LG&E

a PPL company

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

RECEIVED

SEP 01 2011

PUBLIC SERVICE COMMISSION

Louisville Gas and Electric Company
State Regulation and Rates
220 West Main Street
P.O. 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

September 1, 2011

RE: ***In the Matter of: The Application of Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Approval of Its 2011 Compliance Plan for Recovery by Environmental Surcharge*** **- Case No. 2011-00162**

Dear Mr. DeRouen:

Enclosed please find and accept for filing the original and fifteen (15) copies of Louisville Gas and Electric Company's Motion to Deviate from Requirement Governing Filing of Copies for certain responses to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club, and the Natural Resources Defense Council dated August 18, 2011, in the above-referenced matter.

Please confirm your receipt of this filing by placing the stamp of your Office with the date received on the attached additional copies. Please do not hesitate to contact the undersigned should you have any questions.

Sincerely,

Robert M. Conroy

cc: Parties of Record

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY AND APPROVAL OF ITS 2011 COMPLIANCE PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE	)))))))	**CASE NO. 2011-00162**

MOTION OF LOUISVILLE GAS AND ELECTRIC COMPANY TO DEVIATE FROM REQUIREMENT GOVERNING FILING OF COPIES

Louisville Gas and Electric Company ("LG&E") by counsel, petitions the Kentucky Public Service Commission ("Commission") to grant LG&E 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. LG&E 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 LG&E to provide the attachments in an electronic format. In support of its Motion, LG&E states as follows:

1. Pursuant to Commission's June 28, 2011 Order, LG&E 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 LG&E's attachments to its responses to the Joint Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club, and Natural Resources Defense Council (collectively, "Environmental Group") are voluminous, and the Environmental Group has requested certain information explicitly in electronic form. LG&E is therefore requesting permission to file only electronic copies of the

attachments on compact disc for LG&E's responses to Request for Information Nos. 1, 9, and 30.

2. The Environmental Group's Joint Supplemental Request for Information No. 1 asks for the names of the electronic files LG&E provided in response to the Environmental Group's Initial Request for the Production of Documents No. 26. By a motion dated August 5, 2011, LG&E requested a deviation from the paper filing requirement concerning its response to the Environmental Group's request due to the volume of the response, which response LG&E provided solely in electronic format on compact disc. LG&E now seeks to provide in response to the Environmental Group's Joint Supplemental Request for Information No. 1 the same electronic files provided in response to the Environmental Group's Initial Request for the Production of Documents No. 26, this time with the full-length file names intact. Because LG&E will produce the same volume of data in this response as it produced in the previous response, it respectfully requests a deviation from the paper filing requirement and proposes to file all copies of this response with the Commission electronically on compact disc, and to provide all service copies in the same format.

3. The Environmental Group's Joint Supplemental Request for Information No. 9 explicitly asks for "data in an electronic or standard machine readable format" concerning annual capital expenditures for a broad range of items. LG&E proposes to comply with the request by providing the requested information in an electronic format on compact disc, and requests a deviation from the paper filing requirement to provide all copies of the response to the Commission and the intervenors in the same format.

4. LG&E's response to the Environmental Group's Joint Supplemental Request for Information No. 30 is voluminous, consisting of over 1,700 pages. To produce a paper original

and 15 paper copies of each response for the Commission would consume over 27,000 pages, and service copies would consume even more pages. For that reason, LG&E requests a deviation to produce all copies to the Commission and all service copies in electronic format on compact disc.

5. 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 LG&E is providing them complies with the Environmental Group's request.

6. LG&E is making all of the above requests to deviate from the paper filing requirement pursuant to 807 KAR 5:001 § 14.

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

Dated: September 1, 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 Louisville Gas and Electric 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; overnight delivery; or hand-delivery, this 1st day of September 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

Scott E. Handley
Administrative Law Division
Office of the Staff Judge Advocate
50 Third Avenue, Room 215
Fort Knox, KY 40121-5000

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

Edward George Zuger III
Zuger Law Office PLLC
P.O. Box 728
Corbin, KY 40702

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

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

Tom FitzGerald
Kentucky Resources Council
P.O. Box 1070
Frankfort, KY 40602

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

Robert A. Ganton
Regulatory Law Office
U.S. Army Legal Services Agency
901 N. Stuart Street, Suite 525
Arlington, VA 22203-1837

Allyson Sturgeon

Counsel for Louisville Gas and Company

RECEIVED
SEP 01 2011
PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY AND APPROVAL OF ITS 2011 COMPLIANCE PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE	)	**CASE NO. 2011-00162**

PETITION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR CONFIDENTIAL PROTECTION FOR RESPONSES TO CERTAIN DATA REQUESTS OF DREW FOLEY, JANET OVERMAN, GREGG WAGNER, SIERRA CLUB, AND NATURAL RESOURCES DEFENSE COUNCIL

Louisville Gas and Electric Company ("LG&E") hereby petitions the Kentucky Public Service Commission ("Commission") pursuant to 807 KAR 5:001, Section 7, and KRS 61.878(1)(c) to grant confidential protection for the items described herein, which LG&E seeks to provide in response to the Second Data Request of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club, and Natural Resources Defense Council, Request No. 28. In support of this Petition, LG&E 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.

2. Request No. 28 asks LG&E to provide all reports, memoranda, presentations, or other documents related to the status and need for coal-fired generating plants. In response, LG&E is providing confidential board minutes. The board minutes contain information showing

LG&E's highest level decision making processes on numerous matters, including confidential and proprietary matters. To the extent such information is obtained by competitors, those competitors would derive an unfair commercial advantage.

3. If the Commission disagrees with any of these requests for confidential protection, however, it must hold an evidentiary hearing (a) to protect LG&E'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 LG&E is seeking confidential treatment is not known outside of LG&E, is not disseminated within LG&E 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. LG&E 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, Section 7 and the Commission's June 28, 2011 Order in this proceeding, LG&E herewith files with the Commission one copy of the above-discussed responses with the confidential information highlighted and fifteen (15) copies of its responses without the confidential information.

WHEREFORE, Louisville Gas and Electric Company respectfully requests that the Commission grant confidential protection for the information at issue, or in the alternative, schedule and evidentiary hearing on all factual issues while maintaining the confidentiality of the information pending the outcome of the hearing.

Dated: September 1, 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 Louisville Gas and Electric Company

400001.139563/3990233.1

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing Petition was served via U.S. mail, first-class, postage prepaid; overnight delivery; or hand-delivery, this 1st day of September 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

Scott E. Handley
Administrative Law Division
Office of the Staff Judge Advocate
50 Third Avenue, Room 215
Fort Knox, KY 40121-5000

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

Edward George Zuger III
Zuger Law Office PLLC
P.O. Box 728
Corbin, KY 40702

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

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

Tom FitzGerald
Kentucky Resources Council
P.O. Box 1070
Frankfort, KY 40602

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

Robert A. Ganton
Regulatory Law Office
U.S. Army Legal Services Agency
901 N. Stuart Street, Suite 525
Arlington, VA 22203-1837

Allyson Sturgeon

Counsel for Louisville Gas and Electric Company a PPL company

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

Louisville Gas and Electric Company
State Regulation and Rates
220 West Main Street
P.O. 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

September 1, 2011

RE: ***In the Matter of: The Application of Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Approval of Its 2011 Compliance Plan for Recovery by Environmental Surcharge*** **- Case No. 2011-00162**

Dear Mr. DeRouen:

Enclosed please find an original and fifteen (15) copies of Louisville Gas and Electric Company's (LG&E) response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club, and the Natural Resources Defense Council dated August 18, 2011, in the above-referenced matter.

Also enclosed are an original and fifteen (15) copies of a Petition for Confidential Protection regarding certain information contained in response to Question No. 28.

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

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF LOUISVILLE GAS AND	)	
ELECTRIC COMPANY FOR CERTIFICATES OF	)	
PUBLIC CONVENIENCE AND NECESSITY AND	)	**CASE NO.**
APPROVAL OF ITS 2011 COMPLIANCE PLAN	)	**2011-00162**
FOR RECOVERY BY ENVIRONMENTAL	)	
SURCHARGE	)	

RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TO THE SUPPLEMENTAL REQUESTS FOR INFOMRATION OF
DREW FOLEY, JANET OVERMAN, GREGG WAGNER,
SIERRA CLUB, AND THE NATURAL RESOURCES DEFENSE COUNCIL
DATED AUGUST 18, 2011

FILED: SEPTEMBER 1, 2011

VERIFICATION

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

The undersigned, **Daniel K. Arbough**, being duly sworn, deposes and says that he is Treasurer for Louisville Gas and Electric 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.

Daniel K. Arbough

Daniel K. Arbough

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 31st day of August 2011.

Tammy J. Elzy (SEAL)

Notary Public

My Commission Expires:

November 9, 2014

VERIFICATION

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 Louisville Gas and Electric 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
Lonnie E. Bellar

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 31st day of August 2011.

Tammy J. Elzy (SEAL)
Notary Public

My Commission Expires:

November 9, 2014

VERIFICATION

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
Charles R. Schram

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 31st day of August 2011.

Tammy J. Elzy (SEAL)
Notary Public

My Commission Expires:

November 9, 2014

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Gary H. Revlett**, being duly sworn, deposes and says that he is Director – Environmental Affairs 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.

Gary H. Revlett
Gary H. Revlett

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 31st day of August 2011.

Tammy J. Elzy (SEAL)
Notary Public

My Commission Expires:

November 9, 2014

VERIFICATION

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 Louisville Gas and Electric 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.

John N. Voyles, Jr.

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 31st day of August 2011.

Tammy J. Elzy (SEAL)
Notary Public

My Commission Expires:

November 9, 2014

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 1

Witness: Charles R. Schram

Q-1. **File Names:** Refer to Attachment to Response to SC/NRDC Document Request 26, provided by CD on 8-5-11. Please provide original file names for all documents contained in the Question 26 subfolders BreakevenFuel and BreakevenYears.

A-1. The requested information is being provided on the attached CD in the folder titled Question No. 1.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 2

Witness: Charles R. Schram

Q-2. **MTPCapital Costs:** Refer to Attachment to Response to SC/NRDC Document Request 26, provided by CD on 8-5-11, main folder, file 20110517_LAK_11IRPRetireStudies_MC1-2CombFGD.xlsx.

a. Please provide a detailed description of MTPCapital tab, and any documentation or workpapers that support the values given in the tab.

A-2. The MTPCapital tab referenced in the above request contains revenue requirement information associated with ongoing capital costs. The table below summarizes the ongoing capital costs for each of the Companies' generating stations. These costs are assumed to escalate at 2.5% per year. For each station, the CER module of Strategist was used to compute revenue requirements for the 2011 capital cost. Then, the revenue requirements associated with the capital costs in the remaining years were computed by escalating the revenue requirements for the 2011 capital cost by 2.5%. The total revenue requirements by station were allocated to individual units based on the units' capacities. Please see attachment on CD to the response to SC-NRDC Production of Documents Question No. 26 in the folder titled CER/MTP/20110429_MTPCapital.xlsx for the derivation of the annual ongoing capital costs by station.

Station	Ongoing Capital (2011 $M)
Brown	5
Cane Run	3
Ghent	22
Green River	1
Mill Creek	16
Trimble	3
Tyrone	1

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 3

Witness: Charles R. Schram

Q-3. **Landfill Costs:** Refer to Attachment to Response to SC/NRDC Document Request 26, provided by CD on 8-5-11, main folder, file 20110517_LAK_11IRPRetireStudies_MC1-2CombFGD.xlsx.

a. Please provide a detailed description of LandfillCapital tab, and any documentation or workpapers that support the values given in tab.

b. Please explain the meaning and derivation of the values given in lines 24-33 of the LandfillCapital tab.

A-3. a The LandfillCapital tab contains the revenue requirements associated with future capital costs for the storage of coal combustion residuals. The revenue requirements were computed using the CER module of Strategist and allocated to individual units based on the units' capacities. The capital costs are taken from the 2009 ECR filing (see Case No. 2009-00198). Please see attachments on CD to the response to SC-NRDC Production of Documents Question No. 3 for the input and output files of the CER module of Strategist.

b. The values given in lines 24-33 are the revenue requirements associated with future capital costs for the storage of coal combustion residuals. Please see response to Question No. 3a.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 4

Witness: Charles R. Schram

Q-4. **Water Costs:** Refer to Attachment to Response to SC/NRDC Document Request 26, provided by CD on 8-5-11, main folder, file 20110517_LAK_11IRPRetireStudies_MC1-2CombFGD.xlsx.

a. Please provide a detailed description of WaterCapital tab, and any documentation or workpapers that support the values given in tab.

b. Please explain the meaning and derivation of the values given in lines 25-30 of the WaterCapital tab.

