

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ADJUSTMENT OF GAS AND ELECTRIC RATES )  
OF LOUISVILLE GAS AND ELECTRIC COMPANY ) CASE NO. 10064

O R D E R

IT IS ORDERED that Louisville Gas and Electric Company ("LG&E") shall file an original and 16 copies of the following information with the Commission with a copy to all parties of record no later than January 7, 1988. If the information cannot be provided by this date, LG&E should submit a motion for an extension of time stating the reason a delay is necessary and include a date by which it will be furnished. Such motion will be considered by the Commission. LG&E shall furnish with each response the name of the witness who will be available at the public hearing for responding to questions concerning each item of information requested.

1. With reference to pages 4 and 6 of the testimony of Robert L. Royer and page 12 of the testimony of Fred Wright concerning the expenditures to implement various recommendations of the Management Audit of LG&E, issued in August 1986, ("Management Audit"), please provide the following information:

a. A schedule itemizing the expenses included in the test year associated with the implementation of these recommendations.

b. A schedule itemizing the savings or benefits realized during the test year or in the immediate future relating to any implementation of these recommendations.

c. Are any of the adjustments proposed by LG&E in Fowler Exhibit 4, Schedules A through R, the direct result of the implementation of the recommendations?

d. A description and a schedule itemizing the projected costs and cost savings resulting from implementation of recommendations of the Management Audit.

e. A timetable for the implementation of the recommendations noted in 1(d) above.

f. If (d) and (e) above are unavailable, explain in detail the basis for the assertions included in the testimony referenced above regarding the expenditures associated with these recommendations.

2. Discuss the costs and benefits associated with any systems implemented or other changes made during the test year as a result of the recommendations of the Management Audit.

3. With reference to the recommendations of the Management Audit and the proposed adjustments in this case, provide a detailed narrative discussion of LG&E's present or proposed strategies regarding: the compensation and benefit programs for each employee category; the work force mix; work force size; and work force management. With regard to the discussion above, give specific attention to any studies completed or in progress and address the effects of Trimble County Number 1 Unit ("Trimble County") construction project that affect compensation or the work

force. This response should include any information regarding associated costs and any expected benefits as noted in the Management Audit and as expected by LG&E.

4. With reference to the testimony of M. Lee Fowler, provide the following information:

a. Enumerate the adjustments included in Exhibit 4 that eliminate "unrepresentative conditions" as noted on page 6.

b. Are there other "unrepresentative conditions" that have not been eliminated?

c. Please explain the statement on page 8, that the adjustments do not reflect all of the costs that LG&E may be subject to during a reasonable period following the effective date of the new rates. Include a discussion of the following:

(1) A description of the costs and an itemized estimation of the amount of such costs.

(2) A definition of what LG&E considers to be a reasonable period.

(3) In addition to costs, is it possible that some costs savings may not be reflected? Why or why not?

d. Please explain what is meant by "effects of attrition" as noted on page 8.

5. With reference to the testimony of William W. Hancock, Jr., provide the following information:

a. With reference to page 3 of the testimony, are there factors other than the cost containment measures that may have contributed to the decline in the rate of increase in the basic medical plan cost?

b. Provide the information in Hancock Exhibit 1 for the 12-month period ending May 31, 1986, and May 31, 1987.

c. Why was the 12-month period ending in May chosen as the basis for this Exhibit 1?

d. Provide the information under the heading, "INCREASE IN LG&E MEDICAL BENEFIT COSTS", in Hancock Exhibit 2 for the year ended August 31, 1986, August 31, 1985, and August 31, 1984.

e. Correlate the data presented in Hancock Exhibit 1 with that presented in Hancock Exhibit 2.

f. What was the pension expense level for the 5 calendar years immediately preceding the test year?

g. Explain in detail the effect of FASB Standard No. 87 on LG&E's pension plan costs.

h. Have any factors other than the new pension plan accounting rules affected pension plan costs? Explain in detail.

i. Please explain what is meant by "equivalent premium rates" on page 7 of the testimony.

j. Prior to the April 1, 1987, benefit improvement package, what portion of group life insurance premiums was paid by LG&E for non-union employees?

k. What is the total dollar amount of the unabsorbed portion of non-union employee group life insurance?

l. What is the total dollar amount of the unabsorbed portion of LG&E contributions for non-union employees to the Thrift/Savings Plan?

m. With reference to fringe benefits, provide the following information:

(1) The total cost for each benefit for each employee category for the adjusted test year, the test year and for each of the 5 calendar years preceding the test year.

