	5,410,745	3,548,910	38.9000%	1,380,526	24,060,146	761,567
Feb-10	592,380,842	1,861,835	5,410,745	3,548,910	38.9000%	1,380,526	25,440,671	761,567

Note: An adjustment to the in service date of an asset was made in October 2009 which changed tax depreciation.

<u>2006 - Plan</u> Project 23 - TC2 AQCS Equipment

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
Sep-09	-	-	-	-	38.9000%	-	-	-
Oct-09	-	-	-	-	38.9000%	-	-	-
Nov-09	-	-	-	-	38.9000%	-	-	-
Dec-09	-	-	-	-	38,9000%	-	-	-
Jan-10	-	-	-	-	38,9000%		-	
Feb-10	-	-	-	-	38.9000%	-	-	-

2006 - Plan Project 24 - Sorbent Injection

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
							275,382	
Sep-09	7,397,285	16,679	70,638	53,959	38.9000%	20,990	296,372	-
Oct-09	7,397,285	16,679	70,638	53,959	38.9000%	20,990	317,362	-
Nov-09	7,397,285	16,679	70,638	53,959	38.9000%	20,990	338,352	-
Dec-09	7,397,285	16,679	70,638	53,959	38.9000%	20,990	359,342	-
Jan-10	7,397,285	16,679	69,309	52,630	38.9000%	20,473	379,815	-
Feb-10	7,397,285	16,679	69,309	52,630	38.9000%	20,473	400,286	-

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

#### <u>2006 - Plan</u> Project 25 - Mercury Monitors

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
							20,763	
Sep-09	1,031,953	2,394	10,790	8,396	38.9000%	3,266	24,029	-
Oct-09	1,031,953	3,424	10,790	7,366	38.9000%	2,865	26,894	-
Nov-09	1,031,953	3,424	10,790	7,366	38.9000%	2,865	29,760	-
Dec-09	1,031,953	3,424	10,790	7,366	38.9000%	2,865	32,625	-
Jan-10	1,031,953	3,424	8,187	4,763	38.9000%	1,853	34,478	-
Feb-10	1,031,953	3,424	8,187	4,763	38.9000%	1,853	36,333	•

2006 - Plan Project 27 - E.W. Brown Electrostatic Precipitators

Month	Plant Balance	Book Depreciation	Tax Depreciation	Temporary Difference	Income Tax Rate	Deferred Tax	Accumulated Deferred Taxes	Deferred Taxes on Retirements
							11,382	
Sep-09	1,354,119	3,388	6,011	2,623	38.9000%	1,020	12,402	2,274
Oct-09	1,354,119	3,388	6,011	2,623	38.9000%	1,020	13,423	2,274
Nov-09	1,354,119	3,388	6,011	2,623	38.9000%	1,020	14,443	2,274
Dec-09	1,354,119	3,388	6,011	2,623	38.9000%	1,020	15,463	2,274
Jan-10	1.354.119	3,388	8.419	5,031	38.9000%	1,957	17,420	2,274
Feb-10	1,354,119	3,388	8,419	5,031	38.9000%	1,957	19,378	2,274

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#### **KENTUCKY UTILITIES COMPANY**

### Response to Information Requested in Appendix B of Commission's Order Dated July 13, 2010

#### Case No. 2010-00241

#### Question No. 4

#### Witness: Shannon L. Charnas

- Q-4. Refer to ES Form 2.50, Pollution Control Operations & Maintenance Expenses, for the September 2009 through February 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. Attached please find a schedule showing the changes in operations and maintenance expense accounts for September 2009 through February 2010 expense months. The changes in the expense levels are reasonable and occurred as a part of routine plant operations and maintenance.

Monthly variances in the NOx operation expenses, account 506104, reflect normal SCR operations and will fluctuate with generation and coal quality. Ghent Unit 3 was on outage in November 2009, resulting in lower expenses in that month. The plant plans deliveries and payments as close to the expected use of the material as possible.

Fluctuations in the NOx maintenance expenses, account 512101, are the result of catalyst testing in September 2009, which is performed by the maintenance staff, and regular maintenance throughout the six month period.

