COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

GENERAL ADJUSTMENT IN ELECTRIC AND GAS RATES OF LOUISVILLE GAS AND ELECTRIC COMPANY	)))	CASE NO. 8924

O R D E R

IT IS ORDERED that Louisville Gas and Electric Company shall file an original and 12 copies of the following information with the Commission within 2 weeks of the date of this Order. 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 insure that it is legible. Where information requested herein has been provided along with the original application, in the format requested herein, reference may be made to the specific location of said information in responding to this information request. When applicable, the information requested herein should be provided for total company operations and jurisdictional operations, separately. If neither the requested information nor a motion

for an extension of time is filed by the stated date, the case may be dismissed.

ISSUE: Allocation of Increase to the Various Charges Within Each Class-Electric.

1. John Hart's testimony states that one of the determinants used to design electric rates was to maintain approximately the present differential between summer and winter rates. Explain why these differentials were increased by approximately 8 percent in Rate LC; 14 percent in Time-of-Day rates for Large Commercial; 27 percent in Time-of-Day rates for Industrial Power; 15 percent for Special Contract for Fort Knox.

2. Provide reasoning used to increase demand charges by much larger percentages than the energy charges were increased in the various rate classes.

ISSUE: Normalized Revenue-Electric.

3. Provide an explanation of why the revenue for Rate SLE was not adjusted to reflect the present rates for a full year.

4. In response to the Commission's data request dated November 18, 1983, under item 16a electric, page 9 of 28, there was no energy usage billed under Case 8284 rates in the DC rate class. Why?

5. Explain why no increase was proposed for the following lighting units and why they were omitted from the worksheets showing normalized revenue.

<u>Rate OL</u>
150 Watt
150 Watt Floodlight
100 Watt Top Mounted

Rate PSL
150 Watt High Pressure Sodium
150 Watt High Pressure Sodium Floodlight
100 Watt High Pressure Sodium Top Mounted

ISSUE: Cost of Service Support-Gas.

6. Provide backup working papers for Hart Exhibit 5.

7. Provide backup working papers for determining the fixed charges of 20.21 percent used in Hart Exhibit 5.

ISSUE: Special Charges - Gas and Electric.

8. Provide a copy of the study referred to on page 8 of Hart's testimony regarding the cost to disconnect and reconnect a service.

9. Under the following rates it was stated that the proposed revision had no effect on test-year revenues. Why?

Rider for Interruptible Service - Rates LC and LP
(Exhibit No. 2-A, page 9)

Supplemental or Standby Service - Rates LC and LP
(Exhibit No. 2-A, page 10)

Rate T-1 (Exhibit No. 2-B, page 8)

ISSUE: Appropriate Return on Equity, Analysis of Mr. Monteau's Recommendations.

10. Provide a schedule showing the Moodys' and Standard & Poors' bond ratings for Mr. Monteau's 30 comparison companies.

11. Provide a list of the 116 companies, listed on the Turner Sheet for October, 1983, and their book values, as referenced on lines 3 through 6, page 19, of Mr. Monteau's testimony.

12. Explain how the average returns, listed on schedule 9 of Mr. Monteau's testimony, were calculated.

13a. Provide all work papers used in the calculation of the FPC composite growth rates and dividend yields, as shown on schedule 13, page 2 of 2, of Mr. Monteau's testimony.

b. Calculate the FPC cost of equity for LG&E, for the 3 months ended August 31, 1983.

c. Calculate the FPC cost of equity for the NYSE electric utilities, for the most recent 3-month period for which data is available.

d. Calculate the FPC cost of equity for LG&E, for the most recent 3-month period for which data is available.

ISSUE: Appropriate Capital Structure.

14. Explain how the target ratios, listed on Ronald Exhibit 1, were decided upon.

15a. Are the electric utilities, listed on Ronald Exhibit 2, all of the electric utilities followed by First Boston Corporation?

b. If not, which ones were excluded and why?

16. Provide a schedule, as soon as the data is available, showing the coverage ratios for the electric utilities listed on Ronald Exhibit 3, for August 31, 1983.

17. What is the basis for Mr. Ronald's 9.5 percent estimate of the short-term borrowing rate, referred to on line 11, page 13, of his prefiled testimony?

ISSUE: Appropriate Cost of Preferred Stock.

