COMMONWEALTH OF KENTUCKY

RECEIVED

BEFORE THE PUBLIC SERVICE COMMISSION

AUG 05 2011

In the Matter of:

PUBLIC SERVICE COMMISSION

APPLICATION OF KENTUCKY UTILITIES)
COMPANY FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND NECESSITY) CASE NO. 2011-00161
AND APPROVAL OF ITS 2011 COMPLIANCE)
PLAN FOR RECOVERY BY)
ENVIRONMENTAL SURCHARGE	

MOTION OF KENTUCKY UTILITIES COMPANY TO DEVIATE FROM REQUIREMENT GOVERNING FILING OF COPIES

Kentucky Utilities Company ("KU") by counsel, petitions the Kentucky Public Service Commission ("Commission") to grant KU approval pursuant to 807 KAR 5:001 § 14 to deviate from the requirement that parties file an original and fifteen (15) complete copies of all data responses and attachments. KU requests that it be excused from filing any paper copies of certain attachments to its responses because such attachments are voluminous and the requesting intervenor has asked the Companies to provide the attachments in an electronic format. In support of its Motion, KU states as follows:

- 1. Pursuant to Commission's June 28, 2011 Order, KU must provide an original and fifteen (15) copies of all data responses and attachments to the Commission, along with a service copy to all parties of record. Certain of KU's attachments to its responses to the Initial Requests for Production of Documents of Rick Clewett, Raymond Barry, Sierra Club, and Natural Resources Defense Council (collectively, "Environmental Group") are voluminous. Due to the voluminous nature of certain of the attachments, KU is requesting permission to file only electronic copies of the attachments on compact disc.
- 2. In response to the Environmental Group's Initial Requests for Production of Documents Nos. 3, 4, 10, 11, 17, and 26, KU is providing approximately 500 MB of data on

multiple compact discs (including public and confidential attachments). To provide such attachments on paper would consume over 200,000 pages per copy, and certain attachments would be mostly unintelligible because they are intended to be read by computers. Providing just the Commission's fifteen copies would require over 3,000,000 pages, and providing paper service copies would increase the number even more.

- 3. The Environmental Group's Initial Requests for Production of Documents explicitly requested that responses be provided in an electronic format ("Please produce the requested documents in electronic format"). Providing the above-listed attachments in the form KU is providing them complies with the Environmental Group's request.
- 4. Due to the voluminous nature of these documents, KU requests permission pursuant to 807 KAR 5:001 § 14 to deviate from the Commission's June 28, 2011 Order and provide on compact discs the Commission's fifteen copies of KU's responses to the above-described discovery requests. KU seeks permission to provide compact-disc service copies to the other parties to the proceeding, as well.

WHEREFORE, KU requests a deviation from the requirement that parties provide an original and fifteen (15) paper copies of discovery responses. KU requests that it be allowed to instead submit the attachments to responses identified above on compact discs in compliance with this requirement.

Dated: August 5, 2011

Respectfully submitted,

Kendrick R. Riggs W. Duncan Crosby III Monica H. Braun

Stoll Keenon Ogden PLLC

2000 PNC Plaza

500 West Jefferson Street

Louisville, Kentucky 40202-2828

Telephone: (502) 333-6000

Allyson K. Sturgeon Senior Corporate Attorney LG&E and KU Services Company 220 West Main Street Louisville, Kentucky 40202 Telephone: (502) 627-2088

Counsel for Kentucky Utilities Company

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing Motion to Deviate was served via U.S. mail, first-class, postage prepaid, this 5th day of August 2011 upon the following persons:

Dennis G. Howard II Lawrence W. Cook Assistant Attorneys General Office of the Attorney General Office of Rate Intervention 1024 Capital Center Drive, Suite 200 Frankfort, KY 40601-8204

Michael L. Kurtz Kurt J. Boehm Boehm, Kurtz & Lowry 36 East Seventh Street, Suite 1510 Cincinnati, OH 45202

David C. Brown Stites & Harbison PLLC 400 West Market Street, Suite 1800 Louisville, KY 40202-3352 Iris G. Skidmore 415 West Main Street, Suite 2 Frankfort, KY 40601

David J. Barberie, Attorney Senior Leslye M. Bowman, Director of Litigation Government Center (LFUCG) Department of Law 200 East Main Street, Suite 1134 Lexington, KY 40507 Edward George Zuger III Zuger Law Office PLLC P.O. Box 728 Corbin, KY 40702

Kristin Henry Staff Attorney Sierra Club 85 Second Street San Francisco, CA 94105 Shannon Fisk Senior Attorney Natural Resources Defense Council 2 N. Riverside Plaza, Suite 2250 Chicago, IL 60660

Counsel for Kentucky Utilities Company

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APPLICATION OF KENTUCKY UTILITIES)	
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PUBLIC CONVENIENCE AND NECESSITY)	CASE NO. 2011-00161
AND APPROVAL OF ITS 2011 COMPLIANCE)	
PLAN FOR RECOVERY BY)	
ENVIRONMENTAL SURCHARGE	1	

