

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ADJUSTMENT OF GAS RATES OF)	
LOUISVILLE GAS AND ELECTRIC)	CASE NO. 2000-080
COMPANY)	

O R D E R

IT IS ORDERED that the Louisville Gas & Electric Company ("LG&E") shall file with the Commission the original and 12 copies of the following information, with a copy to all parties of record. 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 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. The information requested herein is due on or before May 12, 2000. When applicable, the information requested herein should be provided for total company operations and jurisdictional operations, separately.

1. Refer to Exhibit 13 of William S. Seelye's Direct Testimony. Provide workpapers showing how the "Correction Factor" is computed. Explain why it is necessary to use a "Correction Factor."

2. Refer to the Direct Testimony of William S. Seelye, page 22.
 - a. Provide workpapers and show computations used to arrive at the “580 below 30 year average” used in this adjustment.
 - b. Identify the 30-year period used in the calculation of the weather normalization adjustment. If the 30-year period does not include at least 5 years of the 1990s, explain why the period is reasonable.
3. List by name, annual gas usage and revenue in 1998 and 1999 the customers served under Tariff TS and FT. If there is a concern about confidentiality of the customers, they may be designated as “A B C,” etc. Prepare an estimate of the change in revenue, if any, that would result from service under the proposed tariffs.
4. Refer to the Direct Testimony of William S. Seelye, page 25.
 - a. Explain in detail why it was necessary to reconstruct LG&E’s Test year billing units.
 - b. Why is it more accurate to use the reconstructed billing units rather than adjusted actual revenues in developing rates for LG&E?
5. Refer to Williams Exhibit 1, Schedule N, Adjustment for Increase in Gas Return Check Fees. Provide a detailed explanation for the 50/50 split of the increase in return check fees between the electric and gas departments.
6. Is it LG&E’s belief that customers would prefer the 3-year phase-in of the proposed increase in the customer charge to having the proposed year 3 rate design effective in the first year? Why?
7. Is LG&E concerned that it would not be collecting more of its identified fixed costs through the customer charge versus the volumetric rate in the first and

second years of the proposed 3-year phase-in? Why or why not? Is LG&E relying on the proposed weather normalization adjustment to ensure more of the recovery of those costs as they are collected through the volumetric rates?

8. Refer to Original Sheet No. 2-B of LG&E's proposed tariff. How was 5,000 cf established as the usage over which LG&E would bill residential customers for air conditioning service?

9. Refer to Sheet Nos. 2-B, 3-B, and 4-B of LG&E's proposed tariff. How does LG&E enforce the condition that use must not be occasional or sporadic?

10. Why is LG&E proposing to include Rate CGS customers in the WNA, but not industrial customers? Are there no industrial customers with space-heating loads?

11. Why does LG&E propose to make Rate TS Service available to customers with 50,000 Mcf annual usage as opposed to 18,250 Mcf (365 x 50Mcf)? How many more customers would be eligible for Rate TS if the availability were based on 18,250 Mcf?

12. How many customers would be eligible to migrate to Rate FT if the volumetric requirement were modified to add customers with 50,000 Mcf annual usage? 18,250 annual usage?

13. Why is LG&E proposing to add Section Number 7 to the Special Terms and Conditions of Rate TS?

14. Refer to page 15 of the Direct Testimony of Clay Murphy. Describe any situations in which LG&E has under-recovered gas cost or experienced difficulty on its system due to the \$15 OFO penalty and customers' decisions to pay that penalty rather than curtail deliveries.

15. Explain the financial impact on LG&E of continuing to provide 100 feet of gas main extension to its customers free of charge. What has been the past financial impact, and how has it contributed to LG&E's relatively low level of earnings on the gas side of its business?

16. Provide a description for each project in the construction work in progress for LG&E's gas operations for the test year that costs more than \$1,000,000.

17. For each construction project described in the response to the above question, provide a copy of the contract with the construction contractors.

18. Provide a list and the charges of the plant retired during the test year.

19. Refer to page 5 of the Direct Testimony of Rebecca L. Farrar. Provide location, costs, and manner of replacing the 45 miles of bare pipeline that LG&E intends to replace in 2000. Provide copies of any agreements or contracts between LG&E and the construction contractors that are associated with the bare pipeline replacement.

20. Refer to page 9 of the Direct Testimony of Rebecca L. Farrar. Provide a more detailed explanation for the expansion of gas storage fields and the re-engineering of the gas control and storage area.

21. Refer to page 11 of the Direct Testimony of Rebecca L. Farrar. Provide a more detailed explanation for the enhancement of the operation of gas purifier units.

22. Which utility competes with LG&E in providing gas to Fort Knox and Ford Motor Company?

23. Refer to page 8 of Exhibits 1 of William S. Seelye's Direct Testimony.

a. Describe Account 823, Gas Losses. Explain in detail if the gas losses recorded in this account are from LG&E's gas storage field or from its surface facilities.

b. Describe in detail the maintenance projects recorded in Account 832, Maintenance of Reservoirs.

