



Ms. Elizabeth O'Donnell  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, Kentucky 40602-0615

RECEIVED

NOV 21 2006  
PUBLIC SERVICE  
COMMISSION

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

Kent W. Blake  
Director  
T 502-627-2573  
F 502-217-2442  
kent.blake@eon-us.com

November 21, 2006

RE: In the Matter Of: The Application Of Kentucky Utilities Company For A Certificate Of Public Convenience And Necessity To Construct A Selective Catalytic Reduction System And Approval Of Its 2006 Compliance Plan For Recovery By Environmental Surcharge - Case No. 2006-00206 ✓

In the Matter Of: The Application Of Louisville Gas and Electric Company For Approval Of Its 2006 Compliance Plan For Recovery By Environmental Surcharge - Case No. 2006-00208

Dear Ms. O'Donnell:

Enclosed please find an original and five (5) copies of Kentucky Utilities Company's ("KU") and Louisville Gas and Electric Company's ("LG&E") Joint Responses to the Post Hearing Data Requests requested at the Hearing held on November 8, 2006 in the above-referenced dockets.

Should you have any questions concerning the enclosed, please do not hesitate to contact me.

Sincerely,

Kent W. Blake

cc: Hon. Elizabeth E. Blackford  
Hon. Michael L. Kurtz

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION **RECEIVED**

NOV 21 2006

**PUBLIC SERVICE  
COMMISSION**

**In the Matter of:**

**THE APPLICATION OF KENTUCKY UTILITIES )  
COMPANY FOR A CERTIFICATE OF PUBLIC )  
CONVENIENCE AND NECESSITY TO )  
CONSTRUCT A SELECTIVE CATALYTIC )  
REDUCTION SYSTEM AND APPROVAL OF ITS )  
2006 COMPLIANCE PLAN FOR RECOVERY BY )  
ENVIRONMENTAL SURCHARGE )**

**CASE NO.  
2006-00206**

**In the Matter of:**

**THE APPLICATION OF LOUISVILLE GAS AND )  
ELECTRIC COMPANY FOR APPROVAL OF ITS )  
2006 COMPLIANCE PLAN FOR RECOVERY BY )  
ENVIRONMENTAL SURCHARGE )**

**CASE NO.  
2006-00208**

**JOINT RESPONSE OF  
KENTUCKY UTILITIES COMPANY  
and  
LOUISVILLE GAS AND ELECTRIC COMPANY  
TO POST-HEARING DATA REQUEST  
HEARING DATE - NOVEMBER 8, 2006**

**FILED: NOVEMBER 21, 2006**



**KENTUCKY UTILITIES COMPANY  
and  
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Joint Response to Post Hearing Data Request  
Hearing Date – November 8, 2006**

**Case Nos. 2006-00206 and 2006-00208**

**Question No. 1**

**Witness: Kent W. Blake**

- Q-1. Please provide an estimate of the impact on KU's Fuel Adjustment Clause of switching from low sulfur coal to high sulfur coal as the FGDs at the Ghent and E. W. Brown Stations become operational.
- A-1. Based on the fuel cost projections from the most recent least cost analysis<sup>1</sup>, the impact on KU's FAC of switching from low-sulfur coal to high-sulfur coal is estimated to be \$3.70 per megawatt-hour, once all FGDs are installed. For a KU residential customer using 1,000 kWh, this would be an estimated reduction in the fuel adjustment clause of approximately \$3.70 per month; the estimated FAC impact will vary over time depending on the price of fuel and the performance of the units.

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<sup>1</sup> In the Matter of *The Application Of Kentucky Utilities Company To Modify Certain Certificates of Public Convenience and Necessity To Construct Ductwork for Two Flue Gas Desulfurization Units At The Ghent Power Station*- Case No. 2006-00493



**KENTUCKY UTILITIES COMPANY  
and  
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Joint Response to Post Hearing Data Request  
Hearing Date – November 8, 2006**

**Case Nos. 2006-00206 and 2006-00208**

**Question No. 2**

**Witness: Robert M. Conroy**

- Q-2 Please provide the details to and support for the calculation of the Monthly Residential Customer Impact (1,000 kwh) shown in KIUC Hearing Exhibit #1.
- A-2. The calculation of the ECR billing factor as shown on KIUC Hearing Exhibit #1 is detailed in the Attachment to the Response to Commission Staff Data Request Question No. 13 (for LG&E) and Question No. 18 (for KU). The responses were filed with the Commission on August 7, 2006.