A-4. a. The WaterCapital tab contains the revenue requirements associated with future capital costs for complying with effluent guidelines scheduled to be proposed in late 2012. The revenue requirements were computed using the CER module of Strategist and allocated to individual units based on the units' capacities. The capital costs are estimated based on a range of control costs provided by a consultant in our Trimble County KPDES Permit Application process. The capital costs were further refined using actual costs from a sister company's water treatment installation scaled to match our stations' expected volumes of water to be treated. Please see attachments on CD to the response to SC-NRDC Production of Documents Question No. 3 for the input and output files of the CER module of Strategist.

b. The values given in lines 25-30 are the revenue requirements associated with future capital costs for complying with these regulations. Please see response to Question No. 4a.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 5

Witness: Charles R. Schram

Q-5. **Escalation Rates:** Refer to Attachment to Response to SC/NRDC Document Request 26, provided by CD on 8-5-11, main folder, file 20110517_LAK_11IRPRetireStudies_MC1-2CombFGD.xlsx.

a. Please explain the escalation rate of 2.5% used in the MTPCapital tab, and provide all calculations and workpapers used to make that determination.

b. Please explain the escalation rate of 2.0% used in the RetirementCost_Savings and NewControlsFOM tabs, and provide all calculations and workpapers used to make those determinations.

A-5. a. The 2.5% escalation rate was used for capital costs and is based on construction-related price indices from IHS Global Insight.

b. The 2% escalation rate was used for O&M costs and is based on prices indices for materials and other costs from IHS Global Insight.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 6

Witness: Charles R. Schram

Q-6. **Retirement Costs:** Refer to Attachment to Response to SC/NRDC Document Request 26, provided by CD on 8-5-11, main folder, file 20110517_LAK_11IRPRetireStudies_MC1-2CombFGD.xlsx. In the RetirementCost_Savings tab, a $2.1 million dollar cost appears in the year 2016 for each and every plant. Please explain, for each plant, what the $2.1 million cost entails and please provide all calculations and workpapers used to make that determination.

A-6. Please see the Companies' response to KPSC-2 Question No. 13a.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 7

Witness: Charles R. Schram

Q-7. **New Controls Capital Costs:** Refer to Attachment to Response to SC/NRDC Document Request 26, provided by CD on 8-5-11, main folder, file 20110517_LAK_11IRPRetireStudies_MC1-2CombFGD.xlsx.

a. In tab RRComparison, the formulas in rows 104 (and following rows) for calculating the avoided capital cost of retiring Tyrone 3 appear to reference capital costs for Green River 3. Please explain why Green River 3 is used for this calculation instead of Tyrone 3.

b. In tab NewControlsCapital, please provide the stream of annual capital expenses for new controls for years 2010 - 2059 for Tyrone 3, similar to those shown on the NewControlsCapital tab for the Brown, Ghent, Mill Creek, Trimble County, Cane Run, and Green River plants.

A-7. a. Because Green River 3 and Tyrone 3 are similar in size and vintage, the avoided capital for Tyrone 3 and Green River 3 was assumed to be equal.

b. Please see costs for Green River 3 in the NewControlsCapital tab. Annual capital expenses for Green River 3 and Tyrone 3 were assumed to be equal.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 8

Witness: Charles R. Schram

Q-8. **New Controls Fixed O&M Costs:** Refer to Attachment to Response to SC/NRDC Document Request 26, provided by CD on 8-5-11, main folder, file 20110517_LAK_11IRPRetireStudies_MC1-2CombFGD.xlsx.

a. In tab RRComparison, the formulas in rows 370 (and following rows) for calculating the avoided fixed O&M cost of retiring Tyrone 3 appear to reference FOM costs for Green River 3. Please explain why Green River 3 is used for this calculation instead of Tyrone 3.

b. In tab NewControlsFOM, please provide the stream of annual FOM costs for new controls for years 2010 - 2059 for Tyrone 3, similar to those shown on the NewControlsCapital tab for the Brown, Ghent, Mill Creek, Trimble County, Cane Run, and Green River plants.

A-8. a. Because Green River 3 and Tyrone 3 are similar in size and vintage, the avoided fixed O&M costs for Tyrone 3 and Green River 3 were assumed to be equal.

b. In responding to this interrogatory, the Companies identified a minor discrepancy in the workbook in question: the fixed O&M costs for Tyrone 3, Green River 3, and Green River 4 inadvertently included costs for a new SCR on those units. The impact of this inclusion is not material; removing these costs does not impact the Companies' recommendation to retire these units in 2016.

The table below contains the present value revenue requirement ("PVRR") differences from Table 2 in Exhibit CRS-1 for these units as well as updated PVRR differences reflecting the removal of the SCR-related fixed O&M costs. The updated PVRR differences were computed by changing the values in cells F50 and F53 (in the NewControlsFOM tab) to zero. After making this change, the updated PVRR differences for Tyrone 3, Green River 3, and Green River 4 are located in the RRComparison tab in cells C427, C428, and C436, respectively. These changes do not impact the results of any other analyses in this proceeding. For annual fixed O&M costs for Tyrone 3, please see the fixed O&M costs for Green River 3 on lines 51 and 52 of the NewControlsFOM tab.

Unit	PVRR Difference: Exhibit CRS-1	PVRR Difference: Updated to Reflect Removal of SCR-Related FOM
Tyrone 3	(13)	(1)
Green River 3	(80)	(69)
Green River 4	(110)	(94)

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 9

Witness: Charles R. Schram

Q-9. Please identify the expected annual capital expenditures <u>other than</u> for the new environmental controls required at each KU or LG&E generating unit, including known or estimated periodic maintenance, life extension projects, or other required capital investments. Provide data in an electronic or standard machine readable format.

A-9. The expected annual capital expenditures information is being provided on the attached CD in the folder titled Question No. 9.

	2011	2012	2013	2014	2015	2016	2017	2018
Brown 1	738	753	768	783	799	815	831	848
Brown 2	1,221	1,245	1,270	1,295	1,321	1,348	1,375	1,402
Brown 3	3,041	3,102	3,164	3,227	3,292	3,357	3,425	3,493
Cane Run 4	826	842	859	876	894	0	0	0
Cane Run 5	895	913	931	950	969	0	0	0
Cane Run 6	1,279	1,304	1,331	1,357	1,384	0	0	0
Ghent 1	5,448	5,557	5,668	5,782	5,898	6,015	6,136	6,258
Ghent 2	5,552	5,663	5,776	5,891	6,009	6,129	6,252	6,377
Ghent 3	5,506	5,616	5,728	5,843	5,960	6,079	6,200	6,324
Ghent 4	5,494	5,604	5,716	5,831	5,947	6,066	6,187	6,311
Green River 3	417	426	434	443	452	0	0	0
Green River 4	583	594	606	618	631	0	0	0
Mill Creek 1	3,293	3,359	3,427	3,495	3,565	3,636	3,709	3,783
Mill Creek 2	3,272	3,337	3,404	3,472	3,541	3,612	3,685	3,758
Mill Creek 3	4,250	4,335	4,422	4,510	4,600	4,692	4,786	4,882
Mill Creek 4	5,185	5,288	5,394	5,502	5,612	5,724	5,839	5,956
Trimble County 1	1,233	1,257	1,283	1,308	1,334	1,361	1,388	1,416
Trimble County 2	1,767	1,803	1,839	1,875	1,913	1,951	1,990	2,030
Tyrone 3	1,000	1,020	1,040	1,061	1,082	0	0	0

75% TC

Escalation Rate 2%

	2019	2020	2021	2022	2023	2024	2025	2026
Brown 1	865	882	900	918	936	955	974	994
Brown 2	1,430	1,459	1,488	1,518	1,548	1,579	1,611	1,643
Brown 3	3,563	3,634	3,707	3,781	3,857	3,934	4,012	4,093
Cane Run 4	0	0	0	0	0	0	0	0
Cane Run 5	0	0	0	0	0	0	0	0
Cane Run 6	0	0	0	0	0	0	0	0
Ghent 1	6,384	6,511	6,642	6,774	6,910	7,048	7,189	7,333
Ghent 2	6,505	6,635	6,767	6,903	7,041	7,182	7,325	7,472
Ghent 3	6,451	6,580	6,711	6,846	6,983	7,122	7,265	7,410
Ghent 4	6,437	6,566	6,697	6,831	6,968	7,107	7,250	7,395
Green River 3	0	0	0	0	0	0	0	0
Green River 4	0	0	0	0	0	0	0	0
Mill Creek 1	3,859	3,936	4,015	4,095	4,177	4,260	4,346	4,433
Mill Creek 2	3,833	3,910	3,988	4,068	4,149	4,232	4,317	4,403
Mill Creek 3	4,980	5,079	5,181	5,284	5,390	5,498	5,608	5,720
Mill Creek 4	6,075	6,196	6,320	6,447	6,576	6,707	6,841	6,978
Trimble County 1	1,444	1,473	1,503	1,533	1,564	1,595	1,627	1,659
Trimble County 2	2,071	2,112	2,154	2,197	2,241	2,286	2,332	2,378
Tyrone 3	0	0	0	0	0	0	0	0

75% TC

Escalation Rate

	2027	2028	2029	2030	2031	2032	2033	2034
Brown 1	1,014	1,034	1,054	1,076	1,097	1,119	1,141	1,164
Brown 2	1,676	1,709	1,744	1,778	1,814	1,850	1,887	1,925
Brown 3	4,175	4,258	4,343	4,430	4,519	4,609	4,701	4,795
Cane Run 4	0	0	0	0	0	0	0	0
Cane Run 5	0	0	0	0	0	0	0	0
Cane Run 6	0	0	0	0	0	0	0	0
Ghent 1	7,479	7,629	7,782	7,937	8,096	8,258	8,423	8,592
Ghent 2	7,621	7,774	7,929	8,088	8,249	8,414	8,583	8,754
Ghent 3	7,558	7,709	7,864	8,021	8,181	8,345	8,512	8,682
Ghent 4	7,542	7,693	7,847	8,004	8,164	8,327	8,494	8,664
Green River 3	0	0	0	0	0	0	0	0
Green River 4	0	0	0	0	0	0	0	0
Mill Creek 1	4,521	4,612	4,704	4,798	4,894	4,992	5,092	5,193
Mill Creek 2	4,491	4,581	4,673	4,766	4,862	4,959	5,058	5,159
Mill Creek 3	5,834	5,951	6,070	6,191	6,315	6,442	6,570	6,702
Mill Creek 4	7,118	7,260	7,405	7,553	7,704	7,858	8,016	8,176
Trimble County 1	1,692	1,726	1,761	1,796	1,832	1,869	1,906	1,944
Trimble County 2	2,426	2,474	2,524	2,574	2,626	2,678	2,732	2,787
Tyrone 3	0	0	0	0	0	0	0	0

75% TC

Escalation Rate

	2035	2036	2037	2038	2039	2040
Brown 1	1,188	1,211	1,235	1,260	1,285	1,311
Brown 2	1,964	2,003	2,043	2,084	2,125	2,168
Brown 3	4,891	4,989	5,089	5,191	5,294	5,400
Cane Run 4	0	0	0	0	0	0
Cane Run 5	0	0	0	0	0	0
Cane Run 6	0	0	0	0	0	0
Ghent 1	8,763	8,939	9,117	9,300	9,486	9,675
Ghent 2	8,929	9,108	9,290	9,476	9,665	9,859
Ghent 3	8,856	9,033	9,213	9,398	9,586	9,777
Ghent 4	8,837	9,014	9,194	9,378	9,566	9,757
Green River 3	0	0	0	0	0	0
Green River 4	0	0	0	0	0	0
Mill Creek 1	5,297	5,403	5,511	5,622	5,734	5,849
Mill Creek 2	5,262	5,368	5,475	5,584	5,696	5,810
Mill Creek 3	6,836	6,973	7,112	7,254	7,399	7,547
Mill Creek 4	8,339	8,506	8,676	8,850	9,027	9,207
Trimble County 1	1,983	2,023	2,063	2,104	2,146	2,189
Trimble County 2	2,842	2,899	2,957	3,016	3,077	3,138
Tyrone 3	0	0	0	0	0	0

75% TC

Escalation Rate

	Max Cap
Brown 1	101
Brown 2	167
Brown 3	416
Cane Run 4	155
Cane Run 5	168
Cane Run 6	240
Ghent 1	475
Ghent 2	484
Ghent 3	480
Ghent 4	479
Green River 3	68
Green River 4	95
Mill Creek 1	303
Mill Creek 2	301
Mill Creek 3	391
Mill Creek 4	477
Trimble County 1	383
Trimble County 2	549
Tyrone 3	71

	Annual Capital (2011 $)
MC	16,000
TC	3,000
CR	3,000
GH	22,000
BR	5,000
GR	1,000
TY	1,000

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 10

Witness: Charles R. Schram

Q-10. Please identify the expected variable O&M for new environmental controls on a $/MWh basis.