PETITION OF KENTUCKY UTILITIES COMPANY
FOR CONFIDENTIAL PROTECTION OF,
AND MOTION TO DEVIATE FROM RULE WITH RESPECT TO,
RESPONSES TO FIRST REQUESTS FOR PRODUCTION OF DOCUMENTS BY
RICK CLEWETT, RAYMOND BARRY, SIERRA CLUB
AND THE NATURAL RESOURCES DEFENSE COUNCIL

Kentucky Utilities Company ("KU") hereby petitions the Kentucky Public Service Commission ("Commission") pursuant to 807 KAR 5:001 § 7 and KRS 61.878(1)(c) and (m) to grant confidential protection for the items described herein, which KU seeks to provide as part of its response to Rick Clewett, Raymond Barry, Sierra Club and the Natural Resources Defense Council's (collectively, the "Environmental Group") First Requests for Production of Documents Nos. 3, 4, 10, 11, 16, 17, and 26.

Also, pursuant to 807 KAR 5:001 § 14, KU respectfully moves the Commission for permission to deviate from the rule requiring the highlighting of specific confidential information and the marking of each page containing confidential information with a "CONFIDENTIAL" stamp. (See 807 KAR 5:001 § 7.) Because the confidential information being produced is voluminous and in electronic format (the subject of a separate Motion to Deviate being filed herewith), KU requests that marking the compact discs containing the confidential information with a yellow label clearly stating "CONFIDENTIAL" be deemed sufficient to comply with the rule.

In support of this Petition, KU states as follows:

Confidential or Proprietary Commercial Information (KRS 61.878(1)(c))

- 1. The Kentucky Open Records Act exempts from disclosure certain commercial information. KRS 61.878(1)(c). To qualify for the exemption and, therefore, maintain the confidentiality of the information, a party must establish that the material is of a kind generally recognized to be confidential or proprietary, and the disclosure of which would permit an unfair commercial advantage to competitors of the party seeking confidentiality.
- Environmental Group's RPD Nos. 3, 4, 10, 11, 16, and 26 includes KU's coal and gas base fuel costs and cost projections. If the Commission grants public access to this information, KU could be disadvantaged in negotiating fuel contracts in the future, and could also be disadvantaged in the wholesale energy market because fuel costs are important components of energy pricing. All such commercial harms would ultimately harm KU's customers, who would have to pay higher rates if the disclosed information resulted in higher fuel prices or adversely impacted KU's off-system energy sales.

The Commission has given confidential treatment to projected fuel cost information in numerous cases. For example, see the Commission's letter dated May 1, 2008, in Case No. 2008-00148; the Commission's letter dated April 28, 2005, in Case No. 2005-00162; the Commission's letter dated October 24, 2002, in Case No. 2002-00367); and the Commission's letter dated March 6, 2000, in Case No. 99-430.

(b) KU's responses to Environmental Group's RPD Nos. 3 and 4 contain confidential information concerning KU's maintenance and outage plans. Such information merits confidential protection because revealing it would likely harm KU's ability to compete in

wholesale power markets by revealing its unit availability and dispatch methodology, hampering its off-system sales and harming KU and its customers.

Critical Energy Infrastructure Information (KRS 61.878(1)(m)1.f.)

- 2. KU's response to Environmental Group's RPD No. 17 is an analysis of transmission elements that may need to be adjusted to accommodate possible future generating unit retirements. The analysis may include Critical Energy Infrastructure Information as defined by the Federal Energy Regulatory Commission, which is exempt from federal Freedom of Information Act disclosure, and which meets the exemption requirements of KRS 61.878(1)(m)1.f: "Infrastructure records that expose a vulnerability referred to in this subparagraph through the disclosure of the location, configuration, or security of critical systems, including public utility critical systems. These critical systems shall include but not be limited to ... electrical ... systems[.]" The analysis provides details concerning the location, capabilities, and contingency plans related to KU's transmission system, which infrastructure information would clearly be useful to anyone seeking to threaten or harm public safety. It is therefore highly confidential and must be protected from public disclosure.
- 3. If the Commission disagrees with any of these requests for confidential protection, it must hold an evidentiary hearing (a) to protect KU's due process rights and (b) to supply with the Commission with a complete record to enable it to reach a decision with regard to this matter. Utility Regulatory Commission v. Kentucky Water Service Company, Inc., 642 S.W.2d 591, 592-94 (Ky. App. 1982).
- 4. The information for which KU is seeking confidential treatment is not known outside KU (or its sister utility, Louisville Gas and Electric Company, "LG&E"), is not disseminated within LG&E and KU except to those employees with a legitimate business need to

know and act upon the information, and is generally recognized as confidential and proprietary information in the energy industry.

5. KU will disclose the confidential information, pursuant to a confidentiality agreement, to intervenors and others with a legitimate interest in this information and as required by the Commission. In accordance with the provisions of 807 KAR 5:001 § 7 and the Commission's June 28, 2011 Order in this proceeding, KU herewith files with the Commission one copy of the above-discussed responses with the confidential information highlighted and ten (10) copies of its responses without the confidential information.