Fluctuations in the scrubber operation expenses, account 502006, are the result of regular operation of the Ghent FGDs. These are variable production expenses and will fluctuate with generation, coal quality and the  $SO_2$  removal rate. Monthly variances in account 512005, scrubber maintenance, are generally the result of regular maintenance of the Ghent FGDs. Increases in October and November 2009 relate to costs associated with modifications to and engineering review of upgrades to the drainage system for the Ghent gypsum stack. The drainage work will control the elevation of the water within the stacked gypsum which is expected to help maintain safety factors in accordance with regulatory and industry guidelines.

Monthly variances in accounts 506109 and 512102, sorbent injection operation and maintenance, respectively, are the result of on-going system operation and maintenance expenses at Ghent. The primary driver for the expenses charged to account 506109 is the purchase of consumable materials. Monthly expenses are based on delivery and usage timing, which are impacted by outage timing and usage rates.

Expenses in account 512102 include periodic, regular maintenance activities for the sorbent injection systems that are based primarily on normal equipment wear and issues that limit efficient system performance. Variances in this account are related to the timing of this regular maintenance.

ENVIRONMENTAL SURCHARGE REPORT KENTUCKY UTILITIES COMPANY

Pollution Control - Operations & Maintenance Expenses

			% Change from Prior		% Change from Рпог						
O&M Expense Account	Sep-09	Oct-09	Period	Nov-09	Period	Dec-09	Period	Jan-10	Period	Feb-10	Репод
2001 Plan											
506104 NOx Operation - Consumables	144.642.63	156,923.93	8%	82,391.07	-48%	311,861.64	279%	228,922.76	-27%	251,439.48	10%
506105 NOx Operation - Labor and Other			%0	1	%0	1	%0	1	%0	1	%0
512101 NOx Maintenance	65,895.75	27,690.60	-58%	24,984.30	-10%	26,197.58	5%	20,915.57	-20%	22,281.95	7%
Total 2001 Plan O&M Expenses	210,538.38	184,614.53	-12%	107,375.37	-42%	338,059.22	215%	249,838.33	-26%	273,721.43	10%
5000 Fran 502006 Scrubber Operations	204.210.03	203.258.77	1 %0	188.384.77	%2-	249,169.11	32%	256,941.29	3%	356,080.08	39%
512005 Scrubber Maintenance	202.951.62	402,920.06	%66	379,987.88	-6%	292,905.59	-23%	288,158.24	-2%	164,525.53	-43%
Total 2005 Plan O&M Expenses	407,161.65	606,178.83	49%	568,372.65	-6%	542,074.70	-5%	545,099.53	1%	520,605.61	4%
2006 Plan											
506109 Sorbent Intection Operation	666,822.01	530,182.89	-20%	600,158.85	13%	535,531.26	-11%	683,311.97	28%	649,877.67	-5%
512102 Sorbent Injection Maintenance	1.541.06	10,859.92	605%	1,362.66	-87%	2,817.55	%401	16,857.70	498%	3,058.01	-82%
506110 Mercury Monitors Operation		,	%0	1	%0	-	%0	,	%0	'	%0
512103 Mercury Monitors Maintenance	,	,	%0	1	%0		%0	•	%0	'	%0
506104 Nox OperationConsumables	1	-	%0	•	%0	',	%0	•	%0	,	%0
506105 Nox Operation Labor and Other		-	%0	-	%0	'	%0	•	%0		%0
512101 Nox Maintenance	,	1	%0	•	%0	1	%0	,	%0		%0
502006 Scrubber Operations	,	•	%0	1	%0	t	%0	1	%0	*	%0
512005 Scrubber Maintenance	1	1	%0	•	%0	,	%0	,	%0		%0
506001 Precipitator Operation	•	•	%0	,	%0	,	%0	`ı	%0		%0
506111 Activated Carbon	8	•	%0	'	%0	ł	%0	,	%0	•	%0
512011 Precipitator Maintenance	1	1	%0	,	%0	1	%0	•	%0	•	%0
Total 2006 Plan O&M Expenses	668,363.07	541,042.81	-19%	601,521.51	11%	538,348.81	-11%	700,169.67	30%	652,935.68	%1-
2009 Plan											
506104 Nox Operation Consumbales	•	•	%0	,	%0	,	%0	1	%0	-	%0
506105 Nox Operation Labor and Other	•	-	%0	'	%0	•	%0	1	%0	*	%0
512101 Nox Maintenance	3	•	%0	•	%0	1	%0	ł	%0	-	%0
506109 Sorbent Injection Operation		•	0%0	'	%0	•	%0	1	%0	1	%0
512102 Sorbent Injection Maintenance	•	'	%0	1	%0	1	%0	-	%0	1	%0
502012 ECR Landfill Operations	1	,	%0	1	%0	,	%0	•	%0	•	%0
512105 ECR Landfill Maintenance		-	%0	,	%0	•	%0		%0	-	%0
Adjustment for CCP Dosposal in Base Rates (ES Form 2.51)	•	•	%0	,	%0	1	%0	•	%0	-	%0
Total 2009 Plan O&M Expenses	•	•	%0	-	%0	•	%0	1	%0		%0