A-10. Below are the incremental expected variable O&M for the new environmental controls on a $/MWh basis.

	New Environmental Controls	Variable O&M (2011 $/MWh)
Mill Creek 1	Combined 1&2 FGD	0.05
Mill Creek 1	Baghouse	3.83
Mill Creek 2	Combined 1&2 FGD	0.03
Mill Creek 2	Baghouse	4.00
Mill Creek 3	FGD	0.14
Mill Creek 3	Baghouse	2.76
Mill Creek 3	SAM Mitigation/Economizer Modifications	1.25
Mill Creek 4	FGD	0.11
Mill Creek 4	SCR Upgrade	-
Mill Creek 4	Baghouse	2.76
Mill Creek 4	SAM Mitigation/Economizer Modifications	1.25
Trimble County 1	Baghouse	2.10

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 11

Witness: Charles R. Schram

Q-11. Please identify the expected fixed O&M for the new environmental controls on a $/kW-yr basis.

A-11. Below are the incremental expected fixed O&M for the new environmental controls on a $/kW-yr basis.

	New Environmental Controls	Fixed O&M (2011 $/kW-yr)	Fixed O&M ($M)	Max Capacity (MW)
Mill Creek 1	Combined 1&2 FGD	(1.94)	(0.6)	303
Mill Creek 1	Baghouse	4.53	1.4	303
Mill Creek 2	Combined 1&2 FGD	(0.54)	(0.2)	301
Mill Creek 2	Baghouse	4.47	1.3	301
Mill Creek 3	FGD	-	-	391
Mill Creek 3	Baghouse	3.07	1.2	391
Mill Creek 3	SAM Mitigation/Economizer Modifications	0.08	0.0	391
Mill Creek 4	FGD	-	-	477
Mill Creek 4	SCR Upgrade	-	-	477
Mill Creek 4	Baghouse	2.94	1.4	477
Mill Creek 4	SAM Mitigation/Economizer Modifications	0.08	0.0	477
Trimble County 1	Baghouse	2.35	0.9	383

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 12

Witness: Charles R. Schram

Q-12. **Brown 1-2:** Please refer to the 2011 Air Compliance Plan, provided as Exhibit CRS-1. Section 4.2.6 is an analysis of the merit of retiring Brown Units 1 and 2.

a. Please explain why Brown units 1-2 are considered as a single entity in this analysis.

b. Please describe if those units are physically required to run together or if there are engineering constraints which require the operation of both units jointly, or prohibit the retirement of one of the units independently.

A-12. a. The analysis in Exhibit CRS-1 supporting the 2011 Compliance Plan contemplated a single fabric filter baghouse to serve both Brown Units 1 and 2. Therefore, the analysis to build controls or retire the units affected both units and was conducted on a combined basis.

b. Brown Units 1-2 are not physically required to run together.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 13

Witness: Charles R. Schram

Q-13. **Mill Creek 1-2:** Please refer to the 2011 Air Compliance Plan, provided as Exhibit CRS-1. Section 4.2.16 is an analysis of the merit of retiring Mill Creek Units 1 and 2.

a. Please explain why Mill Creek Units 1-2 are considered as a single entity in this analysis.

b. Please describe if the units are physically required to run together or if there are engineering constraints which require the operation of both units, or prohibit the retirement of one of the units independently.

A-13. a. The analysis contemplated the construction of a single FGD to serve Mill Creek Units 1 and 2. Therefore, the analysis to build controls or retire the units affected both units and was conducted on a combined basis.

b. Mill Creek Units 1-2 are not physically required to run together.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 14

Witness: Charles R. Schram

Q-14. **Evaluation Order:** Please refer to the 2011 Air Compliance Plan, provided as Exhibit CRS-1. In Section 4.2, the exhibit notes that "units were evaluated in the order of decreasing variable production costs."

a. Please state whether you conducted this analysis using any order other than by decreasing variable production cost.

b. If so, please provide the results of this analysis, and any supporting workpapers or documents for this analysis, including raw model inputs in a machine-readable format.

A-14. a. No. Exhibit CRS-1 Section 3.3 describes the Companies' analytical approach.

b. Not applicable.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 15

Witness: Charles R. Schram

Q-15. **Environmental Controls:** Please refer to the Environmental Air Compliance Strategy Summary, provided as Exhibit JNV-2. On page 5, the table of Environmental Air Timeline shows "preliminary optimal technologies" that include SCR at Mill Creek 1 & 2, SCR at Ghent 2, and Brown 1 & 2. These technologies are not considered in the "final scope" as given on Page 9, or within the analyses which support this docket.

a. Please state whether the company ran an analysis similar to that given in the 2011 Air Compliance Plan with these SCR included in the analysis.

b. If so, please provide the results of this analysis, and any supporting workpapers or documents for this analysis, including raw model inputs in a machine-readable format.

A-15. a. The identification of "preliminary optimal technologies" was responsive to a potential need to reduce NOx emissions at non-SCR equipped units. That need was not certain at the time the "preliminary optimal technologies" were identified. Ultimately, the system needs analysis (see Exhibit CRS-1 Section 4.1.1) determined that the Companies' system NOx emissions did not require the construction of additional SCRs. Therefore, the Companies did not include these additional SCRs in any analyses similar to that provided in the 2011 Air Compliance Plan.

b. Not applicable.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 16

Witness: Charles R. Schram

Q-16. **Environmental Controls:** Please refer to the Environmental Air Compliance Strategy Summary, provided as Exhibit JNV-2. On page 8, the document states that "The Companies' Energy Planning, Analysis and Forecasting department's first round of modeling indicated that the SCRs, and associated scope with the implementation of SCRs, identified in the Phases I and II studies would not be necessary to meet the CATR NOx emission reductions for the generating fleet."

a. Please produce any documents and workpapers associated with the "first round of modeling" referenced in this statement supporting the assertion that "SCRs...would not be necessary to meet the CATR NOx emission reductions."

A-16. The "first round of modeling" refers to the assessment of the Companies' system NOx emissions relative to the CATR allowance allocation (see Exhibit CRS-1 Section 4.1.1). Based on this assessment, additional SCRs were not needed to meet the CATR NOx emission reductions for the generating fleet. Also please see the response to KPSC-1 Question No. 40.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 17

Witness: John N. Voyles, Jr. / Gary H. Revlett

Q-17. Please state whether any of the upgrades proposed in the Environmental Air Compliance Strategy Summary are a result of a settlement with either a government agency or the result of a citizen suit. If so, please provide the settlement agreements that affect such units.

A-17. No, none of the upgrades proposed in the LG&E 2011 Compliance Plan are pursuant to a non-compliance identified by either a government agency or a citizen suit.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 18

Witness: Charles R. Schram

Q-18. **Market Prices of Energy and Capacity**: Please refer to the 2011 Air Compliance Plan. Please identify the company's assumed forward market prices of energy and capacity through the analysis period and any source for those market price assumptions. Please also produce any documentation or workpapers that support these assumptions.

A-18. Please see LG&E's response to the KPSC-1 Question No. 46 for the forward market prices for energy. There is no assumed price for capacity due to the absence of a liquid capacity market.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 19

Witness: Charles R. Schram

Q-19. **Sales:** Please refer to the 2011 Air Compliance Plan. Please identify the company's assumed system and off-system sales of energy through the analysis period, and Produce any documentation or workpapers that support these assumptions.

A-19. Please see below for the LG&E's projected system sales of energy. The analysis in the 2011 Compliance Plan does not consider off-system sales of energy. The Companies' 2011 Integrated Resource Plan contains a detailed discussion of the energy forecast.

Year	Energy Requirements (GWh)	Year	Energy Requirements (GWh)
2011	12,985	2026	15,556
2012	13,073	2027	15,782
2013	13,178	2028	16,030
2014	13,253	2029	16,245
2015	13,377	2030	16,471
2016	13,521	2031	16,669
2017	13,639	2032	16,877
2018	13,813	2033	17,124
2019	14,037	2034	17,329
2020	14,276	2035	17,568
2021	14,469	2036	17,807
2022	14,695	2037	18,054
2023	14,889	2038	18,300
2024	15,135	2039	18,539
2025	15,349	2040	18,862

Note: Values reflect the Company's ability to curtail customers with Curtailable Service Riders.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 20

Witness: Charles R. Schram

Q-20. **Demand:** Please refer to the 2011 Air Compliance Plan. Please identify the company's assumed demand projections through the analysis period, and produce any documentation or workpapers that support these assumptions.

A-20. Please see below for the LG&E's peak demand projections. The Companies' 2011 Integrated Resource Plan contains a detailed discussion of the demand forecast.

	Peak Demand* (MW)	Year	Peak Demand* (MW)
2011	2,721	2026	3,262
2012	2,733	2027	3,301
2013	2,754	2028	3,350
2014	2,761	2029	3,403
2015	2,782	2030	3,472
2016	2,788	2031	3,519
2017	2,810	2032	3,555
2018	2,847	2033	3,600
2019	2,910	2034	3,650
2020	2,967	2035	3,708
2021	3,000	2036	3,781
2022	3,040	2037	3,838
2023	3,089	2038	3,879
2024	3,163	2039	3,919
2025	3,211	2040	3,997

*Non-coincident company peaks

Note: Values reflect the Company's ability to curtail customers with Curtailable Service Riders.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 21

Witness: Charles R. Schram

Q-21. **EE/DSM:** Please refer to the 2011 Air Compliance Plan. Please identify the company's assumed energy efficiency or other demand side management projections through the analysis period, and produce any documentation and workpapers that support these assumptions.

A-21. Please see the attachment for combined LG&E and KU projections, consistent with prior filings. Energy Efficiency and DSM programs are detailed in Section 8 of the Companies' 2011 Integrated Resource Plan filing. Furthermore, the expansion of the existing and new DSM programs is the subject of another proceeding before this Commission in Case No. 2011-00134.