Motion to Deviate from Rule

- 6. 807 KAR 5:001 § 7 requires confidential information supplied to the Commission to be highlighted, and each page containing such information to be clearly marked as confidential.
- 7. 807 KAR 5:001 § 14 permits deviations from the regulation's rules when a party shows good cause.
- 8. KU is producing attachments to above-listed responses to the Environmental Group's RPDs (except the attachment to the response to RPD No. 16) in electronic format (as requested by the Environmental Group, and which electronic production is the subject of a separate Motion to Deviate being filed herewith). The attachments are voluminous, made up of numerous computer files, and would span hundreds, if not thousands, of pages if printed. Also, a great deal of the data KU is providing is in machine-readable format, making it all but unintelligible to the naked eye. It would therefore be impracticable (if not impossible) to highlight all of the confidential data contained in such documents, just as it would be impracticable to stamp each "page" of these numerous electronic files with a "CONFIDENTIAL" stamp. KU therefore respectfully submits there is good cause to deviate

from the ordinarily applicable requirements of 807 KAR 5:001 § 7 and to permit KU to substantially comply therewith by placing all files containing confidential information on separate compact discs with yellow labels clearly marked "CONFIDENTIAL."

WHEREFORE, Kentucky Utilities Company respectfully requests that the Commission grant confidential protection for the information at issue, or in the alternative, schedule an evidentiary hearing on all factual issues while maintaining the confidentiality of the information pending the outcome of the hearing. KU further respectfully moves the Commission to permit KU to deviate from the ordinarily applicable rules concerning the filing of confidential information by permitting KU to file such confidential information on compact discs with yellow labels clearly marked "CONFIDENTIAL."

Dated: August 5, 2011

Respectfully submitted,

Kendrick R. Riggs W. Duncan Crosby III

Monica H. Braun

Stoll Keenon Ogden PLLC

2000 PNC Plaza

500 West Jefferson Street

Louisville, Kentucky 40202-2828

Telephone: (502) 333-6000

Allyson K. Sturgeon Senior Corporate Attorney LG&E and KU Services Company 220 West Main Street

Louisville, Kentucky 40202

Telephone: (502) 627-2088

Counsel for Kentucky Utilities Company

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing Petition and Motion was served via U.S. mail, first-class, postage prepaid, this 5th day of August 2011 upon the following persons:

Dennis G. Howard II Lawrence W. Cook Assistant Attorneys General Office of the Attorney General Office of Rate Intervention 1024 Capital Center Drive, Suite 200 Frankfort, KY 40601-8204 Iris G. Skidmore Bates and Skidmore 415 West Main Street, Suite 2 Frankfort, KY 40601

Michael L. Kurtz Kurt J. Boehm Boehm, Kurtz & Lowry 36 East Seventh Street, Suite 1510 Cincinnati, OH 45202

David C. Brown Stites & Harbison PLLC 400 West Market Street, Suite 1800 Louisville, KY 40202-3352

David J. Barberie, Attorney Senior Leslye M. Bowman, Director of Litigation Government Center (LFUCG) Department of Law 200 East Main Street, Suite 1134 Lexington, KY 40507 Edward George Zuger III Zuger Law Office PLLC P.O. Box 728 Corbin, KY 40702

Kristin Henry Staff Attorney Sierra Club 85 Second Street San Francisco, CA 94105

Shannon Fisk Senior Attorney Natural Resources Defense Council 2 N. Riverside Plaza, Suite 2250 Chicago, IL 60660

Counsel for Kentucky Utilities Company



Jeff DeRouen, Executive Director Public Service Commission of Kentucky 211 Sower Boulevard P. O. Box 615 Frankfort, Kentucky 40602 RECEIVED

AUG 05 2011

PUBLIC SERVICE COMMISSION

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

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

August 5, 2011

RE: The Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of Its 2011 Compliance Plan for Recovery by Environmental Surcharge Case No. 2011-00161

Dear Mr. DeRouen:

Enclosed please find an original and fifteen (15) copies of Kentucky Utilities Company's (KU) response to the First Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club, and the Natural Resource Defense Council dated July 12, 2011, in the above-referenced matter.

Also enclosed are an original and fifteen (15) copies of a Motion to Deviate from Requirement Governing Filing of Copies.

Also enclosed are an original and fifteen (15) copies of a Petition for Confidential Protection regarding certain information contained in the supplemental response to Question Nos. 3, 4, 10, 11, 16, 17, and 26.

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

Sincerely,

Robert M. Conroy

cc: Parties of Record

COMMONWEALTH OF KENTUCKY)	
)	SS
COUNTY OF JEFFERSON)	

The undersigned, **Lonnie E. Bellar**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates for Kentucky Utilities Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Lonnie E. Bellar

Notary Public (SEAL)

My Commission Expires:

November 9, 2014

COMMONWEALTH OF KENTUCKY)	
)	SS
COUNTY OF JEFFERSON)	

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Director - Rates for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Robert M. Conroy

Notary Public (SEAL)

My Commission Expires:

November 9, 2014

COMMONWEALTH OF KENTUCKY)	
)	SS
COUNTY OF JEFFERSON)	

The undersigned, **Charles R. Schram**, being duly sworn, deposes and says that he is Director – Energy Planning, Analysis and Forecasting for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Charles R. Schram

Notary Public (SEAL)

Church & Rober

My Commission Expires:

<u>November 9, 2014</u>

COMMONWEALTH OF KENTUCKY)	
)	SS
COUNTY OF JEFFERSON)	

The undersigned, **John N. Voyles**, **Jr.**, being duly sworn, deposes and says that he is Vice President, Transmission and Generation Services for Kentucky Utilities Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

John N. Voyles, Jr.