Please see the attachment to this response for a sample detailed calculation of the determination of the Monthly Residential Customer Impact using the Monthly Billing Factor. The sample is for the 2007 values shown in KIUC Hearing Exhibit #1 for the 2006 ECR Plan.

Kentucky Utilities Company  
Estimated Bill Impact, 2006 Amended ECR Plan

Bill Component	Source	2007
(1) Billing Factor (2006 ECR Plan Projects Only)	Attachment to Response to Question 18(a) of Commission Staff Initial Data Request	1.36%
KU Residential Bill Calculation		
(2) Customer Charge	Tariff Sheet RS	\$ 5.00
(3) Energy, 1,000 Kwh @\$0.04720	Tariff energy rate times 1,000 kWh	47.20
(4) FAC billings (May-06 factor -\$0.00720/kwh)	FAC for May 2006 billings, per Form A dated April 21, 2006, times 1,000 kWh	7.20
(5) DSM billings (May-06 factor - \$0.00057/kwh)	Tariff Sheet DSMRM Sheet No. 71.4, times 1,000 kWh	0.57
(6) ECR billings (May-06 factor: 3.08%)	ECR for May 2006 billings, per ES Form 1.0 dated April 21, 2006. Billing factor of 3.08% times sum of rows (2) through (5)	1.85
(7) Additional ECR factor from 2006 Compliance Plan	Billing Factor from 2006 Plan projects [Row (1)] times sum of Rows (2) through (5)	0.82

Louisville Gas and Electric Company  
Estimated Bill Impact, 2006 Amended ECR Plan

Bill Component	Source	2007
(1) Billing Factor (2006 ECR Plan Projects Only)	Attachment to Response to Question 15(a) of Commission Staff Initial Data Request	0.59%
KU Residential Bill Calculation		
(2) Customer Charge	Tariff Sheet RS	\$ 5.00
(3) Energy, 1,000 Kwh @\$0.05955	Tariff energy rate times 1,000 kWh	59.55
(4) FAC billings (May-06 factor -\$0.00354/kwh)	FAC for May 2006 billings, per Form A dated April 21, 2006, times 1,000 kWh	3.54
(5) DSM billings (May-06 factor - \$0.00072/kwh)	Tariff Sheet DSMRM Sheet No. 71.4, times 1,000 kWh	0.72
(6) ECR billings (May-06 factor: 3.28%)	ECR for May 2006 billings, per ES Form 1.0 dated April 21, 2006. Billing factor of 3.28% times sum of rows (2) through (5)	2.26
(7) Additional ECR factor from 2006 Compliance Plan	Billing Factor from 2006 Plan projects [Row (1)] times sum of Rows (2) through (5)	0.41



**KENTUCKY UTILITIES COMPANY  
and  
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Joint Response to Post Hearing Data Request  
Hearing Date – November 8, 2006**

**Case Nos. 2006-00206 and 2006-00208**

**Question No. 3**

**Witness: Gary H. Revlett**

- Q-3. Please provide any written reports from [KYDAQ] inspectors which note that the Companies' generating units are exceeding their opacity limits.
- A-3. To date, the Kentucky Division for Air Quality has not issued a Notice of Violation (NOV) to any of our generating stations for opacity violations, where SO<sub>3</sub> emissions were identified as the cause. However, the Kentucky Division for Air Quality (KDAQ) has identified situations where SO<sub>3</sub> emissions may have contributed to opacity exceedance. Three recent examples of these opacity concerns are identified in the attached KDAQ Air Inspection Reports.



ERNIE FLETCHER  
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

TERESA J. HILL  
SECRETARY

Division for Air Quality  
8020 Veterans Memorial Dr Ste 110  
Florence, KY 41042  
www.kentucky.gov

November 2<sup>nd</sup>, 2006

Carla Piening  
KY Utilities Co  
Ghent Generation Station  
9485 US 42 E  
Ghent, Kentucky 41045

Re: AI ID: 704  
KY Utilities Co - Ghent Generation Station  
DAQ Alternate ID: 21-041-00010  
Carroll County, Kentucky  
Activity ID: CIN20060002

Dear Ms. Piening

Attached for your information and records is a copy of the DAQ-Partial Compliance Evaluation performed at KY Utilities Co - Ghent Generation Station on September 25, 2006.