Cumulative

Louisville Gas and Electric Company / Kentucky Utilities Company

DSM Energy and Demand Impacts

DSM Energy Reduction (GWh)	Status	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Residential High Efficiency Lighting	Existing	201.8	250.6	299.5	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3
Residential New Construction	Existing	6.9	9.0	11.4	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
Residential HVAC Tune Up	Existing	1.9	3.0	4.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Commercial HVAC Tune Up	Existing	2.0	4.2	6.4	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
Customer Education & Public Information	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dealer Referral Network	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Responsive Pricing (RRP)	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Program Development & Administration	Enhanced	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Conservation (HEPP)	Enhanced	15.5	20.7	25.9	31.0	36.2	41.4	46.5	51.7	56.8	62.0	67.2	72.3	77.5	82.7	87.8
Residential Load Management	Enhanced	5.9	9.6	12.8	16.0	18.7	21.4	24.1	26.7	29.4	32.1	34.7	37.4	40.1	42.7	45.4
Commercial Load Management	Enhanced	0.2	0.4	0.6	0.7	0.8	0.9	1.0	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
Residential Low Income Weatherization	Enhanced	20.5	23.3	26.1	28.9	31.7	34.5	37.3	46.5	55.7	64.9	74.1	83.3	92.5	101.8	111.0
Commercial Conservation/Rebates	Enhanced	93.8	150.8	208.8	266.8	324.8	382.7	440.7	495.7	550.7	605.7	660.7	715.7	770.6	825.6	880.6
Smart Energy Profile	New	29.3	57.0	57.0	104.4	104.4	104.4	104.4	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5
Residential Refrigerator Removal	New	3.0	9.0	16.5	24.0	31.4	38.9	46.4	53.9	61.4	68.9	76.4	83.9	91.4	98.9	106.4
Residential Incentives	New	8.8	20.0	36.9	53.8	70.7	87.6	104.6	120.8	137.1	153.4	169.7	186.0	202.3	218.6	234.9
Total Annual Energy Reduction	All	389.7	557.6	705.9	901.8	994.9	1,088.1	1,181.2	1,279.1	1,375.1	1,471.0	1,566.9	1,662.9	1,758.8	1,854.7	1,950.7

DSM Peak Demand Reduction (MW)	Status	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Residential High Efficiency Lighting	Existing	14.2	17.5	20.8	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
Residential New Construction	Existing	2.8	3.5	4.2	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Residential HVAC Tune Up	Existing	0.9	1.3	1.8	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Commercial HVAC Tune Up	Existing	0.5	1.0	1.5	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Customer Education & Public Information	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dealer Referral Network	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Responsive Pricing (RRP)	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Program Development & Administration	Enhanced	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Conservation (HEPP)	Enhanced	2.2	3.6	5.1	6.5	8.0	9.4	10.9	12.2	13.5	14.8	16.1	17.4	18.8	20.1	21.4
Residential Load Management	Enhanced	157.3	171.6	183.9	196.2	206.5	216.7	227.0	237.2	247.5	257.7	268.0	278.2	288.5	298.7	309.0
Commercial Load Management	Enhanced	5.9	6.7	7.6	8.5	9.1	9.6	10.2	10.8	11.4	12.0	12.5	13.1	13.7	14.3	14.9
Residential Low Income Weatherization	Enhanced	1.0	1.3	1.6	1.8	2.1	2.4	2.7	3.6	4.5	5.4	6.3	7.3	8.2	9.1	10.0
Commercial Conservation/Rebates	Enhanced	26.5	47.9	69.7	91.6	113.4	135.2	157.0	177.7	198.4	219.1	239.8	260.4	281.1	301.8	322.5
Smart Energy Profile	New	5.6	10.9	10.9	19.9	19.9	19.9	19.9	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
Residential Refrigerator Removal	New	0.4	1.2	2.1	3.1	4.1	5.0	6.0	6.9	7.7	8.6	9.4	10.3	11.1	12.0	12.8
Residential Incentives	New	2.5	5.7	11.0	16.3	21.7	27.0	32.3	35.3	38.4	41.4	44.5	47.5	50.5	53.6	56.6
Total Annual Demand Reduction	All	219.6	272.3	320.4	377.6	418.2	458.9	499.5	537.6	575.2	612.9	650.5	688.2	725.8	763.4	801.1

Cumulative

Louisville Gas and Electric Company / Kentucky Utiliti
DSM Energy and Demand Impacts

DSM Energy Reduction (GWh)	Status	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Residential High Efficiency Lighting	Existing	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3	348.3
Residential New Construction	Existing	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
Residential HVAC Tune Up	Existing	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Commercial HVAC Tune Up	Existing	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
Customer Education & Public Information	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dealer Referral Network	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Responsive Pricing (RRP)	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Program Development & Administration	Enhanced	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Conservation (HEPP)	Enhanced	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
Residential Load Management	Enhanced	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1
Commercial Load Management	Enhanced	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Residential Low Income Weatherization	Enhanced	120.2	120.2	120.2	120.2	120.2	120.2	120.2	120.2	120.2	120.2	120.2	120.2	120.2	120.2	120.2
Commercial Conservation/Rebates	Enhanced	935.6	935.6	935.6	935.6	935.6	935.6	935.6	935.6	935.6	935.6	935.6	935.6	935.6	935.6	935.6
Smart Energy Profile	New	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5
Residential Refrigerator Removal	New	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9
Residential Incentives	New	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2
Total Annual Energy Reduction	All	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6	2,046.6

DSM Peak Demand Reduction (MW)	Status	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Residential High Efficiency Lighting	Existing	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
Residential New Construction	Existing	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Residential HVAC Tune Up	Existing	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Commercial HVAC Tune Up	Existing	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Customer Education & Public Information	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dealer Referral Network	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Responsive Pricing (RRP)	Existing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Program Development & Administration	Enhanced	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Conservation (HEPP)	Enhanced	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
Residential Load Management	Enhanced	319.2	319.2	319.2	319.2	319.2	319.2	319.2	319.2	319.2	319.2	319.2	319.2	319.2	319.2	319.2
Commercial Load Management	Enhanced	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
Residential Low Income Weatherization	Enhanced	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Commercial Conservation/Rebates	Enhanced	343.2	343.2	343.2	343.2	343.2	343.2	343.2	343.2	343.2	343.2	343.2	343.2	343.2	343.2	343.2
Smart Energy Profile	New	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
Residential Refrigerator Removal	New	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
Residential Incentives	New	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7
Total Annual Demand Reduction	All	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7	838.7

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 22

Witness: Charles R. Schram

Q-22. **Renewables:** Please refer to the 2011 Air Compliance Plan. Please identify the companies' assumed renewable energy purchases or contracts through the analysis period, and produce any documentation or workpapers that support these assumptions.

A-22. The 2011 Compliance Plan does not include assumptions for renewable energy purchases or contracts through the analysis period. Also see LG&E's response to KPSC-1 Question No. 18.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 23

Witness: Charles R. Schram

Q-23. **Expansion Units:** Please refer to the 2011 Air Compliance Plan, Table 94 in Section 6.3. The table lists three types of expansion units (two types of combined cycle turbines, and one simple cycle CT).

a. Please state whether the company ran an analysis similar to that given in the 2011 Air Compliance Plan with any other expansion units available to be picked in the model.

b. If so, please produce the results of this analysis, and any supporting workpapers or documents for this analysis, including raw model inputs in a machine-readable format.

A-23. a. The Companies' 2011 IRP included other technologies in the Supply Side Screening, however, natural gas fired combined cycle combustion turbines were identified as the least cost resource to meet requirements for the intermediate load capacity needed in 2016. The retirement analysis contained in the 2011 Compliance Plan recognized that, due to the sequential nature of the unit analysis, a simple cycle CT should be included as an option to address the case of retirement for a small unit. Also please see the response to KPSC-1 Question No. 18, and the responses to SC-NRDC-1 Interrogatories Question Nos. 6 and 25.

b. Not applicable.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 24

Witness: Charles R. Schram

Q-24. Please refer to the KU response to Staff's first information request, question 40. The answer to subquestion (a), provided by Witness Revlett, states that "the addition of SCRs on units that do not currently have SCRs will not have an impact on the projects in this compliance plan."

a. Please state whether KU ran an analysis of the economic merit of each unit in this docket similar in structure to the 2011 Air Compliance Plan (as provided in CRS-1) with "the addition of SCRs on units that do not currently have SCRs."

b. If yes, please provide any workpaper, source document, and in machine readable format, input and output files, used in or developed as part of the modeling carried out in such an analysis responsive to the above question.

c. If no, please provide a justification of the statement by Witness Revlett, and produce any documents or workpapers supporting that statement.

A-24. a. The Companies' review of the need for additional SCRs is discussed in Exhibit CRS-1 Section 4.1.1. In the absence of a need for additional SCRs, the Companies did not perform an analysis of the economic merit of each unit with additional SCRs.

The Companies' 2011 Compliance Plan contains analysis relevant to the question about future SCRs. Please refer to Table 2 of Exhibit CRS-1. The positive values in the "Difference" column are indicative that the results favor building controls for a particular unit. The magnitude of each positive value also indicate the level at which the NPVRR of future expenditures could affect the current decision to build controls on that unit.

b. Not applicable.

c. Please see the response to Question Nos. 15-16 for further information about the SCR needs analysis.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 25

Witness: Charles R. Schram

Q-25. Please refer to the KU response to Staff's first information request, question 46(b), pages 3-4. The summer maximum capacity of some units decreases in the 2013 to 2016 timeframe. Please state whether these capacity derates are due to the environmental controls expected to be implemented at these units. If not, please explain the cause of these projected capacity derates.

A-25. The capacity derates are due to the installation of environmental controls.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 26

Witness: Charles R. Schram

Q-26. Please refer to the KU response to Staff's first information request, question 46(b), pages 3-4. The heat rates for each unit given in these tables do not change over the analysis period, save in 2040. Please state whether the analysis in the 2011 Air Compliance Plan assumes any heat rate penalty for fabric filters, FGD, SCR, or SAM modifications? If so, please identify what heat rate penalties are assumed for each such modification. If not, please explain why not.

A-26. While capacity derates are considered as described in the response in Question No. 25, any heat rate penalties as a result of the installation of the controls in the 2011 Compliance Plan are considered de minimus and are not included in the analysis.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 27

Witness: Charles R. Schram

Q-27. Please refer to the KU response to Staff's first information request, question 46(c), pages 1-2. Please provide justification for the NOx and SO2 price trajectory given in this table, and produce any workpaper or source document supporting this justification.

A-27. The 2011-2013 NOx and SO2 prices are based on market prices as quoted by Amerex on May 28, 2010. The Companies' did not project allowance prices after 2013, recognizing that the development of markets for CATR (now CSAPR) are likely to be limited considering the rule's interstate trading restrictions. Therefore, the 2011 Compliance Plan assumes that the Companies will physically comply with the rule's NOx and SO2 emissions caps.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 28

Witness: Lonnie E. Bellar

Q-28. Please provide all reports, memoranda, presentations, or other documents provided to or considered by the KU, LG&E, or PPL Board of Directors (and any subcommittee of that Board) within the past five years concerning

a. the status of the Companies' coal-fired generating stations (the Coal Plants),

b. past, present or future environmental compliance of the Coal Plants, litigation or settlements (including NSR settlements with the EPA and/or DOJ) concerning the Coal Plants, to the extent not covered by attorney-client privilege,

c. past, present or future need for the Coal Plants, or the need for or plans for capital additions to the Coal Plants, whether for environmental compliance or otherwise, and

d. any other matter that could affect the costs or output of the Coal Plants.

A-28. a-d. Please see the attached. Certain information is considered confidential and is being filed pursuant to a Petition for Confidential Protection.

Attachment to Question No. 28

1 of 9

Bellar

E.ON US Investments Corp.
E.ON U.S. LLC
Louisville Gas and Electric Company
Kentucky Utilities Company
Written Consents of the Boards of Directors

August 18, 2008

AGENDA

APPROVALS AND RATIFICATIONS

Approvals and Ratifications on the following topics are submitted for the E.ON US Investments Corp. ("EUSIC"), E.ON U.S. LLC ("EUS"), Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") Boards' consents.

Please direct any questions to John McCall or John Fendig. Upon completion, please return signed consents to Cheryl Johnson.

EUSIC BOARD CONSENT

OMITTED TEXT _ NOT RELEVANT

Alliance Coal Contract

Approval is sought to enter into coal supply agreements between Louisville Gas and Electric Company and Kentucky Utilities Company and Alliance Coal LLC aggregating up to $565.2 million. A board paper with details is attached.

EUS BOARD CONSENTS

OMITTED TEXT _ NOT RELEVANT

LG&E BOARD CONSENT

Alliance Coal Contract

As described above.

KU BOARD CONSENT

OMITTED TEXT _ NOT RELEVANT

Alliance Coal Contract

As described above.

ACTION OF THE BOARD OF DIRECTORS
OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TAKEN BY WRITTEN CONSENT

August 18, 2008

Pursuant to the provisions of Section 271B.8-210 of the Kentucky Business Corporation Act, the Board of Directors of Louisville Gas and Electric Company, a Kentucky corporation (the "Company" or "LG&E"), hereby adopt the following resolutions by unanimous written consent in lieu of a special meeting and consent to the actions contemplated thereby:

ALLIANCE COAL LLC
COAL SUPPLY AGREEMENT

WHEREAS, LG&E and Kentucky Utilities Company ("KU") have conducted negotiations with Alliance Coal Company LLC ("Alliance") regarding a potential coal supply agreement in the amount of up to $565.2 million (the "Alliance Coal Contract"); and

WHEREAS, this Board of Directors has considered matters relating to the Alliance Coal Contract and deems it advisable and in the best interest of LG&E to proceed with such transaction.