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 5^{+1} day of 2011.

Notary Public (SEAL)

My Commission Expires:

November 9, 2014

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY UTILITIES)	
COMPANY FOR CERTIFICATES OF PUBLIC)	
CONVENIENCE AND NECESSITY AND)	CASE NO.
APPROVAL OF ITS 2011 COMPLIANCE PLAN)	2011-00161
FOR RECOVERY BY ENVIRONMENTAL)	
SURCHARGE)	

RESPONSE OF KENTUCKY UTILITIES COMPANY TO THE FIRST REQUESTS FOR PRODUCTION OF DOCUMENTS OF

RICK CLEWETT, RAYMOND BERRY, SIERRA CLUB, AND THE
NATURAL RESOURCE DEFENSE COUNCIL
DATED JULY 12, 2011

FILED: August 5, 2011

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 1

Witness: Robert M. Conroy

- O-1. Produce all discovery responses from KU to any other party in this proceeding.
- A-1. On July 28, 2011, KU sent out a redacted copy of the responses to the request for information filed with the Commission on July 25, 2011.

The Companies will disclose the redacted confidential information to any intervenor with a legitimate interest in such information and as required by the Commission, but only after such an intervenor has entered into a mutually satisfactory confidentiality agreement with the Companies.

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Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 2

Witness: Robert M. Conroy

- Q-2. Produce a non-redacted version of the KU 2011 Plan and all supporting documentation.
- A-2. On July 28, 2011, KU sent out a copy of the Application and Testimony filed with the Commission on June 1, 2011. KU did not redact any information from those documents.

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 3

- Q-3. Refer to page 5, lines 14-16 of the testimony of Charles R. Schram. Produce in machine readable or txt format the input and output files for all Strategist modeling that you carried out regarding the KU 2011 Plan.
- A-3. Please see the attached CD in the folder titled Question 3. The requested information is being provided pursuant to a Petition for Confidential Protection.

Attachment to Response to First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club, and the National Resource Defense Council dated July 12, 2011

Question No. 3

CONFIDENTIAL INFORMATION REDACTED

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 4

- Q-4. Refer to page 5, lines 14-16 of the testimony of Charles R. Schram. Produce in machine readable or txt format the input and output files for all PROSYM modeling that you carried out regarding the KU 2011 Plan.
- A-4. Please see the attached CD in the folder titled Question 4. The requested information is being provided pursuant to a Petition for Confidential Protection.

Attachment to Response to First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club, and the National Resource Defense Council dated July 12, 2011

Question No. 4

CONFIDENTIAL INFORMATION REDACTED

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 5

- Q-5. Refer to Table 1 on page 3 of Exhibit CRS-1. Produce any documents that you reviewed or relied on in determining the capital costs for environmental controls identified therein.
- A-5. The capital costs for environmental controls are described in the KU 2011 Plan Exhibit JNV-2.

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 6

- Q-6. Refer to Table 2 on page 4 of Exhibit CRS-1. Produce any documents that you reviewed or relied on in determining the PVRR of retiring and replacing capacity for each of the units identified in Table 2.
- A-6. Details on the cost of replacement technology are fully described in Volume III, Analysis of Supply-Side Technology Alternatives, of the Companies' 2011 Integrated Resource Plan ("IRP") filing. ¹

¹ In the Matter of: The 2011 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company, PSC Case No. 2011-00140.

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Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 7

Witness: John N. Voyles, Jr.

- Q-7. Produce the most recent condition or performance assessments for each of KU's electric generating units.
- A-7. Please see the response to KPSC-1 Question No. 32(h).

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 8

- Q-8. Produce a copy of any forecast or projection of future C02 costs, taxes, or emissions allowances prices that has been prepared by or for KU.
- A-8. No forecast of CO₂ prices was used in the preparation of the KU 2011 Plan. The Companies have not prepared or caused to be prepared a forecast or projection of possible future CO₂ costs, taxes, or emission allowance prices. The Companies have not done so because there is no reasonable basis on which to forecast such possible costs, all such costs being purely speculative at this time. Please see the response to KPSC-1 Question No. 2. Also, please see the response to MHC-1 Question No. 6 in the LG&E proceeding, Case No. 2011-00162.

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 9

- Q-9. Produce a copy of any plan for reducing CO₂ emissions that has been prepared by or for KU.
- A-9. The Companies have not prepared or caused to be prepared a plan for reducing CO₂ emissions.

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 10

Witness: Charles R. Schram

- Q-10. Produce a copy of any assessment of future natural gas prices and supplies that has been prepared by or for KU.
- A-10. The natural gas prices used in the preparation of the KU 2011 Plan were provided in response to KPSC-1 Question No. 44 pursuant to a Petition for Confidential Protection.