(2) The information in Item No. 3(m)(1) reflecting the amount expensed.

(3) A detailed discussion of the non-union employees' benefit improvement package which became effective April 1, 1987.

(4) The additional cost of each benefit for non-union employees during the test year as a result of the new package.

(5) The additional cost of each benefit for non-union employees on an annualized basis as a result of the new package.

6. With reference to the testimony of John Hart, Jr., correlate the \$<519,393> temperature adjustment to Operation and Maintenance expenses in Hart Exhibit 6, page 2, with the \$<4,365,393> adjustment in Fowler Exhibit 4, Schedule C.

7. With reference to the testimony of Patrick S. Ryan, provide the following information:

a. Provide the basis upon which LG&E estimates that approximately 90 percent of the residential customers utilize some form of air conditioning as noted on page 3.

b. What factors other than changes in weather may result in deviations from year to year in both peak demand and energy sales?

c. Provide the basis upon which LG&E estimates that temperature-sensitive sales will be 20 percent of total sales for the test period.

d. With reference to page 4 of the testimony, would it be possible for the forecaster to underestimate growth in energy usage or expected revenues if abnormal weather effects are eliminated?

e. Provide the source(s) for the information presented in Ryan Exhibit 2. Where applicable include supporting workpapers.

f. Provide the information included in Ryan Exhibit 2 using a 20-, 10-, and 5-year average as the base.

g. Provide the information in Ryan Exhibit 2 for each year from 1977 through 1987 using a 30-year average as the base.

h. With reference to pages 6 and 7 of the testimony, could total energy usage for temperature-sensitive classes consist of components other than base load sales and temperature-sensitive sales? Why or why not?

i. With reference to Ryan Exhibit 3, provide a detailed narrative discussion of how the MWH sales adjustment and MWH expense adjustment were determined.

j. With reference to page 8 of the testimony, please explain why April and November energy sales are typically influenced the least by temperature.

k. With reference to page 9 of the testimony, provide the following information:

(1) Provide support for the average energy consumption of 16.45 KWH per customer per day.

(2) Provide support for the estimate of 16.6 KWH per customer per day for the test period.

(3) What appliances does LG&E consider non-temperature-sensitive? Why?

(4) What appliances does LG&E consider temperature-sensitive? Why?

(5) Provide the source(s) for the information presented in Ryan Exhibit 5. If applicable, include supporting workpapers.

(6) Provide a thorough explanation and calculations supporting the derivation of the factors used to determine the expense adjustment in Ryan Exhibit 7.

The following questions 8 through 29 refer to Fowler Exhibit 4, Schedules A through R; the testimony of Mr. Lee Fowler, page 6 through 17; and Item No. 16, response to the Commission's Information Request No. 1.

8. With reference to the response to the Commission's Information Request No. 1, Item No. 16(d), provide the following information:

a. What does the \$74,634,771 (Base Labor at June 9, 1987) on page 4, represent and how was this amount determined?

b. What does the \$6,895,620 (Base Labor at June 9, 1987) on page 5, represent and how was this amount determined?

c. What does the \$32,650,100 (Base Labor at June 9, 1987) on page 6, represent and how was this amount determined?

9. Please explain how the labor adjustment for union employees proposed by LG&E reflects the following changes:

a. Employees hired prior to November 11, 1986, but not on the payroll at June 9, 1987.

b. Employees hired prior to November 11, 1986, on the payroll at June 9, 1987, but not on the payroll as of November 11, 1987.

c. Employees hired prior to November 11, 1986, on the payroll at June 9, 1987, and November 11, 1987.

d. Employees hired after November 11, 1986, on the payroll at June 9, 1987, but not on the payroll at November 11, 1987.

e. Employees hired after November 11, 1986, on the payroll at June 9, 1987, and at November 11, 1987.

f. Employees hired after June 9, 1987, and on the payroll at November 11, 1987.

10. Please explain how the labor adjustment for office clerical employees proposed by LG&E reflects changes between October 20, 1986, and October 20, 1987, as in 7(a) through (g) above.

11. Please explain how the labor adjustment for supervisory employees proposed by LG&E reflects changes between February 23, 1987, and August 31, 1987, as in 7(a) through (g) above.



12. Please explain why LG&E did not determine the amount of this adjustment by comparing normalized wages to the test-year wage levels.

13. What is the test-year labor expense for each employee category?

14. What is the normalized labor amount for each employee category based on the wage rates in effect as of November 11, 1987?

