COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)
COMMISSION OF THE APPLICATION OF THE FUEL)
ADJUSTMENT CLAUSE OF LOUISVILLE GAS AND) CASE NO. 96-524-A
ELECTRIC COMPANY FROM NOVEMBER 1, 1996)
TO APRIL 30, 1997)
AN EXAMINATION BY THE PUBLIC SERVICE)
COMMISSION OF THE APPLICATION OF THE FUEL)
ADJUSTMENT CLAUSE OF LOUISVILLE GAS AND) CASE NO. 96-524-B
ELECTRIC COMPANY FROM MAY 1, 1997 TO)
OCTOBER 31, 1997)
AN EXAMINATION BY THE PUBLIC SERVICE)
COMMISSION OF THE APPLICATION OF THE FUEL)
ADJUSTMENT CLAUSE OF LOUISVILLE GAS AND) CASE NO. 96-524-C
ELECTRIC COMPANY FROM NOVEMBER 1, 1997)
TO APRIL 30, 1998)

ORDER

IT IS ORDERED that Louisville Gas and Electric Company ("LG&E") shall file the original and 8 copies of the following information with the Commission no later than April 22, 1999, with a copy to all parties of record. Each copy of the information 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. Each response shall include 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 its legibility. When the requested information has been previously provided in this proceeding in the requested

format, reference may be made to the specific location of that information in responding to this Order.

- 1. a. Provide all rate schedules on file with the Federal Energy Regulatory Commission (FERC) that apply to inter-system sales, wheeling transactions (i.e., purchases for resale), or similar transmission-level power transfers that were in effect during the periods under review.
- b. (1) Describe the revisions or amendments, if any, that have been made to these schedules since April 30, 1998.
- (2) For each revision listed, provide the revised or amended rate schedules and state the date of the revision.
- 2. Describe how LG&E calculates the cost of fossil fuel recovered through inter-system sales.
- 3. a. List all inter-system sales paired transactions that occurred during the periods under review.
 - b. For each transaction listed,
- (1) Identify the utility selling the electric power to LG&E and the utility to which LG&E then sold the electric power.
- (2) Provide a detailed description of all charges associated with the transaction. (The term other is not an acceptable description.)
- (3) Identify the LG&E FERC Rate Schedule that governs the transaction.
 - 4. Refer to Prefiled Direct Testimony of William A. Bosta at 5.

- a. Is a 3 percent line loss factor representative of the line loss that LG&E incurs when providing transmission service?
 - b. If not,
 - (1) What line loss factor is representative?
- (2) What plans, if any, does LG&E have to revise its rate schedules on file with the FERC to reflect the correct line loss factor?
- c. Provide all line loss studies available to LG&E when it prepared its FERC Open Access Transmission Tariff ("OATT").
- 5. At page 5 of his testimony, Mr. Bosta states: FERCs own fuel adjustment clause regulations recognize that line losses should not be determined on a system-wide basis. Instead, FERC recognizes that line losses for fuel adjustment clause purposes should be based (as close as possible) on the losses experienced on the transmission lines utilized for wholesale power sales. Identify the provision of 18 C.F.R. § 35.14 that supports this statement.
- 6. Assume the following scenario: Utility A wishes to transmit 100 kW of electric power through LG&E s transmission system to sell to Utility B. Utility A will not self-supply any line losses associated with the transaction. The Commission has accepted LG&E s proposed line loss factor.
- a. How does LG&E report the transaction for fuel adjustment clause ("FAC") reporting purposes?
- b. If LG&E reports the acquisition of the 100 kW as a purchase and its transfer as a sale,

- (1) How much fuel does LG&E report as being purchased for FAC reporting purposes?
- (2) How much fuel does LG&E report as being sold for FAC reporting purposes?
- c. For FAC reporting purposes, how much fuel related to line losses will LG&E attribute to inter-system sales?
- d. What charges related to line loss will LG&E assess Utility A under its current OATT?
- 7. Assume the following scenario: Utility A wishes to transmit 100 kW of electric power through LG&E s transmission system to sell to Utility B. Utility A will self-supply all line losses associated with the transaction. The Commission has accepted LG&E s proposed line loss factor.
- a. How does LG&E report the transaction for FAC reporting purposes?
- b. If LG&E reports the transaction as an acquisition and subsequent sale of power,
- (1) How much fuel (or electric power) does LG&E report as being purchased for FAC reporting purposes?
- (2) How much fuel (or electric power) does LG&E report as being sold for FAC reporting purposes?
- c. How much electric power will Utility A be required to supply to meet line losses incurred during the transaction?