The Companies will disclose the confidential information to any intervenor with a legitimate interest in such information and as required by the Commission, but only after such an intervenor has entered into a mutually satisfactory confidentiality agreement with the Companies.

The Companies monitor reports from a variety of sources, including subscription services from IHA CERA ("CERA") and PIRA Energy Group ("PIRA"), to stay informed on natural gas price and supply developments. Please see the attachments on CD in the folder titled Question 10, which are being provided pursuant to a Petition for Confidential Protection. The CERA and PIRA reports are not included. The Companies requested from CERA and PIRA authorization to disclose the information provided to the Companies under the subscription service; however, neither CERA nor PIRA consented to the request.

Attachment to Response to First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club, and the National Resource Defense Council dated July 12, 2011

Question No. 10

CONFIDENTIAL INFORMATION REDACTED

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 11

Witness: Charles R. Schram

- Q-11. Produce a copy of any assessments of future coal prices and supplies that has been prepared by or for KU.
- A-11. The coal prices used in the preparation of the KU 2011 Plan were provided in response to KPSC-1 Question No. 44 pursuant to a Petition for Confidential Protection.

The Companies will disclose the confidential information to any intervenor with a legitimate interest in such information and as required by the Commission, but only after such an intervenor has entered into a mutually satisfactory confidentiality agreement with the Companies.

For many years, KU has used essentially the same forecast methodology as updated and improved over time. KU's Fuels Department establishes the desired fuel inventory levels by plant. Based on the Generation Planning fuel burn forecast by unit, the Fuels Department calculates the target purchase tonnage that will be needed each year to maintain desired inventory levels while meeting the forecasted fuel burn.

Once the target purchases are established, the Fuels Department incorporates the current contracts and spot orders in place for their full term with known tonnage volumes and prices. The difference between target purchases and existing contract committed purchases is calculated and labeled as "uncommitted tons" or "open position" in the forecast. The price for the uncommitted tons is estimated based on a combination of current coal bids prices and coal price forecasts from an independent third party consultant, Wood Mackenzie. The 2011 Wood Mackenzie price curve forecast was developed from the Wood Mackenzie Long-Term Price Outlook (April 2010). The 2011 bid price curve forecast was developed from the 2010 Spring LG&E/KU Request For Quotation data. These forecasts are blended to establish the 2011 Open Position Price Curve used to price the uncommitted tons. For the first year of the forecast, the bid price is weighted 100%. The weighting on the bid price is reduced by twenty-five percent (25%) each subsequent year. Therefore, for years five and beyond the open position price curve is the same as the Wood Mackenzie Long-Term Forecast. For example, the current forecast prices for 2011 for uncommitted tons would be forecast at 100% of the

Response to Question No. 11
Page 2 of 2
Schram

average price quoted in the bids received in the spring of 2010, 2012-2014 would be priced at a blend of bid prices and Wood Mackenzie forecast prices and 2015 and beyond would be priced at the Wood Mackenzie forecast prices.

Current transportation, barge fleeting, and rail car maintenance costs are added to the forecast price to determine the total forecast delivered price. For years beyond the current agreements the last year contact price is escalated to establish the costs for these services.

Please see the attachments on CD in the folder titled Question 11, which are being provided pursuant to a Petition for Confidential Protection.

Attachment to Response to First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club, and the National Resource Defense Council dated July 12, 2011

Question No. 11

CONFIDENTIAL INFORMATION REDACTED

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 12

Witness: John N. Voyles, Jr.

- Q-12. Produce a copy of any assessment or discussion of corrosion of the flue gas desulfurization controls on any of the units at KU's Ghent and Brown generating stations.
- A-12. Given the age and/or materials of construction of the flue gas desulfurization systems, there are no significant corrosion issues. Therefore, no corrosion assessments were necessary and any discussions of corrosion are merely routine.

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 13

Witness: John N. Voyles, Jr.

- Q-13. Produce a copy of any retirement, continued unit operation, or life extension studies or analyses prepared by or for KU for any of KU's coal-fired electric generating units.
- A-13. Please see the response to KPSC-1 Question No. 32(i).

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 14

Witness: John N. Voyles, Jr.

- Q-14. Produce a copy of any analysis or assessment of the economics of continued operation of any of KU's coal-fired electric generating units.
- A-14. Please see the response to KPSC-1 Question No. 32(i).

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 15

Witness: John N. Voyles, Jr. / Charles R. Schram

- Q-15. Produce a copy of any assessment or analysis of the potential impact that the U.S. EPA's draft rules on coal combustion byproducts would have on the cost of operating any or all of KU's coal-fired electric generating units.
- A-15. Please see Exhibit JNV-4, Exhibit CRS-2, the response to AG-1 Question No. 1 and the response to MHC-1 Question No. 6 in the LG&E proceeding in Case No. 2011-00162. KU has included in the scope of construction for the landfills approved as part of the 2009 ECR Plan in Case No. 2009-00197 the necessary liner that would allow for compliance with EPA's proposed Subtitle D requirements of future CCR regulations. KU has not performed an engineering assessment regarding all potential aspects of future EPA regulations on coal combustion byproducts as they may apply to storage and process pond closures and other requirements.