15. What is the normalized labor amount for each employee category based on the wage rates in effect at test year-end?

16. Please explain how the 72 percent operation portion of this adjustment was determined.

17. What effect has construction of Trimble County had on the ratio of salaries and wages expensed and capitalized over the past 5 years? During the test year? Over the next 3 years?

18. Provide a detailed narrative explanation and supporting workpapers for the proposed adjustment to pension costs. As a minimum, LG&E should address the following: a discussion of the pension plan(s) in effect; a thorough discussion of and support for the Actuarial Valuation Report; a discussion of and workpapers supporting the test-year pension cost; a discussion of and workpapers showing the effects of FASB No. 87 on both test year costs and pro forma costs; and a thorough discussion of any other factors affecting pension costs.

19. With reference to the proposed adjustment for health insurance costs, provide the following information:

a. A thorough explanation of the methodology employed (and workpapers where necessary) in determining this adjustment.

b. The rates and eligible employees as of January 1, 1987, in the same format as 16(d), page 8.

c. Documentary support for the rates effective January 1, 1987, and January 1, 1988.

d. Provide workpaper support for the cash incentive of \$272,789.

e. Explain why the cash incentive was deducted from the \$7,781,922 amount per books.

20. With reference to the proposed adjustment for dental expense, provide the following information:

a. The rates and eligible employees as of January 1, 1987, in the same format as 16(d), page 9.

b. Documentary support for the rates as of January 1, 1987, and January 1, 1988.

21. Provide a thorough narrative discussion of and supporting workpapers for the proposed adjustment to the Thrift/Savings Plan. Include a discussion of any changes during the test year and an explanation for the increase of 138 percent over the test year expense.

22. Provide a detailed narrative explanation and workpapers supporting the proposed adjustment to FICA taxes.

23. Provide a detailed narrative discussion and workpapers supporting the proposed adjustment to Federal and State Unemploy-

ment taxes. As a minimum, LG&E should address: the reason for using total employees as of September 22, 1987, rather than the total employees at test year-end; and the reason for and support for the methodology used to determine the adjusted test year expense.

24. With reference to proposed adjustment to property taxes, provide the following information:

a. A narrative discussion and workpapers supporting the calculation of the amounts used to arrive at the estimated operating property tax of \$5,953,838.

b. A narrative discussion and workpapers supporting the determination of the test-year property tax of \$5,875,229.

c. An explanation of and workpapers supporting the use of the 75 and 25 percent allocation factors.

25. With reference to proposed adjustment to amortize unrepresentative storm damage expenses, provide the following information:

a. A detailed discussion of and workpapers supporting the \$1,922,986 storm damage expenses. Itemize these expenses between labor (regular and overtime), materials, and other items as necessary.

b. Provide the information requested in 25(a) for the \$457,642 storm related expense and explain why this amount would have been incurred regardless.

c. Indicate the amounts and operating expense accounts that were charged with the expenses in (a) and (b) above.

d. Explain why LG&E chose a 3-year amortization period.

e. What amount of storm damage expenses has LG&E experienced during each of the 5-calendar year periods preceding the test year.

26. Provide a thorough discussion of the proposed \$1,901,428 increase in operating expenses to reflect customers served at August 31, 1987. Explain why Total Electric Operating Expenses excluding Sales Expenses were used to determine this adjustment. Are all the expenses listed as number 1 through 6 in Hart Exhibit 6, page 2, considered variable or directly related to sales levels?

27. Please explain why LG&E chose a 3-year amortization period for the costs of the management audit.

28. With reference to the proposed adjustment to uncollectible accounts, provide the following information:

a. What factors led LG&E to determine in 1986 that the reserve for uncollectible accounts was too high?

b. What was the per month accrual for each month of 1986 and the test year for uncollectible accounts?

c. Please explain how LG&E determined that the annual provision for uncollectible accounts should be \$3,000,000 or \$250,000 per month for 1987.

29. With reference to the proposed adjustment of test-year Federal Income taxes to 34 percent, correlate Item No. 16(p), page 20, Response to the Commission's Information Request No. 1, with the Deferred Taxes section of Fowler Exhibit 4, Schedule P.