18a. On Item 3, page 2 of 2, format 3, schedule 2, of the

initial staff request, the annualized cost rate for preferred stock was calculated by multiplying column (e) times column (c). Explain why the calculation was made this way.

b. Provide a schedule of outstanding shares of preferred stock for the test year ended August 31, 1983, with the annualized cost calculated by multiplying column (d) times column (f).

ISSUE: Load Forecasts and Construction Plans for Trimble County.

19. On page 18 of Mr. Royer's prefiled testimony he states that construction of Trimble County Unit No. 1 will be at a minimum level until the projected load forecast can be further reviewed and capacity alternatives can be re-evaluated. Page 4 of Mr. Wright's prefiled testimony states that the decision on revising the forecast has not been made yet.

a. If the load forecasts are revised prior to the hearing in these proceedings, please provide the forecasts and all supporting documentation.

b. On page 5 of Mr. Wright's testimony he refers to several load management options that the company has considered and concludes that they will not reduce enough load in time to defer Trimble County Unit No. 1. Provide all support for this conclusion.

c. Discuss the current status of the contract negotiations with East Kentucky Power for the exchange of diversity power. When is a final contract expected?

d. When is a final decision expected concerning the renovation of the Cane Run units? If a decision is made prior to the hearing in this proceeding, provide all supporting documentation.

e. Page 6, lines 25-26, of Mr. Wright's prefiled testimony refers to estimates which show the present value total revenue requirements of a 1-year deferral of Trimble Unit No. 1. Provide the estimates, state the assumptions used to derive the estimates and an explanation of the methodology used.

ISSUE: Interruptible Service Tariff.

20. Provide the work papers to support the calculation of the demand credits for the Interruptible Service Tariff.

21. Page 37 of the Order in Case No. 8616 states with regard to the interruptible rate that "LG&E shall report on its efforts to determine the interest in the tariff and consider proposing modifications that are cost-justified and which may promote a wider use of the tariff." Please discuss the Company's efforts to determine the interest and any modifications to the tariff that were considered.

ISSUE: Time-of-Day Rates.

22. Provide the work papers that support the calculation of the demand and energy charges for the Large Commercial Time-of-Day Rate and the Industrial Power Time-of-Day Rate.

ISSUE: Embedded Cost-of-Service Study.

23. Provide a copy of all work papers used to develop the embedded cost-of-service study. Particular emphasis should be

given to the minimum distribution study since it provides a cost basis for the proposed increased customer charges.

ISSUE: Marginal Cost-of-Service Study.

24. Provide a copy of all work papers used to develop the marginal cost-of-service study.

ISSUE: Hydroelectric License Fee.

25a. Provide all orders concerning the new license fee issued by the FERC since September 1981.

b. Provide a detailed description of the anticipated results if the company's auditors give a qualified opinion for the 1983 financial statements.

ISSUE: EPRI Participation.

26a. Provide a complete listing of the benefits and services LG&E expects to receive as an EPRI participant.

b. Provide any cost-benefit analysis the company has performed regarding EPRI membership.

c. Provide copies of any promotional material EPRI has presented to LG&E regarding future membership.

d. Provide descriptions of the different types of membership offered by EPRI.

ISSUE: Salaries and Wages.

27. In Case No. 8616 the Commission made adjustments to limit LG&E's November 1982 wage increases to 5 percent and excluded its March 1983 wage increase for exempt supervisory employees. Provide, for the three employee groups shown in Wilkerson Exhibit 4, Schedule D, page 2 of 3, the levels of

salaries and wages (normalized) for the test year as if the company had not granted those increases.

ISSUE: Cost Restraint Measures.

28. Provide a quantification of the various cost restraint measures to which Mr. Royer referred in his testimony.

29. For the purpose of evaluating the company's increasing investment in the Trimble County generating plant and what is currently being done concerning possible alternative sources of power, provide the following information:

a. A schedule, for the test year showing the beginning balances, additions and ending balances for all construction work in progress accounts for the Trimble County plant.

b. Provide the workpapers to support Mr. Wright's estimate of $200 million capital cost for retrofitting the Cane Run units to allow them to burn coal after January 1985.

c. A detailed comparison of the costs to operate these units on natural gas or coal-after retrofitting - based on the projected use of these units after 1984.

30. For the purpose of evaluating the company's earnings, provide the following information:

a. A detailed analysis of the increase in total capitalization of approximately $120 million since the end of the test year in Case No. 8616 showing the uses of the additional capital (identify major projects).

b. In conjunction with the response to item (a) provide an analysis of the $120 million used for construction

expenditures during the test year - as per item 7, page 2 of 3, of the response to the Commission's data request of November 18, 1983.

c. List and quantify any other major factors which have contributed to the earnings deficiency LG&E has experienced since Case No. 8616.