NOW, THEREFORE, BE IT RESOLVED, that this Board of Directors does hereby authorize and approve the Alliance Coal Contract; and

FURTHER RESOLVED, that the appropriate officers of LG&E are, and each of them hereby is, authorized and directed to negotiate, execute and deliver, from time to time, for and on behalf of the Company (i) coal purchase, supply and transport contracts and appropriate amendments thereto, (ii) relevant federal, state or other governmental notices, filings or applications and (iii) any other agreement, document or instrument, that may be necessary or appropriate in connection with the Alliance Coal Contract, including but not limited to credit, security, pledge, guaranty or other financial support arrangements, with such officer's execution and delivery to conclusively evidence such officer's approval thereof and the approval of this Board of Directors; and

FURTHER RESOLVED, that the appropriate officers of LG&E are, and each of them hereby is, authorized and directed, to take such other actions as they shall, in their discretion, deem necessary, appropriate or advisable to consummate the Alliance Coal Contract, including such additional terms, conditions precedent or other changes as may be deemed necessary, appropriate or advisable in the discretion of such officers, with the taking of such actions and the execution of such agreements or documents conclusively to evidence the authorization thereof by this Board of Directors; and

FURTHER RESOLVED, that all actions heretofore or hereafter taken by any officer of the Company in connection with the Alliance Coal Contract contemplated by these resolutions be, and they hereby are, approved, ratified and confirmed in all respects.

WITNESS the signatures of the undersigned, who are all of the directors of Louisville Gas and Electric Company as of the date first written above.

Victor A. Staffieri

Chris Hermann

John R. McCall

S. Bradford Rives

Paul W. Thompson

E.ON US Investments Corp.
E.ON U.S. LLC
Louisville Gas and Electric Company
Kentucky Utilities Company

Written Consents of the Boards of Directors
And Shareholders

December 17, 2007

AGENDA

APPROVALS AND RATIFICATIONS

Approvals and Ratifications on the following topics are submitted for the E.ON US Investments Corp., E.ON U.S. LLC, Louisville Gas and Electric Company and Kentucky Utilities Company Boards' consents.

Please direct any questions to John Fendig or Cheryl Johnson. Upon completion, please return signed consents to Cheryl Johnson.

OMITTED TEXT – NOT RELEVANT

Approval of Armstrong Coal Contract

Authorization is requested to enter coal supply arrangements between Louisville Gas and Electric Company and Kentucky Utilities Company and Armstrong Coal Company aggregating up to $777.1 million. A Board Paper with details is provided.

E.ON U.S. LLC

OMITTED TEXT – NOT RELEVANT

Attachment to Question No. 28

2 of 9

Bellar

ACTION OF THE BOARD OF DIRECTORS
OF
E.ON U.S. LLC
TAKEN BY WRITTEN CONSENT
IN LIEU OF A SPECIAL MEETING

December 17, 2008

The undersigned, being all the members of the Board of Directors of E.ON U.S. LLC, a Kentucky limited liability company ("Company"), hereby adopt the following resolutions and consent to the actions contemplated thereby in lieu of a special meeting:

BROWN NSR SETTLEMENT / FGD & SCR CONSTRUCTION

WHEREAS, Kentucky Utilities Company, a subsidiary of the Company ("KU"), is party to litigation and/or administrative proceedings commenced by the U.S. Department of Justice and the Environmental Protection Agency ("DOJ/EPA") (the "Brown NSR Litigation"); and

WHEREAS, KU and DOJ/EPA have negotiated a settlement-in-principle to resolve the on-going Brown NSR Litigation, with the prospect for a favorable outcome, appropriately balancing the parties' legal positions, the risk of continuing litigation process and operational and financial considerations; and

WHEREAS, the terms of the settlement would include, among other matters, (i) the payment of a $1.4 million civil penalty, (ii) establishment of a $3 million fund for environmental mitigation projects, (iii) surrender of 53,000 SO_2 allowances, (iv) surrender of excess NO_x allowances for E.W. Brown Unit 3 ("Brown Unit 3") through 2010, (v) installation of flue gas desulfurization ("FGD") controls at Brown Unit 3 by December 31, 2010, (vi) installation of selective catalytic reduction ("SCR") controls at Brown Unit 3 by December 31, 2012, and (vii) compliance with specified operational restrictions, including NO_x, SO_2 and particulate matter emissions limits and heat input limits (collectively, the "Brown NSR Settlement" and items (v) and (vi), "the FGD/SCR Construction"); and

WHEREAS, EUS desires to receive approval to negotiate and proceed with the Brown NSR Settlement and the FGD/SCR Construction; and

WHEREAS, the Board of Directors has considered matters relating to the Brown NSR Settlement and the FGD/SCR Construction and deems it advisable and in the best interest of the Company to authorize such transaction as set forth herein.

NOW, THEREFORE, BE IT RESOLVED, that the Company is hereby authorized to negotiate and enter into the ICSID Settlement and the FGD/SCR Construction transactions, if and on such terms and conditions as may, be deemed acceptable and advisable by its officers; and

FURTHER RESOLVED, that the officers of the Company are, and each of them hereby is, authorized and directed, to take such other actions as they shall, in their discretion, deem necessary, appropriate or advisable in connection with the Brown NSR Settlement and the FGD/SCR Construction, including negotiating such terms, conditions or other changes as may be deemed necessary, appropriate or advisable in the discretion of such officers; and

FURTHER RESOLVED, that all actions heretofore or hereafter taken by any officer of the Company in connection with the Brown NSR Settlement and the FGD/SCR Construction contemplated by these resolutions be, and they hereby are, approved, ratified and confirmed in all respects.

WITNESS the signatures of the undersigned, who are all of the directors of E.ON U.S. LLC as of the date first written above.

Victor A. Staffieri

Chris Hermann

John R. McCall

S. Bradford Rives

Paul W. Thompson

ACTION OF THE BOARD OF DIRECTORS
OF
E.ON U.S. LLC
TAKEN BY WRITTEN CONSENT
IN LIEU OF AN ANNUAL MEETING

May 10, 2007

The undersigned, being all the members of the Board of Directors of E.ON U.S. LLC, a Kentucky limited liability company ("Company"), hereby adopt the following resolutions by unanimous written consent in lieu of an annual meeting and consent to the actions contemplated thereby:

APPROVAL OF KU FLUE GAS DESULFURIZATION PROJECT UPDATE

WHEREAS, the Board of Directors previously approved matters relating to the $659 million Flue Gas Desulfurization Project for Kentucky Utilities Company ("KU") on December 16, 2004 and June 13, 2006; and

WHEREAS, actual and projected increases in costs and expenses of equipment, materials, services, labor and other factors have lead to an anticipated increase in the overall cost of the projects to approximately $980 million (including approximately $52 million in capitalized interest) (the "FGD Project"); and

WHEREAS, the Board of Directors has considered matters relating to the FGD Project and deems it advisable and in the best interests of the Company and KU to approve such transactions.

NOW, THEREFORE, BE IT RESOLVED, that the FGD Project is hereby approved in the increased total amount, and the Company and KU are hereby authorized to proceed with such transactions, as set forth herein; and

FURTHER RESOLVED, that the appropriate officers of the Company and KU are, and each of them hereby is, authorized and directed to negotiate, execute and deliver, from time to time, for and on behalf of the Company and KU, respectively, such contracts, agreements, documents or instruments, including appropriate filings with regulatory agencies, that may be necessary or appropriate in connection with the FGD Project, with such officer's execution and delivery to conclusively evidence such officer's approval thereof and the approval of this Board of Directors; and

FURTHER RESOLVED, that the appropriate officers of the Company and KU are, and each of them hereby is, authorized to determine the form and content of documentation, filings or actions relating to the FGD Project; and

FURTHER RESOLVED, that the appropriate officers of the Company and KU are, and each of them hereby is, authorized and directed, to take such other actions as they shall, in their discretion, deem necessary, appropriate or advisable in connection with the FGD Project, including such changes as may be deemed necessary, appropriate or advisable in the discretion of such officers; and

FURTHER RESOLVED, that all actions heretofore or hereafter taken by any officer of the Company or KU in connection with the transactions contemplated by these resolutions be, and they hereby are, approved, ratified and confirmed in all respects.

OMITTED TEXT – NOT RELEVANT

OMITTED TEXT – NOT RELEVANT

WITNESS the signatures of the undersigned, who are all of the directors of E.ON U.S. LLC as of the date first written above.

Victor A. Staffieri

Chris Hermann

John R. McCall

S. Bradford Rives

Paul W. Thompson

Attachment to Question No. 28

3 of 9

Bellar

CONFIDENTIAL INFORMATION REDACTED

E.ON US INVESTMENTS CORP.
LOUISVILLE GAS AND ELECTRIC COMPANY
KENTUCKY UTILITIES COMPANY

Board Summary

August 18, 2008

Alliance Coal LLC Coal Supply Agreement

I. AUTHORIZATION REQUEST:

This request seeks approval of a coal supply agreement jointly between Louisville Gas & Electric (LG&E) and Kentucky Utilities (KU), and Alliance Coal LLC (Alliance). This agreement is treated as LG&E/KU Joint Contract #J09002. This is a seven-year contract for the period January 1, 2009 - December 31, 2015 for the delivery of 11.0 M tons of high-sulfur coal (scheduled delivery to start January 1, 2010). The contract's value of approximately $565.2 M (based upon the forecasted CPI as established by EON plus 2% each year) is expected to be recovered through the Fuel Adjustment Clause (see Appendix A for a description of the Fuel Adjustment Clause).

II. RATIONALE:

Louisville Gas and Electric Company and Kentucky Utilities Company (collectively, the "Utilities") will burn approximately 18 M tons of coal per year beginning in calendar year 2011. The deliveries under this contract will represent approximately [redacted] of this annual burn (at the annual base quantity of 2.0M tons). Historically the Utilities have awarded contracts of similar tonnage as part of their procurement strategy. Under its regulatory obligations, the Utilities must secure an adequate and reliable supply of coal for those generating units utilized to meet the needs of its native load customers. Prudent fuel purchases, such as that which will be made under the Alliance Coal LLC Agreement, are then eligible for cost recovery under the Fuel Adjustment Clause mechanism.

A. DESCRIPTION OF KEY CONTRACTUAL TERMS & CONDITIONS:

The contract is the standard LG&E/KU form Coal Supply Agreement with modifications to reflect the business deal negotiated between the parties. The contract contains standard commercial terms of the kind to be expected in a transaction of this sort. The contract allocates various commercial risks to Alliance through an indemnity clause [redacted] and through a requirement that Alliance maintain certain insurance coverage [redacted]

- PARTIES:
  The counterparty to the Contract is Alliance Coal LLC, who has extensive financial assets and who is directly liable as a party to the agreement for failure to perform by one of its affiliates supplying coal under the Contract. LG&E/KU has the assurance that the contract will result in a reliable supply of coal to its largest base-load generating units, used to serve the needs of its native load customers.

- TERM:
  - *January 1, 2009 - December 31, 2015.*

  - QUALITY:

    Btu/lb 11,500

    lb/mmBtu

CONFIDENTIAL INFORMATION REDACTED

Sulfur	2.60
Moisture	10.00
Ash	7.00

- TONNAGE:
  - 2010 1,000,000 tons
  - 2011 2,000,000 tons
  - 2012 2,000,000 tons
  - 2013 2,000,000 tons
  - 2014 2,000,000 tons
  - 2015 2,000,000 tons

- PRICING: The pricing is effective April 1, 2008 and subject to adjustment effective July 1, 2008 and each calendar quarter thereafter based upon the quarterly percentage change in the Consumers Price Index, plus one-half percent (0.50%)

	Quantity (1)	FOB Barge (2)	
Year	Millions	$/Ton	¢/MMBtu
2010	1.0	44.92	195.30
2011	2.0	46.98	204.26
2012	2.0	49.13	213.61
2013	2.0	51.12	222.26
2014	2.0	53.20	231.30
2015	2.0	55.36	240.70

Notes:
(1) If mine production occurs after January 1, 2010, the Base Quantity of coal will be the lesser of (i) the quantity of coal produced after the Production Date multiplied by a factor of 1.0/5.2, or (ii) 1.0 million tons.

(2) Price is effective April 1, 2008 and adjusted effective July 1, 2008 and each quarter thereafter based upon the forecasted CPI established by EON plus 0.50% per quarter.

The current high sulfur coal position is illustrated in the table below.

Scrubbed High Sulfur Coal Position Report as of 6/30/2008 (Tons in Millions)

	2010	2011	2012	2013
Projected Need of Hi-Sulfur Tons	[redacted]			
Tons committed under contract				
Tons committed pending final contract				
Alliance tons pending final contract				
Tons remaining open				

The Alliance FOB prices are below the Forward Price Curve (FPC) used for budgeting of the 2009 MTP. The table below illustrates the open position pricing used at Mill Creek Station for High Sulfur Illinois Basin Coal.