24. In this proceeding LG&E has requested that its line extension reimbursement policy be changed from 100 feet to 80 feet and that the reimbursement period be decreased from 10 to 5 years. The following refer to these proposed policy changes:

a. Is LG&E requesting a deviation from 807 KAR 5:022, Section 9(16)?

b. Provide the number of extensions of mains LG&E made during the test period.

c. For each main extension provide the cost paid by the new customer and the amount paid by LG&E.

d. Provide the amount of savings LG&E would have realized if the line extension policy were 80 feet per customer rather than the current 100 feet.

e. Explain the reason LG&E requests that its reimbursement policy be reduced from 10 to 5 years.

25. Refer to Filing Requirement 6-n, Item 31 of the Application, LG&E's Depreciation Accrual Rate Study at December 31, 1988.

a. Refer to page S-2 of the Summary and Recommendations. The Depreciation Study has the following recommendation: "Review depreciation accrual

rates and all their constituent elements at no more than five year intervals.” Has LG&E performed a review of the depreciation accrual rates and all their constituent elements? If a review has been performed, provide a copy of the review. If a review has not been performed, explain why LG&E has not followed the recommendations of its Depreciation Study.

b. Given the increase over the past 10 years in LG&E’s level of utility plant investment, explain how the estimates and assumptions of the remaining life values of the 10-year old Depreciation Study are relevant today.

c. Provide justification for the negative 20 percent net salvage value for Account 376.00, Mains.

d. Provide justification for the negative 25 percent net salvage value for the well drilling and well equipment.

e. Refer to the Interpretation of the Findings, Page II-21, Account 380, Services. Provide justification for the increase in percentage of net salvage from negative 40 percent to negative 60 percent.

26. Does LG&E insert plastic pipelines in the cast iron mains during the process of replacing the bare unprotected cast iron pipes with polyethylene pipes?

27. In response to Item 32 of the Commission’s March 15, 2000 Order, it is stated that a Proprietary Model prepared by the Prime Group, LLC and the Sendout Model prepared by New Energy Associates were used in the preparation of the cost-of-service model presented in this case. Provide working copies of the models and supporting user-friendly instructional documentation for these models containing the

exhibits to the direct testimony of William S. Seelye on electronic media, i.e., diskette or CD.

28. a. The cost-of-service study provided is classified as embedded. Have all inputs been reviewed to ascertain that the results will serve the company, the public and the Commission in a manner that is current and forward-looking (most efficient provision of service in the future)?

b. Would any input require modification when viewed from a forward-looking approach?

29. In Seelye's Direct Testimony it is stated that the cost-of-service study corresponds to the pro forma financial exhibits. Is there a complete reconciliation of the cost-of-service study and the exhibits of Scott Williams?

30. Refer to pages 27 and 28 of Exhibit 1 attached to the Direct Testimony of William S. Seelye.

a. Identify functional assignment vectors. Most are given the value of zero or one. Describe how the values for these vectors are determined and provide the criteria used to obtain these values.

b. Aren't these values heavily dependent upon the precision of the financial records of the utility?

c. What assurances can be provided that the judgement of assigning costs is based upon sound data?

d. Do these values generally remain the same or do they deviate from study to study?

31. a. The allocation vector DEM02 and DEM03 are the same. Why is it appropriate that transmission line costs be allocated on the same basis as storage costs?

b. Are transmission lines used in any other capacity other than moving commodity to and from storage fields? Isn't a flow of commodity necessary to maintain service to customers during periods other than during the winter months?

c. Provide DEM03 based upon volumes supplied to the customer classes or other commodity-related analysis and identify the impact upon the results of the cost-of-service model.

32. Provide a description of COM03.

33. a. Is the cost-of-service model as presented the result of a standard industry model? If so, provide source material and explain why the selection of this model was made. What other companies use this model?

b. What concerns or modifications have other state regulatory commissions expressed about the model presented in this case?

c. What other models were considered prior to selecting this model? Did other models reviewed provide similar results and guidance?

d. How is this Commission assured that the guidance represented by this model is the most reasonable?

34. a. It is stated that the "zero intercept" method has been utilized in the preparation of this study. Has a "minimum system" approach been evaluated in this proceeding?

b. How is the “zero intercept” methodology superior to the “minimum system” approach? How do the results differ from those of the “zero intercept” approach?

c. Provide a “zero intercept” regression run using unweighted data. Compare the results to the weighted method in the testimony.

d. Which size of pipe is currently being installed? Identify by customer class.

e. Explain more fully why a more uniform distribution of the number of feet of pipe on LG&E’s system is necessary to employ the “zero intercept” methodology.