31. For the purpose of evaluating the increases to various electric expense accounts during the test year - as compared to the 12 months preceding the test year - from item 18A of the response to the Commission's data request of November 18, 1983, provide the following information:

a. A detailed analysis of the increase in Account No. 502, Steam Expenses, shown on page 1 of 29. This should include a breakdown between materials and labor charges for the test year and the 12 months preceding the test year with detailed explanations for the levels of expense incurred during the months of November 1982, and April and May 1983.

b. A detailed analysis of the increase in Account No. 511, Maintenance of Structures, shown on page 2 of 29. This should include a breakdown between materials and labor charges for the test year and the 12 months preceding the test year with detailed explanations for the levels of expense increased during the months of December 1982, and January and April 1983.

c. A detailed analysis of the increase in Account No. 514, Maintenance of Miscellaneous Steam Plant, shown on page 2 of 29. This should include a breakdown between materials and labor

charges for the month of September 1982 with an explanation for the level of expense incurred during that month.

d. A detailed analysis of the increase in Account No. 570, Maintenance of Station Equipment, Transmission, shown on page 7 of 29. This should include a breakdown between materials and labor charges for the month of July 1983, with an explanation for the level of expense incurred during that month.

e. A detailed analysis of the increase in Account No. 592, Maintenance of Station Equipment, Distribution, shown on page 10 of 29. This should include a breakdown between materials and labor charges for the test year and the 12 months preceding the test year with detailed explanations for the levels of expense incurred during the months of September and November of 1982, and February and August of 1983.

f. A detailed analysis of the increase in Account No. 925, Injuries and Damages, shown on page 13 of 29. This should identify the amounts expensed for insurance premiums for the test year and the 12 months preceding the test year and include detailed explanations for the levels of expense incurred during the months of November and December 1982, and January 1983.

g. A detailed analysis of the increase in Account No. 926, Employee Pensions and Benefits, shown on page 13 of 29. This should include a comparison of the expense levels of the test year with those of the preceding 12 months for each pension, benefit and insurance plan accounted for herein along with

explanations of the reasons for the increases reflected during the test year.

32. For the purpose of evaluating the increases to various gas expense accounts during the test year - as compared to the 12 months preceding the test year shown in Item 18A of the response to the Commission's data request of November 18, 1983, - provide the following information:

a. A detailed analysis of the increase in Account No. 874, Mains and Services Expenses, shown on page 22 of 29. This should include a breakdown between materials and labor charges for the test year and the 12 months preceding the test year with detailed explanations for the levels of expense incurred in the months of November 1982, and May 1983.

b. A detailed analysis of the increase in Account No. 879, Customer Installation Expenses, shown on page 22 of 29. This should include a breakdown between materials and labor charges for the test year and the 12 months preceding the test year with detailed explanations for the levels of expense incurred during the months of March, May, and August 1983.

c. A detailed analysis of the increase in Account No. 926, Employee Pensions and Benefits, shown on page 28 of 29. This should include a comparison of the expense levels of the test year with those of the preceding 12 months for each pension, benefit and insurance plan accounted for herein along with explanations of the reasons for the increases reflected during the test year.

33. For the purpose of evaluating the company's proposed net investment and capitalization levels, provide the following information:

a. Relating to Plant Held for Future Use - Item 13 of the response to the Commission's data request of November 18, 1983, - provide the amounts of energy produced at the Waterside and Paddy's Run stations during the test year.

b. Provide the amounts of energy produced at the Waterside and Paddy's Run stations during each of the past 5 calendar years.

c. Provide the estimated costs to convert the Waterside and Paddy's Run stations to diesel fuel generation at some point in the future.

d. Based on the most recent studies available, provide an analysis of the feasibility of converting the Waterside and Paddy's Run station to diesel fuel.

34. For the purpose of evaluating the matching between the recording of the company's electric revenues and the recording of the variable costs related to those revenues, provide the following information:

a. A chronological description of the company's regular billing cycle from the reading of the meter up to, and including, the recording of the revenues and the rendering of the bill.

b. A listing of the variable costs associated with electric generation and a detailed explanation of how, on a

monthly basis, those costs are recorded and matched with the electrical generation which caused the costs.

c. For each month of the test year and the 12 months preceding the test year - the company's monthly KWH total generation (output), total sales, and lost and unaccounted for generation (KWH and percent).