30. In Case No. 9781,<sup>1</sup> the Commission explored the issue of excess deferred taxes resulting from the change in tax rates under the Tax Reform Act of 1986 ("Tax Reform Act"). The Commission stated in that Order that it,

...recognizes the existence of the excess deferred taxes and is of the opinion that these taxes provided by ratepayers in previous years should be returned in an equitable manner. However, the various options for returning these benefits could not be fully explored within the context of this expedited proceeding. Therefore, the issue regarding accelerated amortization of excess deferred taxes will be considered in future rate proceedings and not in the present, limited proceeding.<sup>2</sup>

With reference to that Order and the Tax Reform Act, provide the following information:

a. The amount of deferred taxes related to the depreciation method and life differences on public utility property in excess of the new 34 percent statutory rate.

b. The amount of deferred taxes relating to other factors such as: book/tax basis differences; life differences on pre-ADR assets; salvage value on ADR assets; repair allowance; and depreciation method and life differences provided at rates in excess of 46 percent, etc.

31. What are the effects of Section 803, the Uniform Capitalization Rules of the Tax Reform Act, for valuing inventory on LG&E? Address for gas and electric operations separately.

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<sup>1</sup> Case No. 9781, The Effects of the Federal Tax Reform Act of 1986 on the Rates of Louisville Gas and Electric Company, Order dated June 11, 1987.

<sup>2</sup> Ibid., page 10.

32. For the purpose of evaluating the changes in various electric and gas expense accounts during the test year - as compared to the 12 months preceding the test year - from Item No. 18(a) of the response to the Commission's Information Request No. 1, provide a detailed explanation and analysis of the change in the following accounts. 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.

a. Electric Expense Accounts:

<u>Account No.</u>	<u>Account Title</u>
<u>Power Production Expenses</u>	
500	Operation Supervision Engineering
506	Miscellaneous Steam Power
507	Rents
512	Maintenance of Boiler Plant
514	Maintenance of Miscellaneous Steam Plant
542	Maintenance of Structures
544	Maintenance of Electric Plant
548	Generation Expenses
553	Maintenance of Generating and Electric Plant
554	Maintenance of Miscellaneous Other Power Generation Plant
555	Purchased Power
557	Other Expenses
<u>Transmission Expenses</u>	
562	Station Expenses
566	Miscellaneous Transmission Expenses
569	Maintenance of Structures
570	Maintenance of Station Equipment
571	Maintenance of Overhead Lines
<u>Distribution Expenses</u>	
583	Overhead Line Expenses
586	Meter Expenses
587	Customer Installation Expenses
588	Miscellaneous Distribution Expenses
592	Maintenance of Station Equipment
593	Maintenance of Overhead Lines
<u>Customer Accounts Expenses</u>	
904	Uncollectible Accounts

Sales Expenses

912

Demonstrating and Selling Expenses

Administrative and General Expenses

920

Administrative and General Salaries

923

Outside Services Employed

925

Injuries and Damages

926

Employee Pensions and Benefits

931

Rents

932

Maintenance of General Plant

b. Gas Expense Accounts:

Account No.

Account Title

Other Gas Supply Expenses

803

Natural Gas Transmission Line Purchases

808.1

Gas Withdrawn from Storage

808.2

Gas Delivered to Storage

810

Gas Used for Compression Station Fuel

812

Gas Used for Other Utility Operations

Underground Storage Expenses

815

Maps and Records

819

Compressor Station Fuel and Power

821

Purification Expenses

822

Exploration and Development

824

Other Expenses

830

Supervision and Improvements

831

Structures and Improvements

832

Reservoirs and Wells

833

Lines

837

Other Equipment

Transmission Expenses

850

Supervision and Engineering

853

Compressor Station Labor and Expenses

860

Rents

863

Mains

866

Communication Equipment

867

Other Equipment

Distribution Expenses

871

Load Dispatching

872

Compressor Station Labor and Expenses

874

Mains and Services Expenses

877

Measuring and Regulatory Station

878

Expenses - City Gate Check Station

880

Meter and House Regulator Expenses

Other Expenses

881	Rents
886	Structures and Improvements
887	Mains
888	Compressor Station Equipment
892	Services
894	Other Equipment
<u>Customer Accounts Expenses</u>	
901	Supervision
903	Customer Records and Collection Expenses
904	Uncollectible Accounts
905	Miscellaneous Customer Accounts Expenses
<u>Customer Service and Information Expenses</u>	
910	Miscellaneous Customer Service and Information Expense
<u>Sales Expenses</u>	
912	Demonstrating and Selling Expenses
<u>Administrative and General Expenses</u>	
920	Administrative and General Salaries
923	Outside Services Employed
925	Injuries and Damages
926	Employee Pensions and Benefits
929	Duplicate Charges
920.1	General Advertising Expenses
931	Rents

33. With reference to the Commission's Information Request No. 1, Item No. 17, page 4 of 4, explain why the balance for Account No. 2489.00, "Revenues from Transportation of Gas of Others," increased from \$2,522,276 at August 31, 1986, to \$7,105,020 at August 31, 1987.