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 16

Witness: John N. Voyles, Jr. / Charles R. Schram

- Q-16. Produce a copy of any assessment or analysis of the need to install, and/or of the economics of installing, additional pollution controls at any KU's coal-fired electric generating units in response to any existing, pending, or anticipated federal environmental regulation.
- A-16. The Company's Application in this proceeding addresses the need for additional pollution controls on existing units to comply with the specific regulations discussed in Testimony. Please see the attached sensitivity analysis. Certain parts of the attachment are being provided pursuant to a Petition for Confidential Protection. Also, please see the response to AG-1 Question No. 3.

2011 Air Compliance Plan Sensitivity Analysis



PPL companies

Generation Planning & Analysis July 2011

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1.0 Introduction

The analysis of the 2011 Air Compliance Plan ("Compliance Plan") was based on multiple inputs having a range of potential values. As a result, the Companies conducted various analyses to assess the reasonableness of its recommendations. These analyses are listed below and summarized in the following sections.

- 1. Fuel Price: The Companies evaluated the sensitivity of its recommendations to changes in fuel prices.
- 2. Future Operation: For each of the units for which controls are recommended, the Companies computed the number of years the units would have to continue to operate to justify the cost of the proposed controls.
- 3. Future Environmental Costs: For each of the units for which controls are recommended, the Companies computed the cost of potential future controls that could be incurred without changing the Companies' current recommendation.

New environmental controls were not recommended for the Cane Run, Green River, and Tyrone coal units. The analyses of controls for these units were based on the initial set of cost estimates from Black and Veatch¹. Given the operating characteristics, age, and size of the units as well as the controls needed to comply with current environmental regulations, the cost of controls at Green River and Tyrone cannot be justified. Based on current cost estimates and the potential for future environmental control costs, this is also true for Cane Run. However, since a significant reduction in the cost of controls for Cane Run could impact the Companies' ultimate recommendation regarding Cane Run, the Companies began formally establishing and documenting estimates for Cane Run in July, using the recently constructed FGD system at Brown and the more refined 2011 Black & Veatch studies for Ghent, Mill Creek and Brown as a basis. Given the EPA timelines for complying with the new environmental regulations, the Companies focused its engineering resources on refining plans for the stations for which – based on initial cost estimates – new environmental controls are recommended. When more refined estimates for the cost of controls at Cane Run are available, this information will be incorporated in additional analysis.

2.0 Additional Analyses

2.1 Fuel Price

In the Compliance Plan analysis, the Companies – for each of the units for which a need for controls had been established – compared the difference in present value of revenue requirements ("PVRR") between (a) installing controls and (b) retiring the unit and replacing the capacity. These analyses are based on forecasts of coal and natural gas prices. If coal becomes relatively more expensive compared to gas, the options to install controls are less favored and retirement is more favored.

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Table 1 summarizes the high sulfur coal and natural gas prices used in the Compliance Plan.

¹ For the units for which controls are recommended, cost estimates for controls are based on more refined engineering estimates from Black and Veatch included in the Compliance Plan.

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Table 1 – Coal and Natural Gas Prices (\$/MMBtu)

	Compliance Plan		
Year	High Sulfur Coal	Natural Gas	
2011			
2012			
2013			
2014			
2015			
2016			
2017			
2018			
2019			
2020			
2021			
2022			
2023			
2024			
2025			

Among all units for which controls are recommended in the Compliance Plan, the difference in PVRR between installing controls and retirement is smallest for Brown 1-2 (\$228 million in favor of installing controls). The average margin between coal and natural gas prices in the Compliance Plan would have to decrease by 42% to reduce the PVRR difference for Brown 1-2 to zero.

2.2 Future Operation

Because the development and impact of potential future environmental regulations is uncertain, the Companies computed the number of years the units for which controls are recommended would have to continue to operate to justify the cost of controls. For each unit, this number of years was computed using an iterative process. In each iteration, the PVRR of the 'retire and replace capacity' case was compared to the PVRR of a modified version of the 'install controls' case that assumed that the unit with controls would be retired several years after controls were initially added. In the iterative process, the retirement year for the units with controls was increased until the difference in PVRR between the cases was close to zero. Table 2 summarizes the results of this analysis as well as the projected end of each unit's economic life based on a 2007 life assessment study². For each of the units for which controls are

² The projected end of the economic life of each unit is uncertain. Ultimately, the actual life of a unit is based on the way the unit is operated and maintained. The Companies believe that continuing a prudent level of ongoing maintenance and investment at its remaining generating units will ensure the ongoing reliable operation of the units and minimize the potential for a significant mechanical failure. Trimble County 1, Mill Creek 3-4, and Ghent 3-4 are being maintained to ensure that, year over year, a minimum 30-year remaining useful life is expected. Mill Creek 1-2, Brown 1-3, and Ghent 1-2 are being maintained to ensure that, year over year, a minimum 20-year remaining useful life is expected. Clearly, the number of years each of the units would have to operate to justify the cost of controls is less than that unit's life expectancy based on the way the units are being maintained.

recommended, the year through which the unit would have to operate to justify the cost of controls is earlier than the projected end of the unit's economic life.