2009 MTP Mill Creek Comparison

	2010	2011	2012	2013
Mill Creek Open Position Delivered Price	[redacted]			

CONFIDENTIAL INFORMATION REDACTED

Alliance Price [redacted]
Alliance MTP Trans/Other Pricing
Estimated delivered price for Alliance

B. COMPARISON TO OTHER VENDORS:

Alliance's price [redacted] as compared to those offers received in response to LG&E's and KU's solicitations for high sulfur coal. On January 24, 2008, the Utilities sent out a solicitation for steam coal with a bid due date of February 21, 2008. Solicitation invitations were sent to approximately one hundred and sixty-nine vendors and responses were received from [redacted] companies providing [redacted] proposals. The Alliance offer [redacted]

C. VENDOR INFORMATION:

Alliance Resource Partners, L.P. (ARLP) is a diversified coal producer and marketer with significant operations in the eastern United States. The company is the coal-producing industry's only publicly traded master limited partnership. ARLP's common units are traded on the Nasdaq National Market under the ticker symbol "ARLP." The headquarters of ARLP are in Tulsa, Oklahoma. A centrally-located operations support office is in Lexington, Kentucky.

Strategically located operations, abundant long-lived reserves and appropriate acquisitions consistently have provided ARLP with solid growth opportunities since they began operations in 1971 as MAPCO Coal Inc. Operations include mining operations in four states – Illinois, Indiana, Kentucky and Maryland, development of new mining operations in West Virginia and a rail-to-barge loading terminal located in Indiana. Work is currently underway on the mine slope and entryway shaft at the Riverview Mine. Mine development is on progress to be producing coal in late 2009 and early 2010.

Alliance Coal, LLC, ARLP's operating holding company, is a diversified producer and marketer of steam coal to major United States utilities and industrial users. Coal is the energy source used by utilities to fuel more than 50 percent of the electricity generated in the United States of America each year. More than 80 percent of ARLP's sales tonnage is dedicated to electric utilities that have long-term contractual relationships with the company.

Through various contractual arrangements, Alliance has been a reliable supplier of coal to LG&E since 1996. The parties concurrently have an existing contract for 4.0 million tons of coal annually through December 31, 2011.

At 2007 year end, ARLP had approximately 2,600 employees, $701.7 million in assets and $1.0 billion in total revenues.

III. FINANCIAL IMPACT:

LG&E (and KU) employ a Fuel Adjustment Clause ("FAC") mechanism, which under Kentucky law allows the Utilities to recover from customers the actual fuel costs associated with retail electric sales. A certain amount of fuel cost recovery occurs through base rates; the FAC is a true-up mechanism by which the difference between base rate fuel cost and actual fuel cost is either collected from the customer or refunded to the customer through a monthly adjustment to the customers bills. The combination of recovery in base rates and the monthly adjustment allows the Companies to recover, in full, the actual fuel costs incurred.

This contract is for delivery of coal to base-load units primarily serving native load customers. The cost of fuel under this contract will be subject to pass-through under the Kentucky Public Service Commission's Fuel Adjustment Clause. [redacted]

[redacted]

IV. RECOMMENDATION:

It is recommended that the E.ON U.S. Investments Corp. Board approve LG&E/KU contract #J09002 for a total value of approximately $565.2 M and to delegate authority to execute the necessary contractual documents to affect the contract to the CEO of E.ON U.S. LLC.

[1]Generation Planning's allocation of unit output between native load and OSS for 2009 – 2013 planning period.

CONFIDENTIAL INFORMATION REDACTED

APPENDIX A: DESCRIPTION OF FUEL ADJUSTMENT CLAUSE

Louisville Gas and Electric Company and Kentucky Utilities Company (collectively, the "Utilities") employ a Fuel Adjustment Clause ("FAC") mechanism, which under Kentucky law allows the two utilities to recover from customers the actual fuel costs associated with retail electric sales. A certain amount of fuel cost recovery occurs through base rates; the FAC is a true-up mechanism by which the difference between base rate fuel cost and actual fuel cost is either collected from the customer or refunded to the customer through a monthly adjustment to the customer's bills. The combination of recovery in base rates and the monthly adjustment allows the Utilities to recover, in full, the actual fuel costs prudently incurred.

For purposes of the Fuel Adjustment Clause, fuel expense is defined as the actual cost of fuel burned at company generating facilities, plus the fuel portion of economic power purchases less the incremental fuel costs associated with off-system sales. For power purchases, fuel cost is defined as all non-demand charges for the purchase. Included in the FAC are adjustments for fuel costs associated with forced outages greater than 6 hours, any purchase power expense greater than the Utilities highest cost units, and purchase power associated with maintaining a reserve margin.

Both LG&E and KU have retail fuel adjustment clauses in place that have essentially remained unchanged for approximately thirty years. Additionally, KU has a FERC wholesale monthly fuel clause applied to wholesale billings (KU municipal customers) and an annual fuel factor component to base rates, applied to Virginia retail customers.

Recovery of fuel expenses occurs during the second calendar month after the expenses are incurred, and fuel expense billed through the fuel adjustment clause are subject to subsequent review and approval by the Kentucky Public Service Commission. The review process generally requires the Utilities to provide to the Commission supplemental information related to purchased power contracts, the degree to which the Utilities engage in energy sales to third parties, and the extent to which the Utilities believe the current fuel inventory level is sufficient to meet upcoming demand. Fuel procurement procedures are subject to review and the Utilities are responsible for ensuring that Company policies and procedures are followed in every instance.

Disallowance of previously billed fuel costs [redacted] the Utilities and the Commission reached a universal settlement on the appropriate treatment of purchased power costs and off-system sales revenues, and subsequent to that settlement, [redacted]

[redacted]

Attachment to Question No. 28

4 of 9

Bellar

CONFIDENTIAL INFORMATION REDACTED

E.ON US INVESTMENTS CORP.

LOUISVILLE GAS AND ELECTRIC COMPANY

And

KENTUCKY UTILITIES COMPANY

<u>Board Summary</u>

December 13, 2007

Armstrong Coal Company, Inc. Coal Supply Agreement

I. AUTHORIZATION REQUEST:

This request seeks approval of a coal supply agreement jointly between Louisville Gas & Electric (LG&E) and Kentucky Utilities (KU), and Armstrong Coal Company, Inc. (Armstrong). This agreement is treated as LG&E/KU Joint Contract #J07032. This is an eight-year contract for the period January 1, 2008 - December 31, 2015 for the delivery of 27.1 M tons of high-sulfur coal. The contract's value of approximately $777.1 M (based upon electing the maximum tonnage of Quality 2 coal available each year) is expected to be recovered through the Fuel Adjustment Clause (see Appendix A for a description of the Fuel Adjustment Clause).

II. RATIONALE:

Louisville Gas and Electric Company and Kentucky Utilities Company (collectively, the "Utilities") burn approximately 15 M tons of coal per year. The deliveries under this contract will represent approximately [redacted] of this annual burn (at the annual base quantity of 4.0M tons). Historically the Utilities have awarded contracts of similar tonnage as part of their procurement strategy. Under its regulatory obligations, the Utilities must secure an adequate and reliable supply of coal for those generating units utilized to meet the needs of its native load customers. Prudent fuel purchases, such as that which will be made under the Armstrong Coal Supply Agreement, are then eligible for cost recovery under the Fuel Adjustment Clause mechanism.

A. DESCRIPTION OF KEY CONTRACTUAL TERMS & CONDITIONS:

The contract is the standard LG&E/KU form Coal Supply Agreement with modifications to reflect the business deal negotiated between the parties. The contract contains standard commercial terms of the kind to be expected in a transaction of this sort. The contract allocates various commercial risks to Armstrong through an indemnity clause [redacted] and through a requirement that Armstrong maintain certain insurance coverage [redacted]

- PARTIES:
  The counterparty to the Contract is Armstrong Land Company, LLC, the ultimate parent of Armstrong Coal Company, Inc. Armstrong Coal Company, Inc. is majority funded by Yorktown Partners. Yorktown Partners LLC is the manager of Yorktown Energy Partners VII, L.P. which was formed in September 2006 with $850M of committed capital of which $154M has been invested as of March 2007. The limited partners include university endowments, foundations, families, insurance companies and other institutional investors. The general partner and the management company are owned by Yorktown staff. Yorktown Partners LLC also manages Yorktown Energy Partners VI, L.P. formed in July 2004 with $730M of capital, Yorktown Energy Partners V, L.P. formed in January 2002 with $588M of capital, Yorktown Energy Partners IV, L.P. formed in October 1999 with $396M of invested capital, Yorktown Energy Partners III, L.P. formed in August 1997 with $250M of invested capital and two

predecessor partnerships which invested $75M from February 1991 through June 1997. Capital committed and/or invested by the Yorktown partnerships is $2.9 billion with investments made in 61 companies since the first "Pre-Yorktown" investment in 1983. Armstrong Land Company, LLC has financial assets and is directly liable as a party to the agreement for the failure to perform by one of its affiliates supplying coal under the Contract. This ensures a parental guarantee. LG&E/KU has the assurance that the contract will result in a reliable supply of coal to its largest base-load generating units, used to serve the needs of its native load customers.

- TERM:
  - January 1, 2008 - December 31, 2015. Either party with notice given by April 1, 2012 may reopen the agreement for repricing effective January 1, 2013 and beyond. The parties will then meet to negotiate an agreement on new pricing for tons to be delivered in 2013 and beyond. If the parties do not reach an agreement on this new pricing by August 1, 2012, the contract will terminate effective December 31, 2012.
  - QUALITY:

	Quality 1	Quality 2
Btu/lb	11,000	11,300
lb/mmBtu		
Sulfur	3.00	2.75
Moisture	12.00	10.44
Ash	12.00	10.44

- TONNAGE:
  - 2008 600,000 tons
  - 2009 2,500,000 tons
  - 2010 4,000,000 tons
  - 2011 4,000,000 tons
  - 2012 4,000,000 tons
  - 2013 4,000,000 tons
  - 2014 4,000,000 tons
  - 2015 4,000,000 tons

- PRICING: The pricing is firm for years 2008 and 2009 of this contract. Pricing effective January 1, 2010 is subject to a diesel fuel adjustment based upon the Producer Price Index as published by the United States Department of Labor, Bureau of Labor Statistics. The base index is 232.5, the average Producer Price Index for May, June, and July 2007. However, the diesel fuel adjustment contains a 20% dead band before any diesel fuel adjustment can be made.

		Quality 1 (11,000 BTU)		Quality 2 (11,300 BTU)	
	Quantity	FOB Rail/Barge		FOB Rail/Barge	
Year	Millions	$/Ton	¢/MMBtu	$/Ton	¢/MMBtu
2008 (1)	.6	27.31	124.14	28.30	125.22
2009 (2)	2.5	27.60	125.46	28.76	127.26
2010 (3)	4.0	28.21	128.23	29.63	131.11
2011 (3)	4.0	28.36	128.91	29.78	131.77
2012 (3)	4.0	28.51	129.59	29.93	132.43
2013 (3)	4.0	28.66	130.27	30.08	133.10
2014 (3)	4.0	28.81	130.96	30.23	133.76
2015 (3)	4.0	28.96	131.64	30.38	134.43

Notes:
(1) Rail delivery is not available. Up to a maximum of 90,000 tons may be Quality 2.
(2) Rail delivery is not available. Up to a maximum of 375,000 tons may be Quality 2.
(3) Up to 1.5M tons may be rail delivered. Up to a maximum of 600,000 tons may be Quality 2.
Prices are subject to a diesel fuel adjustment if the diesel fuel component of the base price increases by at least 20%.

CONFIDENTIAL INFORMATION REDACTED

The current high sulfur coal position is illustrated in the table below.

<u>Scrubbed High Sulfur Coal Position Report as of 11/15/2007 (Tons in Millions)</u>

	2008	2009	2010	2011	2012
Projected Need of Hi-Sulfur Tons	[redacted]				
Tons committed under contract					
Tons committed pending final contract					
Armstrong tons pending final contract					
Tons remaining open					

The Armstrong FOB prices are below the Forward Price Curve (FPC) used for budgeting of the 2008 MTP. The table below illustrates the open position pricing used at Mill Creek Station for High Sulfur Illinois Basin Coal. The largest percentage of Armstrong coal will be going to the Mill Creek Station via barge delivery.