34. With reference to the Commission's Information Request No. 1, Item No. 20(a)(7):

a. On page 8 of 10, explain why a revision of the estimate of deferred income taxes for 1986 was necessary.

b. On pages 9 and 10 of 10, explain why the figures on these schedules are 11 months actual and 1 month estimate



instead of 12 months actual. Also explain why an estimate of depreciation was used for computing deferred income taxes and why is this a forecast of 1986.

35. With reference to the Commission's Information Request No. 1, Item No. 25(a), pages 1 and 2 of 3, provide an explanation of the nature of the advertising recorded in Account No. 909, Safety, Environmental Protection, and Conservation Advertising. This explanation should be broken down by the different mediums and items listed in Item No. 25(a). Also provide examples which are indicative of this advertising.

36. With reference to the Commission's Information Request No. 1, Item No. 25(b), page 2 of 17, concerning payments to the Edison Electric Institute ("EEI"):

a. Provide a description of the \$164,390 paid to EEI in January, 1987.

b. Provide a listing of any other services provided by EEI to LG&E during the test year, including the costs of those services.

c. Provide a complete listing of the benefits and services LG&E receives as an EEI member.

d. Provide any cost-benefit analysis LG&E has performed regarding EEI membership.

37. With reference to the Commission's Information Request No. 1, Item No. 25(b), page 9 through 13 of 17, concerning the director's fees and expenses:

a. Provide the rates for the annual retainer, board meetings, and committee meetings in effect during the test year.

b. For the payments on pages 9 through 13 referenced as "Director's Fees," identify each payment as annual retainer, board meeting, or committee meeting, or other specific classification. The schedule should be arranged by month and director, as Item No. 25(b) was submitted. Committee meeting payments should reference the related committee.

c. With reference to any Management Audit recommendations concerning director's compensation, explain what actions were taken during the test year and what actions are expected to be taken in the near future.

38. With reference to the Commission's Information Request No. 1, Item No. 26, page 1 of 32, for the total of professional service expenses, indicate what account numbers the expenses are recorded in. Also list the amount recorded in each account number.

39. With reference to the Commission's Information Request No. 1, Item No. 26, page 2 through 32, concerning the payments for outside services:

a. For each payment listed, indicate those payments which are related to Trimble County. If an item includes payment for Trimble County and other services, indicate the amount related to Trimble County.

b. For each Trimble County-related payment, indicate whether it has been expensed or capitalized.

c. For expensed payments, explain why it has not been capitalized.

d. For each payment listed, indicate those payments which are related to or resulting from recommendations in the Management Audit. If an item includes payment for a Management Audit service and other services, indicate the amount related to the Management Audit.

e. For each Management Audit-related payment, indicate whether it has been expensed or capitalized. Explain in detail why a payment was expensed or capitalized.

f. For each payment listed, indicate those payments which are of a non-recurring nature.

40. With reference to the Commission's Information Request No. 1, Item No. 34, pages 3 and 4 of 7, concerning the allocation of uncollectible accounts between electric and gas departments:

a. Explain why on page 3 of 7 the allocation of the provision for uncollectible accounts is to be 72 percent electric, 28 percent gas, while on page 4 of 7, the allocation was 67 percent electric and 33 percent gas.

b. Explain the allocation methodology and, if not used, why the allocation is not based on the actual uncollectible history of the two departments.

41. The Commission's Information Request No. 1, Item No. 40, pages 1 through 16, concerning research and development activities indicate that LG&E paid \$79,936, between calendar years 1982 and 1986, to EEI for an assessment of utility acid precipitation study. During the test year, the payments totaled \$20,760.

a. Provide the amounts paid prior to 1982 for this study by calendar year.

b. Provide an estimate of how many more years the study is to be conducted and the cost to LG&E.

c. Provide in detail the benefits specifically relating to LG&E which are to be derived from this study.

