

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF LOUISVILLE GAS AND	)	
ELECTRIC COMPANY FOR APPROVAL OF ITS	)	CASE NO.
2006 COMPLIANCE PLAN FOR RECOVERY BY	)	2006-00208
ENVIRONMENTAL SURCHARGE	)	

SECOND DATA REQUEST OF COMMISSION STAFF TO  
LOUISVILLE GAS AND ELECTRIC COMPANY

Louisville Gas and Electric Company ("LG&E"), 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 1(b) and 1(d). Explain why Paddy's Run Units 12 and 13 appear in the estimated nitrogen oxide ("NOx") allowance schedules but not in the schedules of actual 2005 or estimated 2006 emissions.

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

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>")?

b. Absent specific emission limits or requirements, explain in detail why LG&E believes it is permitted to seek current cost recovery under the provisions of KRS 278.183(1) of its SO<sub>3</sub> mitigation costs.

3. Refer to the response to the Staff's First Request, Item 2(d). In this response, LG&E states,

The findings in the Sargent and Lundy SO<sub>3</sub> Mitigation Study, Exhibit JPM-3, established that a visible stack plume (discounting the portion consisting of water vapor) dissipates rapidly when stack gases are controlled to an SO<sub>3</sub> 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<sub>3</sub> which can be used as a practical guideline for its compliance efforts.

Exhibit JPM-3 of the Direct Testimony of John P. Malloy contains the following statements:

The target SO<sub>3</sub> 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  $\text{SO}_3/\text{H}_2\text{SO}_4$  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  $\text{SO}_3/\text{H}_2\text{SO}_4$  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 LG&E agree that, based upon the statements from Exhibit JPM-3, it appears that the study set the  $\text{SO}_3$  emission limit at 5 ppm in order to evaluate mitigation options, rather than establishing what the reasonable  $\text{SO}_3$  emission level should be? Explain the response.

b. Page 8 of 42 in Exhibit JPM-3 shows a chart relating flue gas  $\text{SO}_3$  concentration with estimated plume opacity for different stack diameters. What are the diameters of the stacks at Mill Creek Units 3 and 4 and Trimble County Unit 1?

c. Provide copies of the Environmental Protection Agency’s Method 9 protocols referenced in the response to Item 2(d).

4. Refer to the response to the Staff’s First Request, Item 9.

a. Explain in detail why LG&E 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 LG&E 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 LG&E intend to amend its application, testimony, and proposed environmental surcharge tariff to include a request to recover O&M expenses for AQCS at Trimble County Unit 2?

5. Refer to the response to the Staff's First Request, Item 11(b).

a. Provide the original cost and accumulated depreciation associated with the Mill Creek stack opacity monitors that were replaced by the installation of the new particulate monitors, as reflected in LG&E's surcharge calculations.

b. Provide the depreciation expense, property taxes, insurance expense, and any O&M expense associated with the replaced Mill Creek stack opacity monitors, as reflected in LG&E's surcharge calculations.

c. Does LG&E's approved environmental compliance plan include provisions for operational inventory or mobile test units? Explain the response.

d. If the Mill Creek stack opacity monitors are no longer operating as part of the capital investment associated with LG&E's environmental compliance plan, explain in detail why LG&E believes there is no need to adjust the surcharge calculations for this removal.

6. Refer to the response to the Staff's First Request, Item 11. Prior to the Commission Staff's request, had LG&E prepared any analyses or modeling to determine if the proposed changes in determining R(m) would impact LG&E's customers? Explain the response. If no analyses or modeling were performed, explain in detail why such an analysis or modeling was not undertaken.

7. Refer to the response to the Staff's First Request, Item 14. 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.

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke at the end.

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Beth O'Donnell  
Executive Director  
Public Service Commission  
P. O. Box 615  
Frankfort, KY 40602

DATED August 21, 2006

cc: All Parties