Table 2 – Year through which Unit Would Have to Operate to Justify Cost of Controls

	Year through which Unit	Projected End of Economic
	Would Have to Operate to	Life Based on 2007 Life
Unit	Justify Cost of Controls	Assessment Study
Tyrone 3	N/A	2018
Green River 3	N/A	2018
Brown 3	2019	2026
Cane Run 4	N/A	2018
Cane Run 6	N/A	2023
Brown 1-2	2021	2026
Cane Run 5	N/A	2022
Ghent 3	2020	2041
Ghent 1	2021	2026
Green River 4	N/A	2018
Mill Creek 4	2023	2042
Trimble County 1	2018	2050
Ghent 4	2018	2044
Mill Creek 3	2021	2038
Ghent 2	2018	2027
Mill Creek 1-2	2024	2026

The Companies believe that stricter limits on the emission of CO_2 could have major impacts on the entire utility industry, LGE/KU, and its customers. Potential CO_2 regulations could take many forms, but the EPA has indicated by the "Tailoring Rule" that it will impose a BACT approach, acknowledging at the same time there is no current technology to control CO_2 emissions. It is difficult to estimate the impact of this approach on individual generating units because it is currently unclear if, or when, commercially viable and scalable technologies will become available which could impose additional costs on fossil fueled generation fleets.

2.3 Future Environmental Costs

The Compliance Plan analysis considered estimates for potential future environmental costs related to cooling water intake structures (section 316(b) of the Clean Water Act) and wastewater discharge compliance; all of which will require capital investment within the next 10-15 years³. The Compliance Plan does not recommend (and therefore did not consider the cost of) SCRs for Brown 1-2, Ghent 2, or Mill Creek 1-2. Because more stringent NO_x emission reduction requirements in the future could require the construction of SCRs on some or all of these units, the Companies considered the cost of potential future controls and whether these costs could be incurred without changing the Companies' current recommendation. For these units, Table 3 summarizes the differences in PVRR between (a) installing controls and (b) retiring and replacing capacity as well as capital cost estimates and revenue

³ Potential future environmental costs also include costs for capping ash ponds related to coal combustion residual regulations. However, these costs will be incurred regardless of whether a unit is retired.

requirements associated with new SCRs. The PVRR values are taken from the Compliance Plan analysis**Error! Reference source not found.**.

Table 3 – Difference in PVRR and Estimates of SCR Capital Costs (\$M, \$2011)

Unit	Base Case Difference in PVRR	SCR Capital Cost Estimate	PVRR of SCR and Associated O&M
Brown 1-2	228	154	195
Ghent 2	1,139	232	288
Mill Creek 1-2	1,022	194	260

Black and Veatch estimated the cost of SCRs for Ghent 2 and Mill Creek 1-2 to be \$232 million and \$194 million, respectively. The PVRRs of these capital costs and the associated incremental operating and maintenance costs assuming – conservatively – a 2018 in-service date are \$288 million and \$260 million, respectively. These values are notably lower than the differences in revenue requirements in Table 3 for these units.

In Table 3, Brown 1-2 has the smallest difference in PVRR. Black and Veatch estimated the cost of SCRs (in \$2011) for Brown 1 and Brown 2 to be \$59 million and \$95 million, respectively. The PVRR of these capital costs and the associated incremental operating and maintenance costs assuming a 2018 inservice date is \$195 million, which is less than the difference in PVRR for Brown 1-2. Because of their size, installing SCRs on Brown 1-2 would have a limited impact on the Companies' overall NOx emissions and would be the least desirable option for further reducing NOx emissions⁴. For these reasons, the likelihood of installing SCRs on Brown 1-2 is very low.

⁴ Installing SCRs on Brown 1-2 would reduce NOx emissions by approximately 5%. Furthermore, based on the size of these units, a less-costly selective non-catalytic reduction control (SNCR) may be a viable alternative.

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Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 17

Witness: John N. Voyles, Jr.

- Q-17. Produce a copy of any assessment prepared or reviewed by or for KU that examines the impact that retirement of any of KU's electric generating units would have on capacity adequacy, transmission grid stability, transmission grid support, voltage support, or transmission system reliability.
- A-17. There are no assessments that examine the impact of retirements on capacity adequacy. However, please refer to the 2011 IRP documentation in Volume III, LG&E and KU 2011 Reserve Margin Study. The assumptions underlying the determination of the optimal reserve margin included the retirement of the coal units at the Cane Run, Green River, and Tyrone Stations in 2016.

The Companies' Transmission group did perform an analysis that examined the impact on the transmission system of potential power plant retirements. The analysis is confidential and may contain "critical energy infrastructure information" as defined by the Federal Energy Regulatory Commission, and is the subject of a Petition for Confidential Protection being filed herewith.

The Companies will disclose the confidential information to any intervenor with a legitimate interest in such information and as required by the Commission, but only after such an intervenor has entered into a mutually satisfactory confidentiality agreement with the Companies.