42. In April of 1986, representatives of LG&E met with the Commission staff to inform staff of the accounting treatments LG&E was utilizing for the abandonment of three gas storage fields. The abandonments occurred in late 1985, and involved the Ballardville, Canmer, and Flint Hill Storage Fields. In June of 1986, staff requested information concerning all major LG&E retirements made during 1981 through 1985. The review of this information led to concerns over the impact current LG&E accounting treatments of early retirements and abandonments were having on the accumulated depreciation accounts and the net original cost rate base. This issue should be further explored in this rate case. The following questions concern LG&E's early retirements and abandonments of utility plant.

a. Explain why LG&E did not utilize the extraordinary property loss accounting treatment, as outlined in the Uniform System of Accounts for Electric and Gas Utilities, for the book losses incurred from the early retirement of sulfur dioxide removal system ("SDRS") units and the abandonment of gas storage fields ("gas fields").

b. Explain why LG&E has recognized a loss on the abandonment of the gas fields on its 1985 tax returns but not on its books.

c. Explain why LG&E has not recognized losses on the 1984 and 1985 early retirements of SDRS units at Mill Creek and Cave Run on either its tax returns or its books.

d. Provide all accounting entries made to book the retirements or abandonments of all SDRS units, all gas fields, and any retirement whose book loss exceeded \$500,000, for the period August 31, 1983, to August 31, 1987. Include the calculations and workpapers which support the amounts recorded in those accounting entries.

e. Using the same retirements and time period as was used in d. above, determine the impact on the accumulated depreciation accounts, net original cost rate base, and any related accounts if LG&E had accounted for those retirements and related losses using the extraordinary property loss treatment instead of the utilized approach. In determining the impact, supply all supporting workpapers and calculations used at arriving at the amount of impact. A separate determination for each retirement should be made, rather than a lump sum determination.

43. With reference to the testimony of Fred Wright regarding the SDRS renovation program, provide the following information:

a. The cost of any studies associated with this program included in the test year expenses.

b. The amount of SDRS operating and maintenance expenses included in the test year and in each of the past 5 calendar years.

44. With reference to the testimony of Jay H. Price, Jr., concerning the inclusion of construction work in progress ("CWIP") in rate base, provide the following information:

a. Restate Price Exhibit No. 2, pages 1 and 2 using the assumption that CWIP is included in rate base for construction years 1 through 7, then changes to the allowance for funds used during construction method for construction years 8 through 10.

b. Restate Price Exhibit No. 3, page 2 of 3, using the assumption stated in (a) above.

45. Regarding tariffs file with the Application.

a. Why is there a power factor adjustment clause only in the LP-70D tariff?

b. How was the 80 percent Power Factor chosen as the "neutral" where no penalty or reward applies? Have any studies been made to support the selection of 80 percent as the neutral value? If so, please describe the studies and the results obtained from them.

c. Why do not all tariffs that have a demand billing component also have a power factor adjustment clause?

46. In your proposed allocation of the revenue increase in the electric and gas billing analysis, there is no proposed adjustment to the forfeited discounts. Shouldn't the forfeited discount account increase in relationship to the increase in your sales accounts? Explain.

47. An adjustment was made for the end-of-year customers in the electric department during the test period. What would be the adjustment for the end-of-year customers for the proposed revenue increase?

48. What is LG&E's current in-house policy as to coal inventories such as number of day, tonnage and dollars?

49. What is LG&E's proposed coal inventories for the next labor negotiation in the coal industries?

50. Furnish copies of the monthly NOAA weather reports used to determine the degree days during the test period.

#### Economic Development Rate

51. Provide all workpapers used in developing Economic Development Rate structure.

52. Provide estimate of projected off-peak demand growth which will result from the Economic Development Rate. Provide estimates of forecasted energy growth resulting from the Economic Development Rate.

53. Will the Ford Motor Company project and the Presbyterian Church Headquarters project, as discussed in Mr. Wright's testimony, be eligible for the Economic Development Rate?

54. For new customers, would the proposed Economic Development Rate result in a 50 percent discount on all demand charges for the first year?

55. On page 6 of Mr. Wright's testimony explain the statement, "If the EDR customer increases the on-peak load, the customer will pay its full costs of any incremental investment required to serve the load."

#### Cogeneration Rate

56. Provide all workpapers used in calculating the avoided capacity costs.

57. Provide all workpapers used in calculating the avoided energy costs.

58. Provide the amount of posted bond that the company thinks should be required to insure that LG&E's customers and shareholders are protected against qualifying facilities failing to provide contracted capacity.

59. Provide an explanation as to why LG&E selected 70 percent availability to qualify for full avoided capacity costs.

60. When available provide hourly system lambda data for calendar year 1987.

61. Provide all studies used in estimating production potential of cogenerators and/or small power producers in LG&E's service area.