35. Refer to Filing Requirement 6-i, Item 27 of the Application.

a. Explain in detail how the calculations shown on page 1 of 2 provide a reconciliation of the total company capitalization of \$1,525,601,322 with the total company rate base of \$1,651,990,150.

b. Provide a reconciliation of the total company capitalization of \$1,525,601,322 with the total company rate base of \$1,651,990,150. Include all calculations, workpapers, assumptions, and other documentation that support the reconciliation.

c. Provide a reconciliation of the gas operations capitalization of \$265,607,189 with the gas operations rate base of \$287,685,312. Include all calculations, workpapers, assumptions, and other documentation that support the reconciliation.

d. Refer to page 1 of 2, line 7. Explain how the Cash and Temporary Cash Investments test-year-end balance of \$61,697,530 is related to the \$46,509,168

included in total company rate base. In addition, provide all calculations, workpapers, assumptions, and other documentation that support the inclusion of \$46,509,168 in the total company rate base.

e. Provide all calculations, workpapers, assumptions, and other documentation that support the amounts included in the total company rate base for Gas Stored Underground, Materials & Operating Supplies, Prepayments, Deferred Regulatory Assets, and Investment Tax Credit.

f. Refer to page 2 of 2. Provide the electric operations, gas operations, and total company rate bases, reflecting the level of detail as shown in the Commission's January 7, 2000 Order in Case No. 98-426.¹ Include all calculations, workpapers, assumptions, and other documentation that support the determination of each rate base.

g. Provide the electric operations, gas operations, and total company capitalization, reflecting the level of detail as shown in Exhibit 2 of the Direct Testimony of J. Scott Williams. Include all calculations, workpapers, assumptions, and other documentation that support the determination of each capitalization.

36. Refer to Filing Requirement 6-j, Item 18 of the Application. The provided chart of accounts includes accounts that are not part of LG&E's gas operations.

a. Is this chart of accounts the one used by LG&E Energy Corp. ("LG&E Energy"), the holding company for LG&E? Explain the response.

¹ Case No. 98-426, Application of Louisville Gas and Electric Company for Approval of an Alternative Method of Regulation of Its Rates and Service, final Order dated January 7, 2000, at 63.

b. If this chart of accounts is for an entity other than LG&E's gas operations, explain in detail why it was provided as the response to the filing requirement.

c. Provide the chart of accounts used for LG&E's gas operations.

37. Refer to Filing Requirement 6-t, Item 37 of the Application.

a. Provide a breakdown of the test-year charges from LG&E Energy to LG&E's gas operations, using the categories listed in this response. Include the allocation factors used to assign these charges, and indicate the charges that include the allocation of common charges.

b. Provide a breakdown of the test-year charges from Kentucky Utilities Company to LG&E's gas operations, using the categories listed in this response. Include the allocation factors used to assign these charges, and indicate the charges that include the allocation of common charges.

c. Explain in detail why the charges from LG&E Energy to LG&E's gas operations increased between 1998 and 1999.

38. Refer to Filing Requirement 7-d, Item 43 of the Application. Prepare a comparison of the 1999 operating budget versus 1999 actual operating results. The comparison should be at the level of detail shown in Item 43. Explain all variances greater than plus or minus 5 percent.

39. Refer to Item 45 of the Application, the Direct Testimony of Rebecca L. Farrar, pages 3 and 4.

a. Prior to the Commission's January 7, 2000 Order in Case No. 98-426, was LG&E aware that its rate of return on common equity for its gas operations was very low?

b. Does LG&E monitor its rates of return on rate base, capitalization, and common equity for its electric and gas operations separately? If no, explain in detail why such monitoring is not performed.

c. Refer to the response to Item 33 of the Commission's March 15, 2000 Order. Calculate the rate of return on rate base and common equity for years 1994 through 1997, as originally requested. Include all workpapers, assumptions, and other documentation that support the calculated rates of return.

40. Refer to Item 45 of the Application, the Farrar Direct Testimony, page 7. The graph presented on this page shows the trend in customer satisfaction since LG&E's last general rate case.

a. Describe the process used throughout this period to determine customer satisfaction. If methodologies changed during the period, explain those changes in detail.

b. The graph shows that since approximately August 1998, there have been two significant dips in customer satisfaction. Explain the reason(s) for these dips in customer satisfaction.

c. Explain why customer satisfaction during the test year generally was lower than the overall trend line for the 10-year period.

41. Refer to Item 45 of the Application, the Williams Direct Testimony, page 14, lines 14 through 16.

a. Has the Commission accepted LG&E's argument in Case No. 98-426 that the cost of long-term debt should be adjusted for the environmental cost recovery?

b. Explain in detail why the annual cost rate for the first mortgage bonds has been adjusted for environmental cost recovery, which is an electric operations adjustment only.

c. Recalculate Williams Exhibit 2 using the annual cost rate for the first mortgage bonds without the adjustment for environmental cost recovery.

42. Refer to Item 45 of the Application, the Williams Direct Testimony, page 15.

a. Explain in detail why LG&E calculated its proposed revenue increase on rate base rather than capitalization. Include a discussion of the circumstances applicable to LG&E's gas operations that support this approach to determining the revenue increase.

b. Did LG&E review past Commission decisions involving Kentucky's only other combined electric and gas investor-owned utility, The Union Light, Heat and Power Company, when deciding the approach to be used to calculate the proposed gas revenue increase? Explain the response in detail.

c. Was Mr. Williams aware that during Case No. 98-426, LG&E repeatedly stated that the Commission traditionally determined LG&E's revenue requirements based on capitalization, rather than rate base? If not, explain why Mr. Williams was not aware of these statements.