<u>2008 MTP Mill Creek Comparison</u>

	2008	2009	2010	2011	2012
Mill Creek Open Position Delivered Price	[redacted]				
Armstrong Qual 1 Price	[redacted]				
2008 MTP Trans/Other Pricing					
Estimated delivered price for Armstrong					

B. COMPARISON TO OTHER VENDORS:

Armstrong's price [redacted] as compared to those offers received in response to LG&E's and KU's solicitations for high sulfur coal. On March 6, 2007, the Utilities sent out a solicitation for steam coal (delivery to start January 2008) with a bid due date of March 29, 2007. Solicitation invitations were sent to approximately one hundred and seventy vendors and responses were received from [redacted] different bidders. The Armstrong offer [redacted] Armstrong is a [redacted]

C. VENDOR INFORMATION:

Armstrong Coal Company, Inc. was formed in 2006 to acquire and develop coal reserves in Western Kentucky. Armstrong Coal Company, Inc. (Armstrong) and its affiliates purchased 225 million tons of saleable coal in Western Kentucky from Peabody Energy. Armstrong is investing approximately [redacted] million to (i) purchase the coal reserves from Peabody Energy, (ii) purchase and upgrade the Smallhous Dock located on the Green River, (iii) build two coal wash/preparation plants, (iv) construct a 120 railcar unit train load out facility on the Paducah and Louisville Railway, and (v) develop the reserves/mines purchased from Peabody Energy.

Strategically located operations and abundant reserves have prepared Armstrong to be a significant coal producer in Western Kentucky. Armstrong plans to be in production from both surface and underground mining operations no later than mid year 2008.

According to Armstrong's 2009 proforma targeted net cash flow, this agreement will provide [redacted] of Armstrong's revenues; a long term agreement with TVA will provide [redacted]; a long term agreement with East Kentucky Power will provide [redacted]; and a long term agreement with Owensboro Municipal Utilities will provide [redacted].

CONFIDENTIAL INFORMATION REDACTED

Work is currently underway on the new preparation/wash plant, new continuous mining equipment has been purchased for underground operations in the Big Run Mine; the rail bed for the new rail spur and railcar loading facility is under construction; and at least two drag lines have been purchased and are being assembled for surface operations.

III. FINANCIAL IMPACT:

LG&E (and KU) employ a Fuel Adjustment Clause ("FAC") mechanism, which under Kentucky law allows the Utilities to recover from customers the actual fuel costs associated with retail electric sales. A certain amount of fuel cost recovery occurs through base rates; the FAC is a true-up mechanism by which the difference between base rate fuel cost and actual fuel cost is either collected from the customer or refunded to the customer through a monthly adjustment to the customers bills. The combination of recovery in base rates and the monthly adjustment allows the Companies to recover, in full, the actual fuel costs incurred.

This contract is for delivery of coal to base-load units primarily serving native load customers. The cost of fuel under this contract will be subject to pass-through under the Kentucky Public Service Commission's Fuel Adjustment Clause. [redacted]

IV. RECOMMENDATION:

It is recommended that the E.ON U.S. Investments Corp. Board approve LG&E/KU contract #J07032 for a total value of approximately $777.1 M and to delegate authority to execute the necessary contractual documents to affect the contract to the CEO of E.ON U.S. LLC.

[1]Generation Planning's allocation of unit output between native load and OSS for 2008 – 2012 planning period.

CONFIDENTIAL INFORMATION REDACTED

APPENDIX A: DESCRIPTION OF FUEL ADJUSTMENT CLAUSE

Louisville Gas and Electric Company and Kentucky Utilities Company (collectively, the "Utilities") employ a *Fuel Adjustment Clause ("FAC") mechanism*, which under Kentucky law allows the two utilities to recover from customers the actual fuel costs associated with retail electric sales. A certain amount of fuel cost recovery occurs through base rates; the FAC is a true-up mechanism by which the difference between base rate fuel cost and actual fuel cost is either collected from the customer or refunded to the customer through a monthly adjustment to the customer's bills. The combination of recovery in base rates and the monthly adjustment allows the Utilities to recover, in full, the actual fuel costs prudently incurred.

For purposes of the Fuel Adjustment Clause, fuel expense is defined as the actual cost of fuel burned at company generating facilities, plus the fuel portion of economic power purchases less the incremental fuel costs associated with off-system sales. For power purchases, fuel cost is defined as all non-demand charges for the purchase. Included in the FAC are adjustments for fuel costs associated with forced outages greater than 6 hours, any purchase power expense greater than the Utilities highest cost units, and purchase power associated with maintaining a reserve margin.

Both LG&E and KU have retail fuel adjustment clauses in place that have essentially remained unchanged for approximately thirty years. Additionally, KU has a FERC wholesale monthly fuel clause applied to wholesale billings (KU municipal customers) and an annual fuel factor component to base rates, applied to Virginia retail customers.

Recovery of fuel expenses occurs during the second calendar month after the expenses are incurred, and fuel expense billed through the *fuel adjustment clause are subject to subsequent review* and approval by the Kentucky Public Service Commission. The review process generally requires the Utilities to provide to the Commission supplemental information related to purchased power contracts, the degree to which the Utilities engage in energy sales to third parties, and the extent to which the Utilities believe the current fuel inventory level is sufficient to meet upcoming demand. Fuel procurement procedures are subject to review and the Utilities are responsible for ensuring that Company policies and procedures are followed in every instance.

Disallowance of previously billed fuel costs [redacted] the Utilities and the Commission reached a universal settlement on the appropriate treatment of purchased power costs and off-system sales revenues, and subsequent to that settlement, [redacted] the [redacted]

[redacted]

Attachment to Question No. 28

5 of 9

Bellar

ACTION OF THE BOARD OF DIRECTORS
OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TAKEN BY WRITTEN CONSENT

August 18, 2008

Pursuant to the provisions of Section 271B.8-210 of the Kentucky Business Corporation Act, the Board of Directors of Louisville Gas and Electric Company, a Kentucky corporation (the "Company" or "LG&E"), hereby adopt the following resolutions by unanimous written consent in lieu of a special meeting and consent to the actions contemplated thereby:

<u>ALLIANCE COAL LLC</u>
<u>COAL SUPPLY AGREEMENT</u>

WHEREAS, LG&E and Kentucky Utilities Company ("KU") have conducted negotiations with Alliance Coal Company LLC ("Alliance") regarding a potential coal supply agreement in the amount of up to $565.2 million (the "Alliance Coal Contract"); and

WHEREAS, this Board of Directors has considered matters relating to the Alliance Coal Contract and deems it advisable and in the best interest of LG&E to proceed with such transaction.

NOW, THEREFORE, BE IT RESOLVED, that this Board of Directors does hereby authorize and approve the Alliance Coal Contract; and

FURTHER RESOLVED, that the appropriate officers of LG&E are, and each of them hereby is, authorized and directed to negotiate, execute and deliver, from time to time, for and on behalf of the Company (i) coal purchase, supply and transport contracts and appropriate amendments thereto, (ii) relevant federal, state or other governmental notices, filings or applications and (iii) any other agreement, document or instrument, that may be necessary or appropriate in connection with the Alliance Coal Contract, including but not limited to credit, security, pledge, guaranty or other financial support arrangements, with such officer's execution and delivery to conclusively evidence such officer's approval thereof and the approval of this Board of Directors; and

FURTHER RESOLVED, that the appropriate officers of LG&E are, and each of them hereby is, authorized and directed, to take such other actions as they shall, in their discretion, deem necessary, appropriate or advisable to consummate the Alliance Coal Contract, including such additional terms, conditions precedent or other changes as may be deemed necessary, appropriate or advisable in the discretion of such officers, with the taking of such actions and the execution of such agreements or documents conclusively to evidence the authorization thereof by this Board of Directors; and

FURTHER RESOLVED, that all actions heretofore or hereafter taken by any officer of the Company in connection with the Alliance Coal Contract contemplated by these resolutions be, and they hereby are, approved, ratified and confirmed in all respects.

WITNESS the signatures of the undersigned, who are all of the directors of Louisville Gas and Electric Company as of the date first written above.

Victor A. Staffieri

Chris Hermann

John R. McCall

S. Bradford Rives

Paul W. Thompson

ACTION OF THE BOARD OF DIRECTORS
OF
LOUISVILLE GAS AND ELECTRIC COMPANY
TAKEN BY WRITTEN CONSENT

December 17, 2007

Pursuant to the provisions of Section 271B.8-210 of the Kentucky Business Corporation Act, the Board of Directors of Louisville Gas and Electric Company, a Kentucky corporation (the "Company" or "LG&E"), hereby adopt the following resolutions by unanimous written consent in lieu of a special meeting and consent to the actions contemplated thereby:

ARMSTRONG COAL COMPANY, INC.
COAL SUPPLY AGREEMENT

WHEREAS, LG&E and Kentucky Utilities Company ("KU") have conducted negotiations with Armstrong Coal Company, Inc. regarding a potential coal supply agreement in the amount of up to $777.1 million (the "Armstrong Coal Contract"); and

WHEREAS, this Board of Directors have considered matters relating to the Armstrong Coal Contract and deem it advisable and in the best interest of LG&E to proceed with such transaction.

NOW, THEREFORE, BE IT RESOLVED, that this Board of Directors does hereby authorize and approve the Armstrong Coal Contract; and

FURTHER RESOLVED, that the appropriate officers of LG&E are, and each of them hereby is, authorized and directed to negotiate, execute and deliver, from time to time, for and on behalf of the Company (i) coal purchase, supply and transport contracts and appropriate amendments thereto, (ii) relevant federal, state or other governmental notices, filings or applications and (iii) any other agreement, document or instrument, that may be necessary or appropriate in connection with the Armstrong Coal Contract, including but not limited to credit, security, pledge, guaranty or other financial support arrangements, with such officer's execution and delivery to conclusively evidence such officer's approval thereof and the approval of this Board of Directors; and

FURTHER RESOLVED, that the appropriate officers of LG&E are, and each of them hereby is, authorized and directed, to take such other actions as they shall, in their discretion, deem necessary, appropriate or advisable to consummate the Armstrong Coal Contract, including such additional terms, conditions precedent or other changes as may be deemed necessary, appropriate or advisable in the discretion of such officers, with the taking of such actions and the execution of such agreements or documents conclusively to evidence the authorization thereof by this Board of Directors; and

FURTHER RESOLVED, that all actions heretofore or hereafter taken by any officer of the Company in connection with the Armstrong Coal Contract contemplated by these resolutions be, and they hereby are, approved, ratified and confirmed in all respects.

OMITTED TEXT – NOT RELEVANT

WITNESS the signatures of the undersigned, who are all of the directors of Louisville Gas and Electric Company as of the date first written above.

Victor A. Staffieri

Chris Hermann

John R. McCall

S. Bradford Rives

12/17/07

Paul W. Thompson

Attachment to Question No. 28

6 of 9

Bellar

Strategic Discussion (Project Atlantis)

Presentation to the Board of Directors

February 26, 2010

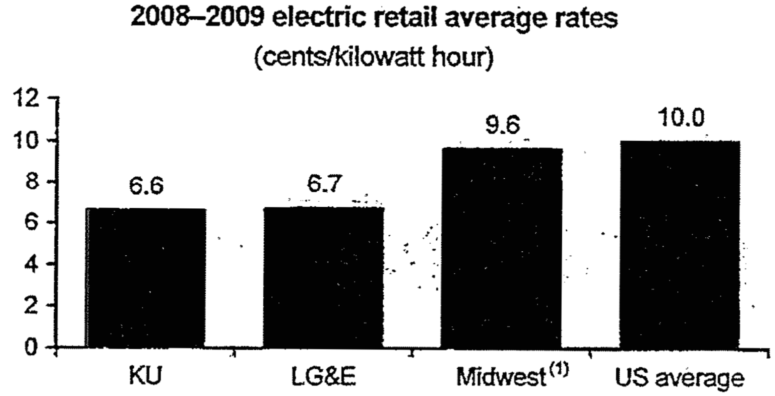
Proprietary & Confidential

ppl

Competitive Rates

After requested rate increases, LG&E and KU will continue to have among the lowest rates in the U.S.