62. On page 13, line 27 of Markel's testimony within LG&E's Prepared Direct Testimony Volume I, Markel states "LG&E's return ranks 23rd out of 27 companies."

a. Over what time period were these returns calculated? Provide copies of all workpapers, documentations, and sources supporting your answer.

b. Provide an estimate of LG&E's total return on equity (including growth) from the period of May 14, 1984, thru October 1, 1987. Include a full and complete detailed explanation of all assumptions, dates, and calculations to support this answer.

63. In the Prepared Direct Testimony Volume I, Mr. Olson has filed testimony showing the 5-year growth rates of earnings



per share, dividends, book value, and the IBES consensus to be 3.8, 3.3, 2.2, and 3.3 percent, respectively.

a. On page 22, line 9 of Olson's testimony, how is Mr. Olson basing an opinion of 5.0 to 5.5 percent expected growth rate "on the Company's 5-year dividend growth rate, ..., as well as the other growth rates I (Olson) have presented?"

b. Provide a full and complete detailed explanation of the discrepancy between the data presented and Olson's opinion on LG&E's growth rates.

c. Provide copies of all workpapers, documentations, sources, and assumptions that support the view of a 5.0 to 5.5 percent growth rate.

64. On page 22, lines 12-23, Olson provides some explanations for choosing a growth rate that is higher than historical rates. However, would the security analysts involved in forming a consensus 5-year earnings growth expectation as published by IBES have also taken these facts into consideration in forming an estimate of only 3.3 percent?

Provide a full and complete detailed explanation including all assumptions, workpapers, documentation, and sources to support this position.

65. Please provide all workpapers, calculations, and sources of information used in Olson's least square estimates of growth rates for earnings per share, book value, and dividends.

66. Does the 8.0 percent premium that Mr. Olson suggests be added to return on equity include both a financing cost of issuing

common stock and a reasonable probability of issuing common stock at a price above book value?

a. Provide the workpapers used in formulating Schedule No. 15.

b. Provide the workpapers along with a full and complete explanation of the methodology used in determining the additional premium above the 3.7 percent to protect LG&E when issuing shares during down markets.

67. Provide copies of the IBES consensus 5-year growth expectations for dividends, earnings per share, and book values for LG&E and the companies listed in Schedule 7 since 1977.

68. Provide copies of all workpapers and sources of information used in determining Olson Schedules 7, 8, 9, 10, 11, 12, 13 and 14.

69. Provide copies of all workpapers and sources of information used in Olson's risk premium analysis on pages 23 to 26 of Olson's testimony.

70. In Fowler's testimony in LG&E's Prepared Direct Testimony Volume I, does Exhibit 6 include any return as a result of growth?

71. Provide the workpapers 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.

72. Provide a copy of all workpapers used to develop the embedded electric cost of service study.

73. Provide all workpapers used to develop the gas cost of service study (Walker Exhibit 1).

74. On page 3 of Walker's testimony (line 28) it is stated that maximum class demands at the system input level were determined on the basis of 5 degree "design-day" temperatures.

a. How was 5 degrees chosen as the design-day temperature?

b. Is that 5 degree design-day the same that occurred on February 22 during the design winter as described in Appendix B of Walker Exhibit 1? If so, why wasn't a design day of -3 degrees (as occurred on January 17th of the design winter) chosen instead of 5 degrees?

75. Describe in narrative detail the process of assigning costs to functional groups using "internally-generated functional assignment vectors," as explained on page 2 of Walker Exhibit 1. Support the explanation with all applicable workpapers.

76. As stated on page 6 of Walker's testimony, Rate G-1, which is composed of residential, commercial and industrial customers, represents approximately 85 percent of LG&E's total gas deliveries. Did LG&E consider separating this relatively large customer group into more than two (residential and non-residential) homogeneous classes of service in order to better distinguish different service characteristics (i.e., size of loads, diversity of the loads, the predominant uses, etc.)? If not, explain why this was not considered. If so, explain why it was chosen not to use more than two classes for the Rate G-1.

77. On page 14 of Walker Exhibit 1, a summary of allocation factors is shown. The Distribution Services Customer (CUST02) factors are shown by class in the eighth column and are based on

information contained in Appendix E. Was any type of weighting technique considered that would distribute weight across classes according to the average costs of distribution services? If not, explain why. If so, explain why the factors were not weighted in this cost of service study.

Also, was any type of weighting mechanism considered in the calculation of any of the other allocation factors shown on page 14.

78. On page D-2 of Appendix D of Walker Exhibit 2, there appears to be a lack of economies of scale in the unit costs of distribution mains (i.e., the unit cost of a 14" main is half that of a 1" main, the unit cost of a 4" main is nearly seven times more than a 3" main, etc.). Explain the varying unit costs of different sizes of distribution mains.