Please review and address any items of concern listed in the report. If you have any questions or comments concerning this inspection, please contact the Florence Regional Office at: (859) 525-4923.

Sincerely,

E-Signed by Courtney Shattuck  
VERIFY authenticity with ApproveIt

Courtney Shattuck  
Environmental Inspector II

cks  
cc:

Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
Air Inspection Report

**AI ID:** 704      **AI Type:** ENERGY-Elec Power Trans. Control. & Distr (22112)  
**AI Name:** KY Utilities Co - Ghent Generation Station  
**AI Address:** 9485 US 42 E  
**City:** Ghent, **State:** Kentucky **Zip:** 41045  
**County:** Carroll **Regional Office:** Florence Regional Office  
**Latitude:** 38.748333    **Longitude:** -85.033611  
**Site Contact:** Carla Piening      **Title:** Senior Scientist      **Phone #:** 502-347-4008  
**Inspection Type:** DAQ-Partial Compliance Evaluation **Activity #:** CIN20060002  
**Inspection Start Date:** September 25, 2006 **Time:** 1:30 PM **End Date:** September 25, 2006 **Time:** 4:00 PM  
**Site/Permit ID:** 21-041-00010 / V-97-025

**Lead DEP Investigator:** Courtney Shattuck  
**Other DEP Investigators:** Clay Redmond  
**Persons Interviewed:** Carla Piening

**General Comments:** The Florence Regional Office visited KU-Ghent Generating Station on September 25th, 26th and 27th, 2006, to observe SO<sub>3</sub> mitigation testing. KU - Ghent performed SO<sub>3</sub> mitigation testing in the spring and determined that the addition of hydrated lime to the exhaust stream could reduce the amount of SO<sub>3</sub> released to the atmosphere. The Florence Regional Office was concerned with KU's ability to maintain compliance with the particulate matter limit when injecting hydrated lime after the control device. The purpose of the September testing was to determine if compliance with the particulate testing could be maintained while injecting lime. The Florence Regional Office believed that KU-Ghent would be performing particulate testing in accordance with US EPA Reference Method 5. Unfortunately, KU-Ghent was unable to meet the requirements of the test method; therefore, it may be necessary to conduct additional testing.

Ms. Piening believes that the hydrated lime particle size and porosity effects SO<sub>3</sub> reduction. Therefore, KU-Ghent tested hydrated lime manufactured by 3 different companies: Chemlime (conducted in the spring), Carmeuse Lime (tested on 9/26/06) and Mississippi Lime (tested on 9/27/06). Preliminary test results indicate that Chemlime and Mississippi Lime produced more desirable results.

Although some amount of SO<sub>3</sub> is created in the boiler, Unit #1 has a greater amount of SO<sub>3</sub> formation than the other generating units due to it being equipped with an SCR (for control of NO<sub>x</sub> emissions). Unit #1 is also unique in that it is equipped with a scrubber to control SO<sub>2</sub> emissions. During the facility visit we noticed an increase in opacity emissions, possibly due to the formation of SO<sub>3</sub>. Unit #1 does not have a Continuous Opacity Monitoring (COM) device to measure and record the opacity. KU - Ghent should realize that the increased formation of SO<sub>3</sub> could contribute to excess opacity emissions that could violate the permit limit. US EPA Reference Method 9 should be used in determining compliance with the opacity limit.

KU-Ghent has plans to install a particulate Continuous Emissions Monitoring (CEM) device on Unit #1 in the next few months. PM CEM Correlation testing will occur during the week of October 30<sup>th</sup>, 2006.

**Overall Compliance Status:** No Violations Observed



ERNIE FLETCHER  
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

TERESA J. HILL  
SECRETARY

Division for Air Quality  
8020 Veterans Memorial Dr Ste 110  
Florence, KY 41042  
www.kentucky.gov

October 23<sup>rd</sup>, 2006

Diana Freibert  
Louisville Gas & Electric  
Trimble Co Generating Station  
487 Corn Creek Rd  
Bedford, Kentucky 40006

Re: AI ID: 4054  
Louisville Gas & Electric  
Trimble Co Generating Station  
DAQ Alternate ID: 21-223-00002  
Trimble County, Kentucky  
Activity ID: CIN20060002

Dear Mrs. Freibert

Attached for your information and records is a copy of the DAQ-Partial Compliance Evaluation performed at Louisville Gas & Electric - Trimble Co Generating Station on September 19, 2006.