ISSUE: ESRG Expense Adjustment.

35. Explain why the proposed adjustment does not recognize the 2-year amortization period indicated for this cost in the Commission's Order on Rehearing in Case No. 8616.

ISSUE: The Reasonableness of Charges and/or Expenses for the Test Year or Expected to be Incurred in Future Years.

36a. Furnish a depreciation expense schedule showing for each account number and name: the end of test balance, depreciation rate and depreciation expense.

b. Indicate any proposed changes in depreciation rates.

37. In reference to Response No. 18 to the Commission's data request dated November 18, 1983, "PROPERTY HELD FOR FUTURE USE" account:

a. Do the expected dates of service listed reflect the latest load forecasts? If not, show changes.

b. Are the costs shown for items listed in accounts 1350.1, 1360.1 and 1360.2 for unimproved land only? If improvements are included, please describe them.

38. Furnish an itemized list of the maintenance and/or other expenses shown in the adjustment on Wilkerson Exhibit 4, Schedule J.

39. Mr. Royer's testimony, at page 11, discusses maintenance and construction expenses. Provide a detailed list of both the construction activities that were cut back and the preventive maintenance functions that were postponed.

40. In reference to Mr. Wright's testimony, page 2, has there been any additional construction of electrical facilities planned and/or scheduled since LG&E filed its previous rate case, No. 8616? If yes, provide a description of each project including the estimated cost and completion date.

ISSUE: Coal Inventory.

The following questions address the general issue of coal inventory including, but not limited to, LG&E's new coal inventory policy, the coal inventory study supporting this new policy, the coal inventory goals and corresponding ranges of days supply under this new policy, and LG&E's test year-end level of coal inventory.

41. Provide the monthly ending inventory levels in both tons and dollars for the test year and for the calendar years 1982 and 1983.

42. What is the 12-month average ending coal inventory level (in tons and dollars) for the test year ended August 31, 1983? Provide a copy of all workpapers used to calculate this average.

43. Will the fiscal year in LG&E's new coal inventory policy (October 1 through September 30) continually change to coincide with the date of the future UMWA labor negotiations?

44. Provide a copy of all workpapers showing how the expected duration of a UMWA strike of 68.3 days was calculated.

45. Provide a copy of all workpapers used to produce Wright Exhibit 1, page 1 of 2, including those showing the calculation of the annual carrying costs and the probabilistic emergency action costs.

46. What burn rate was used to arrive at the coal inventory ranges in tons in Wright Exhibit 1, page 2 of 2?

47. How were the three coal inventory ranges in LG&E's new coal inventory policy for each of the 3 consecutive years determined? Were these coal inventory ranges based on the coal inventory study presented by LG&E?

ISSUE: The Total Gas Cost Reflected in the Adjusted Revenue at Present and Proposed Rates in Hart Exhibits 3 and 4.

48. Question 52 of the Commission's Order dated November 18, 1983, requested total cost, applicable Mcf and unit cost per Mcf data for three separate gas cost components. LG&E's response provided unit cost per Mcf and supporting workpapers. The workpapers contain some total cost and Mcf data. To reduce the possibility of misunderstanding, provide separately total cost and applicable Mcf for each of the following items:

a. Gas cost component reflected in proposed base rates.

b. Additional gas cost reflected in changes which were tracked through the PGA that would change the gas cost component reflected in base rates upon the incorporation of the PGA corresponding to base supplier rate as of the end of the test year into base rates.

c. Gas cost component reflected in proposed base rates plus incorporation of PGA corresponding to base supplier rate as of the end of the test year into base rates.

49. The note on page 1 of the response to question 52 of the Commission's Order dated November 18, 1983, states that "the PGA billings set forth on Hart Exhibit 4 cannot be used in such a calculation unless they are adjusted to eliminate $406,135 for interest paid to customers on refundable amounts." Provide a detailed statement setting forth the reasons that interest paid to customers on refundable amounts should be eliminated from this calculation.

50. Provide a breakdown for the test year of refunds from supplier, showing separately total refunds, interest paid by supplier, and refunds net of interest.

Done at Frankfort, Kentucky, this 29th day of December, 1983.

PUBLIC SERVICE COMMISSION

ATTEST:

For the Commission

Secretary