43. Refer to the Williams Direct Testimony, Exhibit 2.

a. Provide all calculations, workpapers, assumptions, and other documents supporting the amounts shown in the “Per Books 12-31-99” and “Adjustments” columns on page 1 of 2.

b. Is the amount shown on page 1 of 2 as “Other Notes Payable to Banks” the gas operations’ allocation of the Commercial Paper balance of \$122,000,000, as shown in response to Item 3(b) of the Commission’s March 15, 2000 Order?

c. If yes to part (b) above, explain why this short-term debt should be included in LG&E’s gas operations capitalization, since this short-term obligation matured between February 7 and 14, 2000.

d. Refer to page 2 of 2. Explain why none of the “common” job development credit was allocated to LG&E’s gas operations job development credit.

44. Refer to the Williams Direct Testimony, Exhibit 3.

a. For each line item of the gas rate base, cross-reference the balance shown with the account detail provided in responses to Item 10 and 15 of the Commission’s March 15, 2000 Order. List all the accounts included in the line item of the rate base determination separately. The list of accounts shall include the account number and account title.

b. For any amount shown in the gas rate base that includes an allocation of the account balances shown in the response to Item 10 of the March 15, 2000 Order, provide all calculations, workpapers, assumptions, and other supporting documents used to make the required allocations. Allocations shall be shown for each account separately.

c. Does the balance shown on page 1 of 2 for Prepayments include the PSC Assessment? If yes, isolate the portion of the Prepayments total related to the PSC Assessment and explain in detail why the PSC Assessment should be included in the determination of LG&E's gas operations rate base.

d. Refer to page 2 of 2 in Exhibit 3 and Filing Requirement 7-a, Item 40 of the Application. Explain why the \$170,296,004 has been identified on Exhibit 3 as "Operation and Maintenance Expenses for 12 months ended December 31, 1999" while in Item 40 this same amount is identified as "Total Utility Operating Expenses." Does Mr. Williams agree that total operation and maintenance expense and total operating expense are not the same? Explain the response.

45. Refer to the Williams Direct Testimony, Exhibit 4. Using the same "Adjusted net operating income pro-formed for rate increase" shown on line 5, calculate the rate of return on gas capitalization and the rate of return on gas common equity. Include all workpapers, assumptions, and other documentation supporting the calculations.

46. Refer to the response to Item 15 of the Commission's March 15, 2000 Order. For each of the accounts listed below, explain in detail the reason(s) for the change in the account balance between the 12th month of the test year and the 12th month of the prior year.

- a. Account No. 353 – Lines.
- b. Account No. 354 – Compressor Station Equipment.
- c. Account No. 356 – Purification Equipment.
- d. Account No. 376 – Mains.

- e. Account No. 380 – Services.
- f. Account No. 381 – Meters.
- g. Account No. 394.3 – Other Equipment.
- h. Account No. 396.1 – Power Operated Equipment – Hourly Rated.

47. Refer to the response to Item 18 of the Commission's March 15, 2000 Order, page 80 of 81.

a. Explain why the test year capitalized wages were 23.8 percent higher than the capitalized wages in 1998.

b. Explain how the wage capitalization rate is determined, how frequently it is reviewed and revised, and when the last revision to the capitalization rate occurred.

c. If the wage capitalization rate in use for 2000 is different from that used in the test year, explain why the rate was changed and when the change became effective.

48. Refer to the response to Item 24 of the Commission's March 15, 2000 Order, page 2 of 2. Explain the reason(s) for the transfer of \$589,951 from Account No. 392.1 – Transportation Equipment – Cars and Trucks.

49. Refer to the response to Item 26 of the Commission's March 15, 2000 Order, page 1 of 10, lines 1 through 29.

a. For each legal expense shown, provide a further description of the legal services provided.

b. For legal services related to regulatory proceedings, identify the proceeding by docket number, regulatory agency, and the expense for each regulatory proceeding.

c. For legal services shared with LG&E's electric operations, explain how the expense was allocated between electric and gas operations.

50. Refer to the response to Item 26 of the Commission's March 15, 2000 Order.

a. Refer to lines 38 through 41. Provide a further description of the consulting services supplied by 4Sight Corporation Inc.

b. Refer to lines 70 and 71. Provide a further description of the consulting services supplied by Ajilon.

c. Refer to line 97. Explain in detail why LG&E's gas operations were charged for an "Audit BREC." Provide a similar explanation if a corresponding allocation was made to LG&E's electric operations.

d. Refer to lines 153 and 154. Provide a further description of the consulting services supplied by Computer Task Group, Inc.

e. Refer to lines 164 and 165. Provide a further description of the thank you ad and gas consumer campaign supplied by Creative Alliance.

f. Refer to lines 168 through 170. Provide a further description of the consulting services supplied by D. W. Destiny Consulting, Inc.

g. Refer to lines 200 and 201. Provide a further description of the consulting services supplied by Duncan Technologies.