Please review and address any items of concern listed in the report. If you have any questions or comments concerning this inspection, please contact the Florence Regional Office at: (859) 525-4923.

Sincerely,

A black and white image of a handwritten signature, which appears to be "Courtney Shattuck".

Courtney Shattuck  
Environmental Inspector II

cks  
cc:

**Environmental and Public Protection Cabinet**  
**Department for Environmental Protection**  
**Division for Air Quality**  
**Air Inspection Report**

**AI ID:** 4054      **AI Type:** ENERGY-Elec Power Trans, Control, & Distr (22112)  
**AI Name:** Louisville Gas & Electric - Trimble Co Generating Station  
**AI Address:** 487 Corn Creek Rd  
**City:** Bedford, **State:** Kentucky **Zip:** 40006  
**County:** Trimble **Regional Office:** Florence Regional Office  
**Latitude:** 38.584722 **Longitude:** -85.411944  
**Site Contact:** Diana Freibert **Title:** Chemist /Environmental Coordinator **Phone #:** 502-627-6204  
**Inspection Type:** DAQ-Partial Compliance Evaluation **Activity #:** CIN20060002  
**Inspection Start Date:** September 19, 2006 **Time:** 11:30 am **End Date:** September 19, 2006 **Time:** 3:00 PM  
**Site/Permit ID:** 21-223-00003

**Lead DEP Investigator:** Courtney Shattuck  
**Other DEP Investigators:** Clay Redmond; Jerry Slucher  
**Persons Interviewed:** Diana Freibert; Jeff Slocum

**General Comments:** The Florence Regional Office visited LG&E Trimble Co. Generating Station on September 19th and 20th, 2006, to observe SO<sub>3</sub> mitigation testing. LG&E performed SO<sub>3</sub> mitigation testing in the spring and determined that the addition of hydrated lime to the exhaust stream could reduce the amount of SO<sub>3</sub> released to the atmosphere. The Florence Regional Office was concerned with LG&E's ability to maintain compliance with the particulate matter limit when injected hydrated lime after the control device. The purpose of the September testing was to determine if compliance with the particulate testing could be maintained while injecting lime. The Florence Regional Office believed that LG&E Trimble would be performing particulate testing in accordance with US EPA Reference Method 5. Unfortunately, LG&E was unable to meet the requirements of the test method; therefore, it may be necessary to conduct additional testing.

Although some amount of SO<sub>3</sub> is created in the boiler, LG&E has noticed a greater amount of SO<sub>3</sub> formation during ozone season due to the use of the SCR. The Florence Regional Offices believes that the increased formation of SO<sub>3</sub> could contribute to excess opacity emissions that could violate the permit limit. A COM unit measures the opacity of the exhaust stream before it travels through the scrubber. Although the COM was reading an acceptable opacity, SO<sub>3</sub> condenses in the FGD causing increased opacity as the exhaust gas exits the stack. The inspectors took no official Method 9 readings. However, qualitative observations indicated that LG&E was experiencing higher opacities when not controlling for SO<sub>3</sub>. We noticed that the opacity and appearance of the plume was noticeably better when SO<sub>3</sub> emissions were controlled (injection of lime).

**Overall Compliance Status:** No Violations Observed

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### Investigation Results

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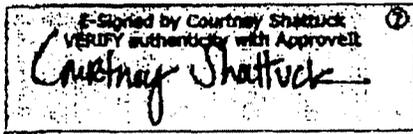
SI: A1004054

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#### Documentation

- |                                                              |                                                                    |
|--------------------------------------------------------------|--------------------------------------------------------------------|
| <input type="checkbox"/> Photos taken                        | <input type="checkbox"/> Record of visual determination of opacity |
| <input type="checkbox"/> Documents obtained from facility    | <input type="checkbox"/> Samples taken by DEP                      |
| <input type="checkbox"/> Samples taken by outside source     | <input type="checkbox"/> Regional office instrument readings taken |
| <input type="checkbox"/> Request for Submission of Documents | <input type="checkbox"/> Other documentation                       |

Inspector:



Date: October 23<sup>rd</sup>, 2006

Received By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_  
Delivery Method: USPS

AI#: 4054

Page 2

Activity #CIN20060002 :



ENVIRONMENTAL AND PUBLIC PROTECTION CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Ernie Fletcher  
Governor

Florence Regional Office  
8020 Veterans Memorial Dr Ste 110  
Florence, KY 41042