Utility	Service	Requested Rate Increase
LG&E	Electric	12.1% ($94.6 million)
LG&E	Gas	7.7% ($22.6 million)
KU	Electric	11.5% ($136 million)



	KU	LG&E	Midwest	US average
Residential:	7.18	7.51	11.46	11.76
Commercial:	6.99	6.96	9.98	10.25
Industrial:	5.52	5.15	6.57	6.82

- On January 29, 2010, E.ON U.S. filed an application with the KPSC requesting annual increases in base electric and gas rates
- The requested increases are based on historic test year ended October 31, 2009
  - 11.5% return on equity and 53% equity
  - Designed to recover costs associated with capital investments, including a portion of the Trimble County 2 coal plant under construction (COD 2010), as well as other increases in operating costs, including ice and wind storm regulatory assets for which E.ON U.S. is seeking recovery over five years
  - Hearings expected to begin in May 2010
  - Anticipated effective date of August 1, 2010

Source: Edison Electric Institute, typical bills and average rates report, summer 2009 (covers July 2008 through June 2009).
Note: The EEI report surveys approximately 90 electric utilities in the US.
(1) 'Midwest' includes utilities operating in DE, IL, IN, KY, MD, MI, NJ, OH, PA WI, and WV.

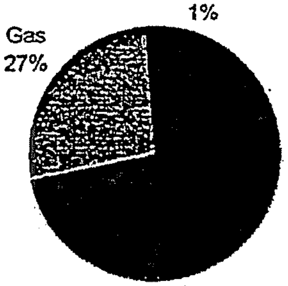
Supportive Regulatory Environment

Regulatory construct	Description
Environmental cost recovery ("ECR")	• Provides real-time recovery of, and return on, environmental investment and recovery of environmental O&M resulting from compliance with the Clean Air Act • Approximately 75% of the $1 billion of environmental capital expenditures to be spent in 2010–2019 has been approved by the KPSC for inclusion in the ECR
Construction work in progress ("CWIP")	• History of including CWIP in rate base for large projects such as Trimble County 2 coal plant
Fuel adjustment clause ("FAC")	• Increases and decreases in the cost of fuel for electric generation are reflected monthly in the rates charged to retail electric customers with a two month lag
Gas supply clause ("GSC")	• Actual cost of natural gas supply for LG&E gas utility reflected in rates, which are reset quarterly • Includes an incentive mechanism tied to performance versus benchmarked natural gas costs
Demand side management ("DSM")	• Concurrent recovery of DSM costs, including lost revenue • Financial incentive to the utility for implementing DSM programs

ppl

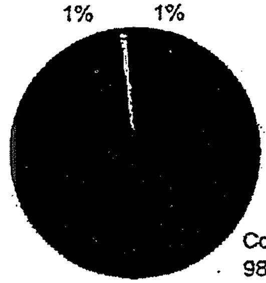
Regulated Generation Fleet

Capacity (MW)(1)



Total (MW) = 8,077MW

Output (GWh)(2)



Total Output (GWh) = 31,678

Operating plants

Plant name	Owner	Net capacity (MW)	In-service year	Primary fuel type	Environmental equipment
Ghent	KU	1,918	1974	Coal	Scrubber, particulate & NOx control
Mill Creek	LG&E	1,472	1972	Coal	Scrubber, particulate & NOx control
E.W. Brown	KU	697	1957	Coal	Particulate control and NOx control. Scrubber to be installed by 12/2010
Cane Run	LG&E	563	1962	Coal	Scrubber, particulate & NOx control
Trimble County I	LG&E	383	1990	Coal	Scrubber, particulate & NOx control
Green River	KU	163	1954	Coal	Scrubber, particulate & NOx control
Tyrone 3	KU	71	1953	Coal	NA
Trimble County 2	LG&E / KU	570	2010(1)	Coal	Scrubber, mercury, PM, NOx control
Trimble County CT	LG&E / KU	960	2002	Gas	NA
E.W. Brown CT	LG&E / KU	947	1994	Gas	NA
Secondary CTs	LG&E / KU	257	NA	Gas	NA
Ohio Falls	LG&E	52	1928	Hydro	NA
Dix Dam	KU	24	1925	Hydro	NA
Total		**8,077**			

(1) Pie charts and table include 570 MW net ownership of Trimble County 2, a coal plant currently under construction with expected COD of mid-2010.
(2) Output for 12 months ended December 31, 2009.

ppl

Attachment to Question No. 28

7 of 9

Bellar

PPL CORPORATION
AGENDA FOR MEETING OF
BOARD OF DIRECTORS
MARCH 26, 2010

EXECUTIVE SESSION
(outside directors, Chairman, CLC and J. McGuire)

PRESENTATION

1. Strategic Update .... Separate booklet

   Presenter: James H. Miller
   Chairman, President and
   Chief Executive Officer

EXECUTIVE SESSION
(outside directors)

INTRODUCTORY MATTERS
(all attendees)

2. [redacted] .... Separate booklet

3. [redacted]

PRESENTATIONS
(all attendees)

4. [redacted] .... Separate booklet

   [redacted]

PRESENTATIONS (cont.)

5. [redacted] .... Tab A and separate booklet

6. [redacted] .... Tab B and separate booklet

EXECUTIVE SESSION
(outside directors and Chairman)

COMMITTEE REPORTS

7. [redacted]

   - [redacted] .... Tab C

8. [redacted].

9. [redacted]

GENERAL INFORMATION

10. [redacted] .... Tab D

ADJOURNMENT

3/26/10

Attachment to Question No. 28

8 of 9

Bellar

Strategic Update (Project Atlantis)

Presentation to the Board of Directors

March 26, 2010

Proprietary & Confidential

ppl

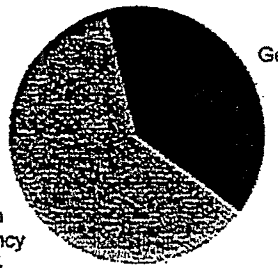
Progressive Regulatory Environment

Regulatory construct	Description
Environmental cost recovery ("ECR")	• Provides real-time recovery of, and return on, environmental investment and recovery of environmental O&M associated with coal-fired generation • Approximately 75% of the $1 billion of environmental capital expenditures to be spent in 2010–2019 has been approved by the KPSC for inclusion in the ECR
Construction work in progress ("CWIP")	• History of including CWIP in rate base for large projects such as Trimble County 2 coal plant
Fuel adjustment clause ("FAC")	• Increases and decreases in the cost of fuel for electric generation are reflected monthly in the rates charged to retail electric customers with a two-month lag
Gas supply clause ("GSC")	• Actual cost of natural gas supply for LG&E gas utility reflected in rates, which are reset quarterly • Includes an incentive mechanism tied to performance versus benchmarked natural gas costs
Demand side management ("DSM")	• Concurrent recovery of DSM costs, including lost revenue • Financial incentive to the utility for implementing DSM programs

ppl

Key Issues: Environmental

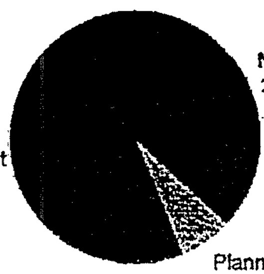
FGDs in Coal Fleet (SOx)



Environmental cost recovery ("ECR") mechanism

- 95% of E.ON US's electric production comes from coal-fired plants
- Most recent ECR plan approved by KPSC December 2009
  - Includes Brown SCR and coal combustion by-products projects at Brown, Cane Run, Ghent and Trimble County 1
- Year-end 2009 ECR Rate Base over $1.5 billion, with environmental capital spending of approximately $1 billion over the 2010-2019 period
- Periodic reviews by KPSC (no disallowance to date)

SCRs in Coal Fleet (NOx)



Environmental legislation and regulation issues

- EPA regulation: significant areas include NSR, CAIR and CAMR replacements, Hg and HAPs and coal ash
- Renewable legislation: Kentucky does not currently have an RPS standard
- CO_2 legislation: anticipate recovery of carbon costs through ECR mechanism

ppl

Attachment to Question No. 28

9 of 9

Bellar

AGENDA
BOARD OF DIRECTORS MEETING
APRIL 27, 2010

INTRODUCTORY MATTERS

1. Overview of Transaction

   James H. Miller
   Chairman, President and
   Chief Executive Officer

PRESENTATIONS

2. Business Judgment Rule

   Presenters: Vincent Pagano
   Mario A. Ponce
   Simpson Thacher & Bartlett LLP

3. Review of Terms of Purchase and Sale Agreement

   Presenter: Mario A. Ponce
   Andrew Calder
   Simpson Thacher & Bartlett LLP

4. Analysis Supporting Fairness Opinion

   Presenters: Jamie Welch
   Managing Director
   Head of Global Energy
   Credit Suisse

   John Cogan
   Managing Director
   Credit Suisse

   Pierre Bosse
   Director
   Credit Suisse

   The Board will be requested to approve the acquisition of the limited liability company interests of E.ON U.S. LLC.

ADJOURNMENT

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 29

Witness: Lonnie E. Bellar

Q-29. To the extent not already provided in response to request 28 above, please provide any agendas, handouts, minutes, documents or notes prepared for or resulting from each meeting of the Companies' Board of Directors (and any subcommittee of that Board) at which the matters of request 28 were discussed in any way.

A-29. Please see the response to Question No. 28.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 30

Witness: Counsel / John N. Voyles, Jr. / Daniel K. Arbough

Q-30. Please provide all reports, memoranda, presentations, or other documents provided to stockholders, investors, banks, investment firms, investment brokers or dealers, investment analysts, bond rating agencies or the like by the Companies' within the past five years concerning

a. the status of the Companies' coal-fired generating stations (the Coal Plants),

b. past, present or future environmental compliance of the Coal Plants, litigation or settlements (including NSR settlements with the EPA and/or DOJ) concerning the Coal Plants, to the extent not covered by attorney-client privilege,

c. past, present or future need for the Coal Plants, or the need for or plans for capital additions to the Coal Plants, whether for environmental compliance or otherwise, and

d. any other matter that could affect the costs or output of the Coal Plants.

A-30. Objections are made to the request for information on the grounds that it is not a supplemental data request, is overly broad and unduly burdensome. Without wavier of these objections, KU provides the following responses:

a. Documents responsive to the request for information are attached on CD in the folder titled Question No. 30. Please also see the response to KPSC-1 Question No. 32(h).

b. The consent decrees responsive to this request were provided as Exhibits attached to Mr. Revlett's testimony.

c. Documents responsive to the request for information are attached on CD in the folder titled Question No. 30 Please also see the response to KPSC-1 Question No. 32(h) and part b above.

d. Documents responsive to the request for information are attached on CD in the folder titled Question No. 30.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 31

Witness: John N. Voyles, Jr. / Daniel K. Arbough

Q-31. To the extent not already provided in response to request 30 above, please provide any agendas, handouts, minutes or notes prepared for or resulting from each meeting of the Companies' representatives with stockholders, investors, banks, investment firms, investment brokers or dealers, investment analysts, bond rating agencies or the like during which the matters listed in request 30 were discussed in any way.

A-31. Please see the response to Question No. 30.

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 32

Witness: Charles R. Schram

Q-32. Please state whether the company has evaluated, or caused to be evaluated, the external costs or damages, including costs or damages to human health or the environment, of operating the existing coal fleet? If yes, please provide the analysis, as well as any workpaper or source document supporting this analysis.

A-32. Please see the response to SC-NRDC-1 Production of Documents Question No. 18. Consistent with Commission precedent[1], the Companies did not evaluate externalities in determining the least-cost plan for meeting native load requirements and complying with anticipated environmental regulations.

---

[1] *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 ….").

LOUISVILLE GAS AND ELECTRIC COMPANY

Response to the Supplemental Requests for Information of Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and the Natural Resources Defense Council Dated August 18, 2011

Case No. 2011-00162

Question No. 33

Witness: Charles R. Schram

Q-33. For each of the following tables and exhibits, please state if the dollar values are in real or nominal dollars, and the assumed inflation rate associated with the table.

a. Attachment to Response to LGE KPSC-1 Question 37 Pages 1-2, 4-5, and 7-8

b. Attachment to Response to LGE KPSC-1 Question 45 Page 1

c. Attachment to Response to LGE KPSC-1 Question 46(b) Pages 9-10

d. Attachment to Response to LGE KPSC-1 Question 46(c) Pages 1-4

e. Attachment to Response to SC/NRDC Document Request 16, 2011 Air Compliance Plan Sensitivity Analysis, page 4

A-33. a. Nominal.

b. Nominal.

c. Nominal.

d. Nominal.

e. Table 2 on Page 4 of the Companies' response to SC-NRDC-1 Production of Documents Question No. 16 does not contain dollar values.