- h. Refer to line 204. Provide a further description of the consulting services supplied by Electronic Data Systems Corporation.
- i. Refer to line 248. Provide a further description of the surveys supplied by ICR.
- j. Refer to line 262. Provide a further description of the consulting services supplied by International Computerware Inc.
- k. Refer to lines 316 through 318. Provide a further description of the consulting services supplied by Majestic Systems Integration Co.
- l. Refer to lines 322 through 324. Provide a further description of the consulting services supplied by Mastech Corporation.
- m. Refer to lines 327 through 332. Provide a further description of the consulting services supplied by Maxim Group.
- n. Refer to line 396. Provide a further description of the consulting services supplied by Pacific Economics Group.
- o. Refer to lines 414 and 415. Explain in detail why LG&E's gas operations were charged for "merger cost to achieve & outplacement service" supplied by Right Associates. Were these expenses associated with the merger of LG&E Energy and KU Energy Corp.? Explain the response.
- p. Refer to lines 470 through 473. Provide a further description of the consulting services supplied by Technology Consulting Inc.
- q. Refer to lines 488 through 504. Provide a further description of the temporary services supplied by Todays Staffing Inc.

r. Refer to lines 505 through 521. Provide a further description of the temporary services supplied by Todays Temporary.

s. Refer to lines 564 and 565. Provide a further description of the consulting services supplied by William M. Mercer, Inc.

51. Throughout the application and responses to the Commission's March 15, 2000 Order, LG&E has responded that many of its balance sheet accounts are maintained on a total company basis, rather than separated between electric and gas operations. Explain in detail why separate balance sheet accounts are not maintained for the electric and gas operations. To the extent this occurs with income statement accounts, provide an explanation as to why separate electric and gas operation income statement accounts are not maintained.

52. Provide a schedule showing all transactions between LG&E's gas operations and LG&E Energy and any affiliate or subsidiary of LG&E Energy. The schedule should separate transactions in which LG&E's gas operations provided items to LG&E Energy and the affiliates from those in which LG&E's gas operations received items from LG&E Energy and the affiliates. The schedule should list separately LG&E Energy, affiliate, or subsidiary and provide:

a. The nature of the transactions (provision of goods, services, merchandise, etc.).

b. The total dollar amount of the test-year transactions. For any individual transaction priced at over \$100,000, include a detailed description of the transaction.

c. An explanation of how the transactions were priced.

53. Refer to page 7 of Robert G. Rosenberg's Direct Testimony that describes his choice of comparison companies to determine the cost of equity of LG&E.

a. Explain how each electric utility in the comparison group of utilities is comparable to LG&E's gas operations.

b. Explain whether or not gas utilities were considered as a comparable group to calculate the required return on equity ("ROE") of LG&E's gas operations.

c. Explain why, since LG&E chose to file for a rate increase for its gas operations only, Mr. Rosenberg choose to use electric utilities to calculate the associated required ROE.

d. Explain the impact of using a comparable group of gas utilities to calculate the required ROE of LG&E's gas operations. In support of this response, provide a comparable group of gas utilities and calculate the required ROE of the gas group. Explain all criteria used in the selection of comparable companies and provide all calculations.

54. Explain the impact of earnings stabilization through a Weather Normalization Adjustment on a gas utility's required ROE.

55. Refer to page 29 of Robert G. Rosenberg's Direct Testimony. Explain whether or not the Ibbotson Associates criteria would consider LG&E's capitalization in the mid or small capitalization range. Explain what, if any, size premium would be added based on LG&E's capitalization.

56. Refer to Schedule 3 of Robert G. Rosenberg's Direct Testimony. Explain why the schedule uses the median, as opposed to the mean, in the calculations. Provide the mean value for each of these DCF calculations.

57. Refer to page 45 of Robert G. Rosenberg's Direct Testimony. Provide workpapers for each of the DCF, CAPM, Risk Premium, and Comparable Earnings analyses.

58. Provide copies of the Value Line sheets for each company listed in Schedule 1.

59. Provide copies of any Ibbotson sheets and S&P analysis that support the analyses.

60. Refer to page 10 of Robert G. Rosenberg's Direct Testimony.

a. Mr. Rosenberg states that many companies in the industry are in flux and are transitioning to a restructured environment. Mr. Rosenberg used electric utilities, rather than gas utilities, to develop his comparison companies. Explain whether the industry changes referred to are changes in the electric industry or the gas industry.

b. Provide examples and copies of specific legislative actions or commission rulings that are changing or restructuring the gas environment.

c. Mr. Rosenberg states that the 5-year growth projections used by analysts are not good proxies for long-term expected growth for utilities. Explain whether or not it is Mr. Rosenberg's opinion that analysts do not update their projections to account for changes occurring in the industry.

d. Explain whether or not Mr. Rosenberg would have access to information that these analysts do not have.

61. Refer to page 11 of Robert G. Rosenberg's Direct Testimony. Mr. Rosenberg provides a quote from Goldman Sachs in its Electric Utility publication of December 1999. Provide a copy of that article.