Lajuana S. Wilcher  
Secretary

May 12, 2006

Diana Freibert  
Louisville Gas & Electric Company  
Trimble County Generating Station  
487 Corn Creek Road  
Bedford, KY 40006

AI #: 4054  
ID #: 21-223-00002

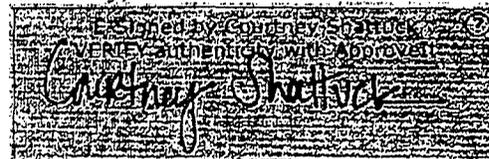
Re: SO3 Mitigation Testing

Dear Ms. Freibert:

On May 9<sup>th</sup>, 2006, the Division for Air Quality visited LG&E Trimble County to witness SO3 mitigation testing. This site visit was for educational purposes only and no compliance determination was made. Enclosed are the report and any associated photos taken during the inspection. Though no violations were cited as a result of this inspection, please thoroughly review the report to ensure that all concerns the Division for Air Quality has noted are addressed.

If you have any questions concerning this determination, please contact me at the Florence Regional Office (859) 525-4923.

Sincerely,



Courtney Shattuck  
Environmental Inspector II



**Environmental and Public Protection Cabinet**  
**Department for Environmental Protection**  
**Division for Air Quality**  
**Air Inspection Report**

**AI ID:** 4054      **AI Type:** ENERGY-Elec Power Trans, Control, & Distr (22112)  
**AI Name:** Louisville Gas & Electric - Trimble Co Generating Station  
**AI Address:** 487 Corn Creek Rd  
**City:** Bedford, **State:** Kentucky **Zip:** 40006  
**County:** Trimble **Regional Office:** Florence Regional Office  
**Latitude:** 38.584722 **Longitude:** -85.411944  
**Site Contact:** Diana Freibert      **Title:** Chemist/Environmental Coordinator      **Phone #:** 502-627-6204  
**Inspection Type:** DAQ-Partial Compliance Evaluation      **Activity #:** CIN20060001  
**Inspection Start Date:** May 9, 2006 **Time:** 10:58 AM **End Date:** May 9, 2006 **Time:** 02:00 PM  
**Site/Permit ID:** V-02-043 (Revision 2)  
**Lead DEP Investigator:** Courtney Shattuck  
**Other DEP Investigators:** Clay Redmond  
**Persons Interviewed:** Diana Freibert

**General Comments:** DAQ Inspectors Shattuck and Redmond traveled to LG&E - Trimble County Station to witness SO3 mitigation testing.

SO3 is formed in the boiler and SCR. As SO3 cools it is converted to H2SO4, sulfuric acid vapor. The acid vapor creates a blue plume that can "touch down" on neighboring properties. SO3 and H2SO4 can also corrode power plant equipment. The purpose of the SO3 mitigation project was to determine the type and amount of additive that reduces SO3 the greatest.

Two chemicals were being tested, Trona (sodium sesquicarbonate) and hydrated lime (calcium hydroxide). Two injection sites were tested; one before the ESP and one after the ESP and COM. The placement of the injection sites is influenced by amount of duct available. SO3 and ammonia form to produce ammonia bisulfate. Ammonia bisulfate precipitates in the air heater and ductwork creating a decrease in efficiency and increase in maintenance. The ideal injection site would be before the air heater (which is before the ESP) but because of limited ductwork (~20 ft.) this option is not available. Other advantages with injection before the ESP include increasing the efficiency of the ESP (increases polarization) and control of the injection chemical. The Florence Regional Office is concerned with the ability to maintain compliance with the current particulate matter limit when injecting the chemical after the control device. A determination using EPA Method 5 may be necessary to demonstrate compliance.

Trona was tested Monday and Tuesday while hydrated lime testing was scheduled for Wednesday and Thursday. SO3 levels were collected at the stack. Below is preliminary data from the test (all runs lasted approximately 1 hour):

SO3 level before any injections = 17 ppm

Monday results:

Run 1- 3000 lbs Trona injected before the ESP = 15 ppm of SO3  
Run 2 -2000 lbs Trona injected before the ESP = 15 ppm of SO3  
Run 3 -3000 lbs Trona injected after the ESP = 9 ppm of SO3  
Run 4 -2000 lbs Trona injected after ESP = 13 ppm of SO3  
Run 5 -1000 lbs Trona injected before the ESP & 2000 lbs of Trona injected after the ESP = 6 ppm of SO3

Tuesday results:

Run 1- 1000 lbs Trona injected before the ESP & 1000 lbs of Trona injected after the ESP = 11 ppm of SO3  
Run 2- 500 lbs Trona injected before the ESP & 2000 lbs of Trona injected after the ESP = 6-7 ppm of SO3  
Run 3- 500 lbs Trona injected before the ESP & 2500 lbs of Trona injected after the ESP = 5-6 ppm of SO3  
Further tests were conducted Tuesday afternoon but DAQ does not have the results from those tests.