<sup>1</sup> Amount rounds to less than 1%

Attachment to Response to Question No. 4 Page 1 of 1 Charnas

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## KENTUCKY UTILITIES COMPANY

### Response to Information Requested in Appendix B of Commission's Order Dated July 13, 2010

#### Case No. 2010-00241

#### **Question No. 5**

#### Witness: Shannon L. Charnas

- Q-5. In Case No. 2000-00439, the Commission ordered that KU's cost of debt and preferred stock would be reviewed and re-established during the six-month review case. Provide the following information as of February 28, 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. KU's calculation of its weighted average cost of capital for environmental surcharge purposes.
- A-5. a. Please see the attachment. There was no preferred stock as of February 28, 2010, therefore it is not listed in the attached schedule.
  - b. Please see the attachment. There was no preferred stock as of February 28, 2010, therefore it is not listed in the attached schedule.
  - c. Please see the attachment. KU 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. 2009-00548.

## Kentucky Utilities Company Outstanding Balances - Capitalization As of February 28, 2010

	1	2 Outstanding Balance Total Company	3 Outstanding Balance KY Jurisdictional 87.19%
1	Long-Term Debt	\$1,681,779,405	\$1,466,343,463
2	Short-Term Debt	\$77,898,954	\$67,920,098
3	Common Equity	\$2,001,918,194	\$1,745,472,473