79. Provide all workpapers regarding the zero intercept regression methodology used to determine the customer component of the costs of distribution mains described in Walker Exhibit 1.

80. In Mr. Markel's prepared testimony it is stated that preliminary estimates for construction expenditures during 1988-1992 are \$750 million.

a. What portion of this amount represents construction on the gas system?

b. If none, what are the preliminary estimates for gas-related construction expenditures during 1988-1992?

c. Describe the nature of the gas construction that is anticipated to occur during the period 1988-1992.

81. In Mr. Wright's prepared testimony, the proposed economic development rate is discussed.

a. Why does this proposal only apply to electric customers?

b. Did LG&E consider proposing an economic development rate with similar parameters as the electric proposal for its current and/or prospective gas customers?

82. You also discuss various increases in operations and maintenance costs, but the information relates specifically to electric. Since your last rate case, and particularly during the test year, describe any expenditures or activities related to operations and maintenance on the gas system of an extraordinary nature, i.e., not of a day-to-day routine nature.

83. In Case No. 9607,<sup>3</sup> the Commission approved a Stipulation and Proposed Settlement regarding LG&E's curb box accessibility program. The Order was issued May 21, 1987.

a. Describe the status of the program, described in the Order as the Curb Box Plan.

b. Hasn't implementation of this program resulted in increased expenditures, compared to LG&E's efforts previous to the Plan? If not, why?

c. If expenditures have increased, why aren't they proposed as adjustments to the appropriate accounts?

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<sup>3</sup> In the Matter of: Louisville Gas and Electric Company's Failure to Comply with Curb Box Accessibility Requirements.

84. In Schedule G of Fowler Exhibit 4, the adjustment of depreciation expense as related to depreciable plant at August 31, 1987, is presented.

- a. What is included in the term "depreciable plant?"
- b. For mains and services what accrual rates are used?
- c. What useful life does LG&E use for mains and services? For each, how was the useful life calculated?
- d. For mains and services, is negative salvage assumed? If so, what is the effect on accrual rates?

85. What is the date of LG&E's most recent depreciation study on its gas plant? Specifically, on mains and services?

86. In LG&E's response to Commission's Data Request No. 1, at page 2 of 3 of Item 16(g), under gas plant, what is included in the term "Distribution - Other?" How was the 2.87 depreciation rate derived?

87. Regarding Item 53, page 2 of 2, the unit cost of gas withdrawn from storage increased from \$2.614 per Mcf in 1982 to \$3.301 per Mcf in 1986. Explain the reason for the increase.

88. At that same page explain the reasons for the decrease in unit cost of gas to storage from \$3.470 per Mcf to \$2.57 per Mcf during the same period.

89. Why has the net gas supply cost only decreased from \$3.153 to \$3.133 (1982-1986) while gas purchased has decreased from \$3.444 to \$2.812?

90. In LG&E's response to the Commission's Data Request No. 1, at page 12 of 18 of Item 6(h), a new gas transportation service - Rate T - is proposed.

a. It is stated, "Any such transportation service hereunder shall be conditioned on the Company being granted a reduction in D-1 and D-2 billing demands by its pipeline supplier." In what manner, and under what circumstances, might LG&E experience such a reduction, and from what suppliers?

b. If no such reduction occurs, does that mean this tariff cannot be utilized? If so, why?

91. Can an end-user receive transportation service through Rate TS who is not served under Rates G-1 or G-6, i.e., an end-user not a gas customer of LG&E at the time transportation service is requested? If not, why?

92. Under Rate TS why is a demand component included in the rate for a transportation customer served under Rate G-6?

93. Are customers served under Rate TS in effect required to accept standby service? If so, isn't this contrary to the Commission's Order in Administrative Case No. 297<sup>4</sup> which required each Class A LDC to file a separate rate for standby service?

94. Shouldn't the end-user, not the company, decide whether standby service is necessary?

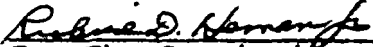
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<sup>4</sup> In the Matter of: Investigation of Kentucky Regulation in Light of FERC Rulemaking (Docket No. RM 85-1) - Natural Gas.

95. Under Rate G-6, the distribution cost component is 53 cents per Mcf, yet under Rate G-7 the distribution cost component is 43 cents per Mcf. Explain the basis for the difference.

Done at Frankfort, Kentucky this 23rd day of December, 1987.

PUBLIC SERVICE COMMISSION

  
For The Commission

ATTEST:

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Executive Director