Diana Freibert conducted a Method 9 reading during each test run to determine compliance with the opacity limit. DAQ Inspectors and Ms. Freibert spent time observing the behavior of the plume during the test runs. We observed a noticeable different in plume appearance during periods with the Trona injections. The plume lacked the blue/brown haze and trailing characteristic.

Overall Compliance Status: Not Evaluated

Investigation Results

SI: AIOO4054

Requirement: Sources subject to this administrative regulation shall operate in compliance with a permit issued under this administrative regulation. [401 KAR 52:020 Section 3(1)(b)]

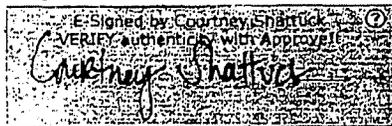
Compliance Status: Not Evaluated

Comment: This site visit was for educational purposes only. No compliance determination was made.

Documentation

- Photos taken
- Documents obtained from facility
- Samples taken by outside source
- Request for Submission of Documents
- Record of visual determination of opacity
- Samples taken by DEP
- Regional office instrument readings taken
- Other documentation

Inspector:



Date: May 12<sup>th</sup>, 2006

Received By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Delivery Method: USPS

LG&E - Trimble County Generating Station. AI: 4054  
SO3 mitigation testing  
Photo taken by Courtney Shattuck on May 9<sup>th</sup>, 2006 at 12:07 pm



This photo was taken between test runs (nothing injected into flue gas).



**KENTUCKY UTILITIES COMPANY  
and  
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Joint Response to Post Hearing Data Request  
Hearing Date – November 8, 2006**

**Case Nos. 2006-00206 and 2006-00208**

**Question No. 4**

**Witness: Shannon L. Charnas**

Q-4. Please provide the following information related to the four stack opacity monitors originally installed in 1984 and removed from the Mill Creek stacks, as of September 30, 2003:

- a. Original Installed cost
- b. Accumulated depreciation
- c. Accumulated deferred income taxes
- d. Monthly depreciation expense
- e. Monthly property tax expense
- f. Any other monthly operating expense that is no longer incurred

- A-4.
- a. Original installed cost is \$98,008.
  - b. Accumulated depreciation is \$45,189.
  - c. Accumulated deferred income taxes is \$21,319
  - d. Monthly depreciation expense is \$195.
  - e. Monthly property tax expense is \$6.60.
  - f. N/A



**KENTUCKY UTILITIES COMPANY  
and  
LOUISVILLE GAS AND ELECTRIC COMPANY**

**Joint Response to Post Hearing Data Request  
Hearing Date – November 8, 2006**

**Case Nos. 2006-00206 and 2006-00208**

**Question No. 5**

**Witness: Robert M. Conroy**

- Q-5. Please provide a revised ECR revenue requirement comparing the impact of keeping the opacity monitors in-service as inventory, and adjusting the ECR revenue requirement as if the monitors are being retired and removed from service.
- A-5. Please note that this request is applicable only to LG&E. The requested information is attached to this response. The *italicized* and **highlighted** lines show the inclusion of the removal from service of the monitors. In comparison to the original data filed for Project 21, the difference in revenue requirements is shown in the table below (also shown on the attachment). This level of change in revenue requirement would not result in a discernable change in the ECR billing factor.