62. Refer to Rosenberg testimony page 12. Mr. Rosenberg provides a quote from Value Line stating that several M & A deals may result in strong earnings growth over the coming years. Mr. Rosenberg then goes on to state that speculation about future merger activity among utilities would influence price but not the growth projections made by analysts. Explain why this quote does not indicate that analysts do incorporate industry changes into their growth projections.

63. Refer to page 21 of Robert G. Rosenberg's Direct Testimony. Mr. Rosenberg states that the average beta of the comparison companies is .54, per The Value Line Investment Survey. Provide a copy of the respective pages of the Value Line survey that present this information.

64. Refer to page 22 of Robert G. Rosenberg's Direct Testimony. Mr. Rosenberg discusses his decision to use a range of 6.5 - 6.8 percent as the risk free rate in the CAPM calculation. The range is based on the 10-year composite yield of 20 and 30-year Treasury securities and recent long-term Treasury bond futures. Explain why it is appropriate to include riskier Treasury bond futures in developing the risk free rate.

65. Refer to page 23 of Robert G. Rosenberg's Direct Testimony. Mr. Rosenberg states that he used information from Ibbotson Associates Risk Premia Over Time Report: 2000 to calculate the expected market risk premium. Provide a copy of the relevant pages from the Ibbotson report.

66. Refer to page 25 of Robert G. Rosenberg's Direct Testimony. Mr. Rosenberg states that the Ibbotson Yearbook supports the arithmetic mean as the correct measure to use in estimating the cost of equity capital.

a. Provide a copy of the pages in the Yearbook which discuss this issue.

b. Provide a calculation showing the expected market risk premium from the Ibbotson data if the geometric mean were used instead of the arithmetic mean. Provide any workpapers.

67. Refer to pages 26 – 28 of Robert G. Rosenberg's Direct Testimony.

a. Explain why the Ibbotson and S&P 500 market risk premia are appropriate in developing the expected market risk premium in the CAPM.

b. Provide the calculation for the 1.1 percent dividend yield level for the S&P 500.

68. Refer to page 33 of Robert G. Rosenberg's Direct Testimony. Mr. Rosenberg added a long-term risk premium to a six month utility bond yield to obtain the cost of equity under the Risk Premium method.

a. Explain why it is appropriate to combine short- and long-term figures in this calculation.

b. Isn't the historical volatility of the risk premium between equity and debt relevant to the short-term volatility in today's utility market? Explain, and demonstrate why, this is not a problem in the analysis.

69. Refer to page 45 of Robert G. Rosenberg's Direct Testimony.

a. The summary of results shows a range labeled “Upper half of Range” which includes a maximum percentage that is higher than the maximum in the “Full Range of Results.” Explain what is included in each range and why the “Upper Half of the Range” produces a higher range.

b. The ranges produced by the DCF, CAPM, and Risk Premium methods collectively produce a range between 10.5 and 12.4. The fourth method, the Comparable Earnings method, produces a range of 14.0-15.5 which is far higher than any of the other three methods. Mr. Rosenberg recommends a range of 11.5-12.5 percent, stating that this range is toward the center of results shown in the four methods. Explain whether or not the recommended range would be in the “center of results” without the Comparable Earnings method.

70. Refer to Appendix B of Robert G. Rosenberg’s Direct Testimony that discusses why the arithmetic rather than the geometric mean should be used in estimating expected future returns.

a. Provide copies of at least two documents that support the statement that the arithmetic mean should be used when utilizing the Ibbotson historic rate of return as a proxy for the expected future return.

b. Page 1 of Appendix B contains a statement that the principles discussed hold even in the more complex situation of the real world. Provide any documentation or copies of papers that support this contention.

c. Appendix B provides an example using two equally likely returns of 5 percent and 15 percent. Using this example, assume that an investor who invests \$1,000 realizes a 15 percent return on his investment in each of the first two years he

invests, with a 5 percent return in years three and four. The arithmetic average return is 10 percent for each year, and using that methodology the investor would have expected his investment to grow to \$1,464.10. In actuality, using the assumptions provided of the \$1,000 growing at the given percentage rates over the four years, his investment grew to \$1,458.06. When the geometric mean of approximately 9.89 percent is calculated and applied to the original \$1,000 investment, the investor would see that this percentage results in an ending value of approximately \$1,458.25, just a few cents different than the actual result. Explain why the investor should base his future expectations on the arithmetic mean of 10 percent as opposed to the geometric mean of 9.89 percent.

71. When available provide the following financial statements for the calendar year 1999:

- a. The Annual Report to Shareholders.
- b. Federal Energy Regulatory Commission Form 2 (Gas).
- c. Securities and Exchange Commission Form 10-K.

72. Refer to Filing Requirement 7-a, Item 40 of the Application.

a. Provide the impact of all of LG&E's proposed adjustments to an income statement with the same account detail as the Gas Operation and Maintenance Expenses of FERC Form 2. Exclude all the accounts that do not have balances.

b. The actual income tax expense for the gas operations is \$890,568. Provide a detailed analysis identifying each component separately.

c. Calculate LG&E's pro forma income tax expense based upon the adjusted gas operations on this schedule and the proposed interest synchronization.

