LaJuana S. Wilcher, Secretary **Environmental and Public Protection Cabinet** 

Christopher L, Lilly Commissioner **Department of Public Protection** 



Commonwealth of Kentucky **Public Service Commission** 211 Sower Blvd. P.O. Box 615 Frankfort, Kentucky 40602-0615 Telephone: (502) 564-3940 Fax: (502) 564-3460 psc.ky.gov

## August 21, 2006

Honorable Elizabeth E. Blackford Assistant Attorney General Office of the Attorney General Utility & Rate Intervention Division 1024 Capital Center Drive Suite 200 Frankfort, KY 40601-8204

RE: Case No. 2006-00206

Please see enclosed data request from Commission Staff in the above case.

If you need further assistance, please contact Isaac Scott at (502) 564-3940 ext. 444.

Sincerely,

**Beth O'Donnell Executive Director**  Mark David Goss Chairman

> Teresa J. Hill Vice Chairman

BOD/sh Enclosure

KentuckyUnbridledSpirit.com

KON

An Equal Opportunity Employer M/F/D

LaJuana S. Wilcher, Secretary Environmental and Public Protection Cabinet

Christopher L. Lilly Commissioner Department of Public Protection

Kent W. Blake Director State Regulations and Rates Kentucky Utilities Company 220 W. Main Street P. O. Box 32010 Louisville, KY 40232-2010



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Christopher L. Lilly Commissioner **Department of Public Protection** 

Honorable David F. Boehm Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street 2110 CBLD Building Cincinnati, OH 45202



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Honorable Elizabeth L. Cocanougher Senior Corporate Attorney Kentucky Utilities Company c/o Louisville Gas & Electric Co. P. O. Box 32010 Louisville, KY 40232-2010



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Honorable Kendrick R. Riggs Attorney at Law Stoll Keenon Ogden PLLC 1700 PNC Plaza 500 West Jefferson Street Louisville, KY 40202



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#### COMMONWEALTH OF KENTUCKY

### BEFORE THE 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

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### SECOND DATA REQUEST OF COMMISSION STAFF TO KENTUCKY UTILITIES COMPANY

Kentucky Utilities Company ("KU"), pursuant to 807 KAR 5:001, is requested to file with the Commission the original and 5 copies of the following information, with a copy to all parties of record. The information requested herein is due on or before September 5, 2006. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible. Where information requested herein has been provided, in the format requested herein, reference may be made to the specific location of said information in responding to this information request.

1. Refer to the response to the Commission Staff's First Data Request dated July 24, 2006 ("Staff's First Request"), Items 3(b) and 3(d).

a. For each of the emission types shown in the response to Item 3(b), explain why the expected total emissions for 2006 are higher than the actual total emissions for 2005.

b. Does KU anticipate that its mercury emissions will be impacted by the addition of scrubbers and selective catalytic reduction equipment at its generating units? Explain the response.

c. Refer to the response to Item 3(d).

(1) Have the Green River Units 1 and 2 and Pineville Unit 3 been retired? If yes, explain why there are entries on the various emission charts for these units.

(2) Describe the generating units identified as Green River Unit5 and Tyrone Units 1, 2, 4, and 5.

(3) Explain why Tyrone Unit 3 was not included in the charts for sulfur dioxide ("SO<sub>2</sub>") and mercury emissions.

2. Refer to the response to the Staff's First Request, Item 4.

a. Under the provisions of KRS 278.183(1), a utility shall be entitled to the current recovery of its costs of complying with the Federal Clean Air Act as amended and those federal, state, or local environmental requirements which apply to coal combustion wastes and by-products resulting from the production of energy by the burning of coal. Other than the "general duty" provisions of KRS 224 cited in the May 19, 2006 letter from the Kentucky Division of Air Quality, what specific requirements have been issued by federal, state, or local agencies concerning the emission of sulfur trioxide ("SO<sub>3</sub>")?

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b. Absent specific emission limits or requirements, explain in detail

why KU believes it is permitted to seek current cost recovery under the provisions of

KRS 278.183(1) of its  $SO_3$  mitigation costs.

3. Refer to the response to the Staff's First Request, Item 4(d). In this

response, KU states,

The findings in the Sargent and Lundy  $SO_3$  Mitigation Study, Exhibit JPM-4, established that a visible stack plume (discounting the portion consisting of water vapor) dissipates rapidly when stack gases are controlled to an  $SO_3$ concentration level of approximately five (5) parts per million ("ppm"). Hence, based on this study, the Company has identified a value of 5 ppm  $SO_3$  which can be used as a practical guideline for its compliance efforts.