Attachment to Response to Question No. 5 (b) Page 1 of 2 Charnas

Kentucky Utilities Company Blended Interest Rates As of February 28, 2010

		1 Blended Interest Rate Total Company / KY Jurisdictional
1	Long-Term Debt	4.66%
2	Short-Term Debt	0.20%

## KENTUCKY UTILITIES COMPANY ANALYSIS OF THE EMBEDDED COST OF CAPITAL AT February 28, 2010

				LONG-TERM	DEBT	*****			
					A	Annualized Cost			
	Due	Rate	Principal	Interest	Amortized Debt Issuance Expense	Amortized Loss- Reacquired Debt	Letter of Credit and other fees	Total	Embedded Cost
Pollution Control Bonds									
Mercer Co 2000 Series A	05/01/23	0 16000% *	12,900,000	20,640	-	46,743	94,413 #	161,796	1 254%
Carroll Co 2002 Series A	02/01/32	0 95000% *	20,930,000	198,835	4,104	36,300	20,930 ь	260,169	1 243%
Carroll Co 2002 Series B	02/01/32	0 95000% *	2,400,000	22,800	2,856	4,164	2,400 ь	32,220	1 343%
Muhlenberg Co. 2002 Series A	02/01/32	0 95000% *	2,400,000	22,800	1,140	12,744	2,400 •	39,084	1 629%
Mercer Co 2002 Series A	02/01/32	0 95000% *	7,400,000	70,300	3,180	12,900	7.400 b	93,780	1 267%
Carroll Co 2002 Series C	10/01/32	0.21200% *	96,000,000	203,520	73,658	186,036	240,000 c	703,214	0 733%
	10/01/34	0 23000% *	50,000,000	115,000	-	105,023	409,041 d	629,064	1 258%
Carroll Co 2004 Series A						105,023			
Carroll Co. 2006 Series B	10/01/34	0 29000% *	54,000,000	156,600	47,757	-	441,990 d	646,347	1 197%
Carroll Co 2007 Series A	02/01/26	5.75000% *	17,875,000	1,027,813	33,166	-	-	1,060,979	5 936%
Trimble Co 2007 Series A	03/01/37	6 00000% *	8,927,000	535,620	16,022	-	-	551,642	6 179%
Carroll Co 2008 Series A	02/01/32	0 29000% *	77,947,405	226,047	34,268	-	636,669 d	896,984	1 151%
Called Bonds			-	-	-	200,687	1	200,687	0.000%
Total External Debt			350,779,405	2,599,975	216,151	604,597	1,855,243	5,275,966	0.314%
Notes Payable to Fidelia Corp	11/24/10	4.240%	33,000,000	1,399,200	•	•	-	1,399,200	4 240%
Notes Payable to Fidelia Corp	01/16/12	4 390%	50,000,000	2,195,000	*	-	-	2,195,000 4,550,000	4 390% 4 550%
Notes Payable to Fidelia Corp Notes Payable to Fidelia Corp	04/30/13 08/15/13	4 550% 5 310%	100,000,000 75,000,000	4,550,000 3,982,500	-	-	-	3,982,500	4 5509
Notes Payable to Fidelia Corp	12/19/14	5,450%	100,000,000	5,450,000	-	-		5,450,000	5.450%
Notes Payable to Fidelia Corp	07/08/15	4 735%	50,000,000	2,367,500	-	-	-	2,367,500	4 7359
Notes Payable to Fidelia Corp	12/21/15	5 360%	75,000,000	4,020,000	-	*	-	4,020,000	5 360%
Notes Payable to Fidelia Corp	10/25/16	5 675%	50,000,000	2,837,500	-	-	-	2,837,500	5.675%
Notes Payable to Fidelia Corp.	06/20/17	5 980%	50,000,000	2,990,000	-	•	-	2,990,000	5 980%
Notes Payable to Fidelia Corp	07/25/18	6 160%	50,000,000	3,080,000	*	-	•	3,080,000	6.160%
Notes Payable to Fidelia Corp	08/27/18	5 645%	50,000,000	2,822,500	-	-	-	2,822,500	5 645% 7 035%
Notes Payable to Fidelia Corp	12/17/18	7 035% 5 710%	75,000,000	5,276,250 3,997,000	•	-	-	5,276,250 3,997,000	5 7109
Notes Payable to Fidelia Corp Notes Payable to Fidelia Corp	10/25/19 02/07/22	5 690%	70,000.000 53,000,000	3,997,000	-	-	-	3,015,700	5 690%
Notes Payable to Fidelia Corp	05/22/23	5 850%	75,000,000	4,387,500	-	-	-	4,387,500	5.850%
Notes Payable to Fidelia Corp	09/14/28	5 960%	100,000,000	5,960,000	-	-	-	5,960,000	5 960%
otes Payable to Fidelia Corp	06/23/36	6 330%	50,000,000	3,165,000		-	-	3,165,000	6 330%
Notes Payable to Fidelia Corp.	03/30/37	5 860%	75,000,000	4,395,000	-		-	4,395,000	5 860%
Notes Payable to Fidelia Corp	04/24/17	5 280%	50,000,000	2,640,000	-	-	-	2,640,000	5 280%
Notes Payable to Fidelia Corp	07/29/19	4 810%	50,000,000	2,405,000	•	•		2,405,000	4 810%
Notes Payable to Fidelia Corp	11/25/19	4 445%	50,000,000	2,222,500	-			2,222,500	4.445%
Total Internal Debt			1,331,000,000	73,158,150	-		<u> </u>	73,158,150	4.350%
		Total	1,681,779,405	75,758,125	216,151	604,597	1,855,243	78,434,116	4.664%