Include copies of all workpapers, calculations, and assumptions used by LG&E in its calculation.

73. a. In Case No. 98-426 the Commission offered, and LG&E accepted, an Earnings Sharing Mechanism (“ESM”) for its electric operations. Explain why LG&E has not proposed a similar ESM in this proceeding for its gas operations.

b. If it proposed an ESM, how would LG&E incorporate its PBR in the overall mechanism?

74. Refer to the response to Item 35 of the Commission’s March 15, 2000, Order.

a. The summary states that the Common Utility Study is conducted each November. Provide a copy of the 1999 Common Utility Study when it becomes available.

b. Provide a comparison of the results of the 1998 and 1999 Common Utility Studies and include an explanation for each variance.

c. Determine the impact the 1999 Common Utility Study would have upon LG&E’s pro forma financials, (i.e., Income Statement, Rate Base, Capital Structure, and Cost-of-Service Study). Provide copies of all workpapers, calculations, and assumptions used in LG&E’s determination.

d. In the 1998 Common Utility Study there is concern regarding the impact the closing of the Central Service Center and the completion of the first floor Data Center would have upon the 1999 rates. Explain whether these two events had the impact upon the 1999 rates that LG&E anticipated.

75. a. In response to Item 37 of the Commission's March 15, 2000, Order, LG&E stated that 250 positions would be eliminated company-wide and that some of the eliminations would be at LG&E. According to LG&E most of the staffing reductions would occur in April 2000 and the associated expense would be recorded in March 2000. Determine the impact the staff reduction will have upon LG&E's proposed labor and labor-related adjustments. Include all workpapers, calculations, and assumptions used by LG&E in this determination.

b. Provide the cost associated with its staffing reductions and the amount LG&E allocated to the gas division. Include all workpapers, calculations, and assumptions used by LG&E to arrive at the amount allocated to the gas division.

c. Explain why LG&E did not propose an adjustment to its test-period operations to reflect the staffing reductions.

76. On page 8 of his Direct Testimony, Scott Williams states that the annualized base labor was calculated by applying the actual base wage rate at December 31, 1999 to each employee on that date. Provide copies of the workpapers, calculations, and assumptions LG&E used to calculate the base labor at December 31, 1999 for each work group.

77. In its response to Item 19 of the Commission's March 15, 2000 Order, LG&E provided the actual straight time and overtime hours worked in the test-period. Provide an analysis by work group of the straight time and overtime hours for the period of 1995 through 1999, as shown in Format 77.

78. On Williams Exhibit 1, Schedule G, page 2, LG&E shows that the actual amount of overtime recorded for the 12-month period ended December 31, 1999 was

\$12,075,670. Provide a comparison by work group of the overtime recorded for the period of 1995 through 1999, as shown in Format 78.

79. Refer to Williams Exhibit 1, Schedule G, page 2, Team Incentive Awards ("TIA") of \$4,111,675.

a. Provide a copy of LG&E's TIA plan.

b. Identify the employees who are eligible to participate in LG&E's TIA.

c. Provide an analysis by work group of the TIA reported for the period 1995 through 1999, as shown in Format 79c.

80. a. On page 9 of his Direct Testimony, Mr. Williams explained that the payroll taxes were calculated by deriving a percentage of total payroll taxes to total payroll and applying the percentage to the total labor increase. Explain how LG&E's proposed payroll tax increase reflects the FICA wage base limitation.

b. Does LG&E's proposed payroll tax adjustment reflect the FICA wage base limit of \$76,200, which became effective January 1, 2000?

c. Provide the analysis of LG&E's test-period wages and salaries as shown in Format 80c.

81. Refer to the explanation of Schedule H on pages 9 and 12 of J. Scott Williams' Direct Testimony.

a. During the test-period LG&E calculated and recorded the storage losses for its Doe Run and Magnolia Storage fields. Provide an analysis showing the amount of losses recorded by LG&E's Doe Run and Magnolia Storage fields for the period 1995 through 1999, as shown in Format 81a.

b. Provide copies of any storage loss analysis LG&E performed at either Doe Run or Magnolia Storage fields.

c. Provide LG&E's calculation of its storage losses at the Doe Run and Magnolia Storage fields.

d. Provide a copy of the inventory analysis LG&E performed in the test-period.

e. What made LG&E believe that it has gas losses at the Muldraugh storage field?

f. Provide a copy of the analysis performed by the consultant at the Muldraugh storage field.

g. Explain why LG&E believes that the gas losses at the Muldraugh storage field will be an on going expense.

82. Refer to Williams Exhibit 1, Schedule H, Adjustment to Gas Storage Losses. Provide detailed documentation to support the average gas storage price of \$2.937.

83. Refer to Williams Exhibit 1, Schedule I, To Adjust for Gas Year 2000 Expenses.

a. Provide an analysis of the costs that are included in the \$391,066 operating expenses charges in the test-period, as shown in Format 83a.

b. Provide justification for the use of a 2-year amortization period.

c. Provide an analysis showing the amount of costs incurred by LG&E for the year 2000 computer problem for the period 1995 through 1999, as shown in Format 83c.