Attachment to Response to First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club, and the National Resource Defense Council dated July 12, 2011

Question No. 17

CONFIDENTIAL INFORMATION REDACTED

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 18

Witness: Lonnie E. Bellar

- Q-18. Produce a copy of any assessment prepared or reviewed by or for KU that examines the impact that retirement of any of KU's electric generating units may have on the community in which such unit is in, or on the workers currently employed in such unit.
- A-18. Consistent with Commission precedent,² the Companies did not evaluate externalities such as the impact of the retirement of a generating unit may have on a community in which such unit is in when determining the least-cost plan for meeting native load requirements and complying with anticipated environmental regulations.

KU has begun, but has not yet completed a final and comprehensive assessment of the impact on employees of potential unit retirements. No unit retirements are currently contemplated until the end of 2015. As unit retirement decisions are made and the date of any retirements near, KU will complete a final and comprehensive analysis surrounding the impact to its employees and develop appropriate plans to address any impacts.

² See, .e.g., In the Matter of the Application of East Kentucky Power Cooperative, Inc., for a Certificate of Public Convenience and Necessity to Construct a 138 kV Transmission Line in Rowan County, Kentucky, Case No. 2005-00089, Order at 7 (Aug. 19, 2005) ("Unlike some other utility regulatory agencies, this Commission has not previously attempted to quantify "externalities," nor does it intend to").

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 19

Witness: Lonnie E. Bellar

- Q-19. Produce a copy of any assessment prepared or reviewed by or for KU that examines steps that could be taken to mitigate or reduce the impact that retirement of any of KU's electric generating units may have on the community in which such unit is in, or on the workers currently employed in such unit.
- A-19. See the response to Question No. 18.

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Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 20

- Q-20. Produce a copy of any assessment of the potential for or cost of renewable resources within KU's service territory, in the State of Kentucky, or in one of the states contiguous to Kentucky that have been prepared by or for KU or that you reviewed or relied on in developing the KU 2011 Plan.
- A-20. In developing the KU 2011 Plan, the results of the 2011 IRP were the basis for evaluating the installation of environmental controls. Please see the Companies' response to Initial Request for Production of Documents of Rick Clewett, et al., Question No. 29, filed with the Commission on August 4, 2011 in Case No. 2011-00140.

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Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 21

- Q-21. Produce a copy of any assessment of the availability or cost of unused natural gas combined cycle capacity within KU's service territory, in the State of Kentucky, or in one of the states contiguous to Kentucky that have been prepared by or for KU or that you reviewed or relied on in developing the KU 2011 Plan.
- A-21. No assessments of unused natural gas combined cycle capacity have been performed by or for the Companies.

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 22

- Q-22. Produce a copy of any assessment of the feasibility or cost of constructing additional natural gas combined cycle capacity within KU's service territory, in the State of Kentucky, or in one of the states contiguous to Kentucky that have been prepared by or for KU or that you reviewed or relied on in developing the KU 2011 Plan.
- A-22. In developing the KU 2011 Plan, the results of the 2011 IRP were the basis for evaluating the installation of environmental controls. Please see the Companies' response to Initial Request for Production of Documents of Rick Clewett, et al., Question No. 31, filed with the Commission on August 4, 2011 in Case No. 2011-00140.

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 23

- Q-23. Produce a copy of any assessment of the potential for or cost of combined heat and power within KU's service territory, in the State of Kentucky, or in one of the states contiguous to Kentucky that have been prepared by or for KU or that you reviewed or relied on in developing the KU 2011 Plan.
- A-23. No assessments of combined heat and power have been performed by or for the Companies.

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Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 24

- Q-24. Produce a copy of any assessment or analysis of the economics of constructing companyowned solar resources that have been prepared by or for KU or that you reviewed or relied on in developing the KU 2011 Plan.
- A-24. In developing the KU 2011 Plan, the results of the 2011 IRP were the basis for evaluating the installation of environmental controls. Please see the Companies' response to Initial Request for Production of Documents of Rick Clewett, et al., Question No. 33, filed with the Commission on August 4, 2011 in Case No. 2011-00140.

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 25

- Q-25. Produce a copy of any assessment or analysis of the economics of constructing companyowned wind power resources that have been prepared by or for KU or that you reviewed or relied on in developing the KU 2011 Plan.
- A-25. In developing the KU 2011 Plan, the results of the 2011 IRP were the basis for evaluating the installation of environmental controls. Please see the Companies' response to Initial Request for Production of Documents of Rick Clewett, et al., Question No. 34, filed with the Commission on August 4, 2011 in Case No. 2011-00140.

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Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 26

- Q-26. Produce any workpaper, source document, and, in machine readable or txt format, input and output files, used in or developed as part of the modeling carried out in developing the KU 2011 Plan.
- A-26. Please see the attachments on CD in the folder titled Question 26 and the responses to Question Nos. 3 and 4. Certain documents are being provided pursuant to a Petition for Confidential Protection.

Response to the First Set Requests for Production of Documents of Rick Clewett, Raymond Berry, Sierra Club and the Natural Resource Defense Council

Case No. 2011-00161

Question No. 27

- Q-27. Produce in machine readable or txt format the input and output files for each sensitivity analysis that you considered as part of developing the KU 2011 Plan.
- A-27. Please see the response to Question No. 3.