Exhibit JPM-4 of the Direct Testimony of John P. Malloy contains the following

statements:

The target  $SO_3$  concentration at the stack exit was set at 5 ppm, which is the recommended level for low stack opacity (no visible plume). [Page 4 of 42]

\* \* \* \* \*

For the purposes of this study, the  $SO_3/H_2SO_4$  in the flue gas will need to be reduced to 5 ppm or less to mitigate the "blue" plume phenomenon. Although limited data exists on the relationship between  $SO_3/H_2SO_4$  concentration and plume visibility, a level of 5 ppm was selected, as it would eliminate the visible plume under most atmospheric conditions. [Page 8 of 42]

a. Would KU agree that, based upon the statements from Exhibit

JPM-4, it appears that the study set the  $SO_3$  emission limit at 5 ppm in order to evaluate mitigation options, rather than establishing what the reasonable  $SO_3$  emission level should be? Explain the response.

b. Page 8 of 42 in Exhibit JPM-4 shows a chart relating flue gas  $SO_3$  concentration with estimated plume opacity for different stack diameters. What are the diameters of the stacks at Ghent Units 1, 3, and 4?

c. Provide copies of the Environmental Protection Agency's Method 9 protocols referenced in the response to Item 4(d).

4. Refer to the response to the Staff's First Request, Item 7(a). In its response KU states, "The 2006 NOx Compliance strategy identifies the <u>next</u> least-cost step in the continued compliance with environmental regulations as constructing an SCR at Ghent 2 in 2009."

a. Does KU normally employ this "next least-cost step" evaluation approach when considering its compliance with environmental regulations for not only nitrogen oxide ("NOx") but also to  $SO_2$  and  $SO_3$  emissions? Explain the response.

b. Given the nature of current environmental regulations concerning the emissions of NOx, SO<sub>2</sub>, and SO<sub>3</sub>, would KU agree its evaluation approach should also consider overall compliance with the environmental requirements, and not just the "next least-cost step"? Explain the response.

5. Refer to the response to the Staff's First Request, Item 8(b). The Commission has previously issued Certificates of Public Convenience and Necessity specifically for the construction of scrubbers at Ghent Units 1 and 2. Subsequent to the issuance of those certificates, KU decided to switch the Ghent Unit 1 scrubber to Unit 2 and construct a new scrubber for Unit 1. Explain in detail how KU reached the conclusion that it does not need to seek an amendment to the Certificate of Public Convenience and Necessity issued for the Ghent Unit 2 scrubber nor does it need to

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seek a new Certificate of Public Convenience and Necessity for the new scrubber at Ghent Unit 1.

6. Refer to the response to the Staff's First Request, Item 15.

a. Explain in detail why KU did not include the operating and maintenance ("O&M") expenses associated with the Air Quality Control System ("AQCS") at Trimble County Unit 2 in its June 23, 2006 application.

b. Explain in detail what has changed since the filing of the June 23, 2006 application that caused KU to now seek the recovery of the Trimble County Unit 2 AQCS O&M expenses as part of its amended environmental compliance plan and amended surcharge mechanism.

c. Does KU intend to amend its application, testimony, and proposed environmental surcharge tariff to include a request to recover O&M expense for AQCS at Trimble County Unit 2?

7. Refer to the response to the Staff's First Request, Item 16. Prior to the Commission Staff's request, had KU prepared any analyses or modeling to determine if the proposed changes in determining R(m) would impact KU's customers? Explain the response. If no analyses or modeling were performed, explain in detail why such an analysis or modeling was not undertaken.

8. Refer to the response to the Staff's First Request, Item 19.

a. As drafted in the proposed tariff, the reference to "adjusted for the Average Month Expense already included in existing rates" applies only to depreciation and amortization expense, property taxes, and insurance expense.

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(1) Given that the response to Item 19(a) focuses on the situation concerning emission allowance expense, would KU agree that the tariff language should be modified to indicate that the emission allowance expense is adjusted for the expense already included in existing rates? Explain the response.

(2) If KU agrees, provide sample tariff language addressing this item.

b. If the Commission finds in the final Order in this case that the revised surcharge tariff is effective for service rendered on and after December 22, 2006, indicate when the tariff change would appear on customer bills.

Beth O

Beth O'Bennell Executive Director Public Service Commission P. O. Box 615 Frankfort, Kentucky 40602

DATED August 21, 2006

cc: All Parties