84. Refer to the explanation of Schedule J on pages 10 and 11 of J. Scott Williams' Direct Testimony.

- a. Provide a copy of LG&E's most recent actuarial report.
- b. When will the next actuarial study be performed?
- c. Provide a listing of the changes in the actuarial assumptions referenced on page 10. Include an estimate the impact each change had upon LG&E's test-period pension expense.
- d. Provide an analysis of LG&E's pension assets investments comparing the performance to the 5 previous calendar years.
- e. Explain whether any of the decrease in LG&E's pension expense in the test-period can be attributed to the employee reduction that resulted with its merger with Kentucky Utilities Energy Corporation.
- f. Determine the expected impact the employee reduction that occurred in the year 2000 will have on LG&E's pension expense. Include all workpapers, calculations, and assumptions used by LG&E in its determination.
- g. Mr. Williams states, "To normalize the pension expense the Company adopted the methodology used before by the Company, and accepted by the Commission." Identify the proceeding in which LG&E used and the Commission accepted the normalization methodology of a 5-year average of pension expenses.

85. Refer to Williams Exhibit 1, Schedule J, Adjustment to Normalize Gas Pension Expense. Provide an analysis of the reported pension expenses for the period 1995 through 1999, as shown in Format 85.

86. Refer to the response to Item 25a of the Commission's March 15, 2000 Order.

a. Provide a brief description of the items included in \$26,667 reported in Column (d), Conservation Advertising, Line 5, Direct Mail.

b. Provide a brief description of the items included in \$5,410 reported in Column (d), Conservation Advertising, Line 6, Other (Community events, etc.).

87. Refer to the response to Item 25b of the Commission's March 15, 2000 Order. Provide an analysis of the costs that are recorded in Account 930, Miscellaneous General Expenses in the amount of \$364,074, as shown in Format 87.

88. Refer to the explanation of Schedule L on page 11 of J. Scott Williams' Direct Testimony.

a. Provide an analysis of the clean-up costs LG&E incurred at its manufactured gas plant of \$1,684.835 that have been recorded in other deferred debits, as shown in Format 88a.

b. Provide justification for the use of a 3-year amortization period.

c. Mr. Williams states that the costs LG&E incurred were recorded as deferred debits on its balance sheet. Were any of the clean-up costs expensed rather than deferred? If yes, identify the amount, the date expensed, a brief description, and the reason this cost was expensed rather than deferred.

89. Refer to the Response to Item 48 of the Commission's March 15, 2000 Order.

a. Provide copies of the contracts LG&E has with its outside consultants that are working on this rate case proceeding.

b. Provide copies of invoices LG&E has received to date in connection with the cost of this rate case proceeding.

c. Provide justification for the use of a 3-year amortization period.

90. Refer to Williams Exhibit 1, Schedule P, Adjustment to Remove the Gas Portion of LG&E Energy Corporation Expenses. Provide an analysis of the LG&E Corporation Costs, as shown in Format 90.

91. Refer to the explanations of Schedule R and Schedule S on page 13 of J. Scott Williams' Direct Testimony.

a. In Case No. 90-158² the Commission applied the cost rates applicable to the long-term and short-term debt components to the capital structure to compute the interest adjustment. Provide a detailed explanation as to why the interest synchronization methodology proposed by LG&E is preferable to the Commission's method.

b. Determine the interest synchronization adjustment by applying the long-term and short-term debt components to LG&E's proposed capital structure. Include all workpapers, calculations, and assumptions used by LG&E in its determination.

c. Determine the interest synchronization adjustment by applying the weighted long-term and short-term interest rates to LG&E's proposed rate base. Include all workpapers, calculations, and assumptions used by LG&E in its determination.

² Case No. 90-158, Adjustment of Gas and Electric Rates of Louisville Gas and Electric Company, final Order dated December 21, 1990.

d. Provide a comparison of LG&E's proposed interest synchronization with the results of (b) and (c) above.

92. Refer to Williams Exhibit 1, Schedule T, Calculation of Revenue Gross Up Factor:

a. In the determination of its gross up factor, LG&E included an allowance for bad debt and the PSC assessment. Explain why LG&E did not adjust its test-period operations to reflect the effect its revenue adjustments would have upon these two expense components.

b. Calculate the effect the proposed revenue adjustments would have upon LG&E's bad debt expense and PSC assessment. Include copies of all workpapers, calculations, and assumptions used by LG&E in its calculation.

c. If the PSC assessment rate is modified in 2000, does LG&E agree that the new assessment rate should be used in this proceeding? If no, provide a detailed explanation.

93. Refer to the Response to Item 51 of the Commission's March 15, 2000, Order.

a. Provide a description of LG&E's residential energy audit program and explain why it is ongoing but not actively promoted.

b. Explain if the expenses are included in LG&E's pro forma operations.

Done at Frankfort, Kentucky, this 28th day of April, 2000.

By the Commission

ATTEST:


Executive Director