- d. For FAC reporting purposes, how much fuel related to line losses will LG&E attribute to inter-system sales?
- e. What charges related to line loss, if any, will LG&E assess Utility A under its current OATT?
- 8. Provide the proposed changes to LG&E's FERC Electric Service Tariffs, Volume Nos. 2 and 3, which LG&E submitted to the FERC in Docket No. ER94-1380-000 on June 20, 1994.
- 9. At page 5 of his testimony, Mr. Normand states that he has reviewed numerous power flow analyses and conducted several loss analyses to reach his conclusions.
 - a. Provide these analyses.
 - b. For each analysis provided,
- (1) If Mr. Normand did not prepare the analysis, identify the preparer.
 - (2) State the date the analysis was prepared.
 - (3) State the time period with which the analysis dealt.
- 10. Describe how a power flow analysis is conducted. In the description provided, list each step performed in the analysis and explain its significance.
 - 11. What is the purpose of a power flow analysis?
- 12. a. (1) During the review periods, did LG&E provide transmission services under its FERC Rate TS?

- (2) If yes, list all customers for whom LG&E provided firm transmission service under its FERC Rate TS during the review periods and the amount of firm transmission capacity that LG&E agreed to provide for each.
- b. (1) Does LG&E currently provide transmission services under its FERC Rate TS?
- (2) If yes, list all customers for whom LG&E currently provides firm transmission service under its FERC Rate TS and the amount of firm transmission capacity that LG&E has agreed to provide for each.
- 13. a. (1) During the review periods did LG&E provide transmission services under its FERC Rate NS?
- (2) If yes, list all customers for whom LG&E provided transmission service under its FERC Rate NS during the review periods and the amount of firm transmission capacity that LG&E agreed to provide for each.
- b. (1) Does LG&E currently provide transmission services under its FERC Rate NS?
- (2) If yes, list all customers for whom LG&E currently provides transmission service under its FERC Rate NS and the amount of firm transmission capacity that LG&E has agreed to provide for each.
- 14. a. List all customers for whom LG&E provided long-term firm point-topoint transmission service under its OATT during the review periods and the amount of firm transmission capacity that LG&E agreed to provide for each.

- b. List all customers for whom LG&E currently provides long-term firm point-to-point transmission service under its OATT during the review periods and the amount of firm transmission capacity that LG&E has agreed to provide for each.
- 15. a. List all customers for whom LG&E provided network integration transmission service under its OATT during the review periods and the amount of firm transmission capacity that LG&E agreed to provide for each.
- b. List all customers for whom LG&E currently provides long-term firm point-to-point transmission service under its OATT during the review periods and the amount of firm transmission capacity that LG&E has agreed to provide for each.
- 16. At pages 4 and 5 of his testimony, Mr. Normand discusses the need to determine the correct cost of inter-system sales transactions and the dangers of overpricing such transactions. Does Mr. Normand agree that underpricing such transactions will also promote inefficiency and market distortion?
- 17. Is the use of an incremental loss factor appropriate to measure line loss associated with firm transmission service transactions? Explain.
- 18. a. Refer to Prefiled Testimony of Paul M. Normand at 13. Provide the power flow model to which Mr. Normand refers.
 - b. State all assumptions used to develop the power flow model.
- 19. Refer to Prefiled Testimony of Paul M. Normand, Exhibit PMN-5. Provide all workpapers and show all calculations made to derive this exhibit.

- 20. Refer to Pre-filed Testimony of Paul M. Normand, Exhibit PMN-7. Provide a revised exhibit that reflects only LG&E monthly system peaks.
 - 21. Refer to Pre-filed Testimony of Paul M. Normand, Exhibit PMN-2.
- a. (1) Identify the proceedings in which the inter-system sales line loss was an issue.
- (2) Provide Mr. Normand's testimony, if any, in the proceedings referred to in response to subpart a(1).
- b. (1) Identify the proceedings, if any, in which Mr. Normand recommended the use of an incremental loss factor for inter-system sales transactions.
- (2) Provide Mr. Normand's testimony, if any, in the proceedings referred to in response to subpart b(1).
- c. (1) Identify the proceedings, if any, in which Mr. Normand recommended the use of a loss factor that was not incremental for inter-system sales transactions.
- (2) Provide Mr. Normand's testimony, if any, in the proceedings referred to in response to subpart c(1).

Done at Frankfort, Kentucky, this 12th day of April, 1999.

		By the Commission
ATTEST:		
Executive Director	_	