			SHORT TERM	1 DEBT				
				A	nnualized Cost			
	Rate	Principal	Interest	Expense	Loss	Premium	Total	Embedded <u>Cost</u>
Notes Payable to Associated Company	0 200% *	77,898,954	155,798	-	-	-	155,798	0.200%
	Total	77,898,954	155,798	-			155,798	0.200%
Embedded Cost of Total Debt		1,759,678,359	75,913,923	216,151	604,597	1,855,243	78,589,914	4.466%]

\* Composite rate at end of current month

1 Series P and R bonds were redeemed in 2003, and 2005. respectively. They were not replaced with other bond series. The remaining unamortized expense is being amortized over the remaining of the original lives (due 5/15/07, 6/1/25, 6/1/35, and 6/1/36 respectively) of the bonds as loss on reaquired debt.

a - Letter of credit fee = (principal bal + 45 days Interest)\*.70% Rate based on company credit rating Additional fee of \$250/month for drawdown b - Remarketing fee = 10 basis points c - Remarketing fee = 25 basis points d - Is a and b combinded.

Kentucky Utilities Company Outstanding Balances - Adjusted Jurisdictional Capitalization February 28, 2010

÷	2	ю	4	QJ	Q	7 Weiahted
	Electric Only	Capital Structure	Cost Rate	Weighted Average Cost of Capital	Tax Gross-up Factor	Average Cost of Capital with Equity Gross-up
1 Long-Term Debt	1,407,768,323	44.80%	4.66%	2.09%		2.09%
2 Short-Term Debt	65,201,225	2.08%	0.20%	0.00%		%00.0
3 Common Equity	1,669,028,682	53.12%	10.63%	5.65%	0.55	8.77%
4 Total	3,141,998,230			7.74%		10.86%
	Ľ	Rate of Return (ROR) Grossed Up:	ed Up:	10.86%		

Weighted Cost of Capital Grossed up for Income Tax Effect {ROR + (ROR - Debt rate) x [TR/(1-TR)]}

See tax rate (TR) calculation on 5(c) page (2)

Attachment to Response to Question No. 5 (c) Page 1 of 2 Charnas

## ECR - Gross-up Revenue Factor & Composite Income Tax Calculation 2010

,

(1)	Assume pre-tax income of	Prod W/ 6	2010 eral & State uction Credit % 2010 State <u>Rate Included</u> 100.0000	
(2) (3)	State income tax (see below)		5.4896	(37)
(4)	State medine tax (see below)	<b></b>		(37)
(5)	Taxable income for Federal income tax			
(6)	before production credit		94.5104	(1)-(3)
(7)			9%	
(8)	Less: Production tax credit		8.5059	(6)*(7)
(9)			000044	
(10)	Taxable income for Federal income tax		86.0044	(6)-(8)
(11)	Federal income tax		30.1015	(10) +758
(12)	Federal income tax		30.1015	(10)*35%
(13) (14)	Total State and Federal income taxes			
(15)	Total State and Tederal meenie axes	\$	35.5912	(3)+(12)
(16)				
(17)	Gross-up Revenue Factor		64.4088	100-(15)
(18)				
(19)	Therefore, the composite rate is:			
(20)	Federal		30.1015%	(12)/100
(21)	State		5.4896%	(3)/100
(22)	Total	Contraction Management	35.5912%	(20)+(21)
(23) (24) (25) (26) (27)				
(28)	State Income Tax Calculation			
(29)	Assume pre-tax income of	\$	100.0000	
(30)				
(31)	Less: Production tax credit		8.5059	(8)
(32)	Taxable income for State income tax		91.4941	(29) - (31)
(33)	Taxable income for state income tax		71,4741	(29) - (31)
(34) (35)	State Tax Rate		6.0000%	
(36)	State I an Itale		0.000070	
(37)	State Income Tax		5.4896	(33)*(35)

## KENTUCKY UTILITIES COMPANY

## Response to Information Requested in Appendix B of Commission's Order Dated July 13, 2010

#### Case No. 2010-00241

#### **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 recovering the net under-recovered position of \$632,831 over one month, the ECR billing factor for a residential customer using 1,000 kWh will increase by approximately \$0.48 per month, using rates and adjustment clause factors in effect for the August 2010 billing month.