	2007	2008	2009	2010	2011	2012
Difference in Total E(m)	\$(5,819)	\$(5,820)	\$(5,820)	\$(5,772)	\$(5,771)	\$(5,771)

## Revenue Requirements Summary

### 2006 Amended Plan - LG&E (Original Filing)

	2007	2008	2009	2010	2011	2012
<b>Project 21</b>						
Opacity Monitors						
<b>Revenue Requirement</b>						
Eligible Plant	835,310	835,310	835,310	835,310	835,310	835,310
Less: Retired Plant	-	-	-	-	-	-
Less: Accumulated Depreciation	(43,519)	(65,278)	(87,038)	(108,797)	(130,556)	(152,316)
Plus: Accumulated Depreciation on retired plant	-	-	-	-	-	-
Less: Deferred Tax Balance	(17,821)	(30,304)	(41,254)	(50,494)	(58,461)	(65,249)
Plus: Deferred Tax Balance on retired plant	-	-	-	-	-	-
Environmental Compliance Rate Base	773,970	739,728	707,019	676,019	646,292	617,745
Rate of return	10.79%	10.79%	10.79%	10.64%	10.64%	10.64%
	<u>\$ 83,504</u>	<u>\$ 79,810</u>	<u>\$ 76,281</u>	<u>\$ 71,899</u>	<u>\$ 68,737</u>	<u>\$ 65,701</u>
Operating expenses	-	-	-	-	-	-
Annual Depreciation expense	21,759	21,759	21,759	21,759	21,759	21,759
Less depreciation on retired plant	-	-	-	-	-	-
Annual Property Tax expense	1,220	1,188	1,155	1,122	1,090	1,057
<b>Total OE</b>	<u>\$ 22,980</u>	<u>\$ 22,947</u>	<u>\$ 22,914</u>	<u>\$ 22,882</u>	<u>\$ 22,849</u>	<u>\$ 22,817</u>
<b>Total E(m)</b>	106,484	102,757	99,195	94,780	91,586	88,517

### 2006 Amended Plan - LG&E (Inclusive of Adjustment for Opacity Monitors Retirement)

	2007	2008	2009	2010	2011	2012
<b>Project 21</b>						
Opacity Monitors						
<b>Revenue Requirement</b>						
Eligible Plant	835,310	835,310	835,310	835,310	835,310	835,310
<b>Less: Retired Plant</b>	<b>(98,008)</b>	<b>(98,008)</b>	<b>(98,008)</b>	<b>(98,008)</b>	<b>(98,008)</b>	<b>(98,008)</b>
Less: Accumulated Depreciation	(43,519)	(65,278)	(87,038)	(108,797)	(130,556)	(152,316)
<b>Plus: Accumulated Depreciation on retired plant</b>	<b>45,189</b>	<b>45,189</b>	<b>45,189</b>	<b>45,189</b>	<b>45,189</b>	<b>45,189</b>
Less: Deferred Tax Balance	(17,821)	(30,304)	(41,254)	(50,494)	(58,461)	(65,249)
<b>Plus: Deferred Tax Balance on retired plant</b>	<b>21,319</b>	<b>21,319</b>	<b>21,319</b>	<b>21,319</b>	<b>21,319</b>	<b>21,319</b>
Environmental Compliance Rate Base	742,470	708,228	675,519	644,519	614,792	586,245
Rate of return	10.79%	10.79%	10.79%	10.64%	10.64%	10.64%
	<u>\$ 80,106</u>	<u>\$ 76,411</u>	<u>\$ 72,882</u>	<u>\$ 68,548</u>	<u>\$ 65,387</u>	<u>\$ 62,351</u>
Operating expenses	-	-	-	-	-	-
Annual Depreciation expense	21,759	21,759	21,759	21,759	21,759	21,759
<b>Less depreciation on retired plant</b>	<b>(2,340)</b>	<b>(2,340)</b>	<b>(2,340)</b>	<b>(2,340)</b>	<b>(2,340)</b>	<b>(2,340)</b>
Annual Property Tax expense	1,220	1,188	1,155	1,122	1,090	1,057
<b>Less property tax on retired plant</b>	<b>(81)</b>	<b>(81)</b>	<b>(81)</b>	<b>(81)</b>	<b>(81)</b>	<b>(81)</b>
<b>Total OE</b>	<u>\$ 20,559</u>	<u>\$ 20,526</u>	<u>\$ 20,493</u>	<u>\$ 20,461</u>	<u>\$ 20,428</u>	<u>\$ 20,396</u>
<b>Total E(m)</b>	<u>\$ 100,665</u>	<u>\$ 96,937</u>	<u>\$ 93,375</u>	<u>\$ 89,009</u>	<u>\$ 85,815</u>	<u>\$ 82,747</u>
<b>Difference in Total E(m)</b>	<u>\$ (5,819)</u>	<u>\$ (5,820)</u>	<u>\$ (5,820)</u>	<u>\$ (5,772)</u>	<u>\$ (5,771)</u>	<u>\$ (5,771)</u>