

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF LOUISVILLE GAS AND)	
ELECTRIC COMPANY FOR APPROVAL OF AN)	
AMENDED COMPLIANCE PLAN FOR PURPOSES)	CASE NO.
OF RECOVERING THE COSTS OF NEW AND)	2000-386
ADDITIONAL POLLUTION CONTROL FACILITIES)	
AND TO AMEND ITS ENVIRONMENTAL COST)	
RECOVERY SURCHARGE TARIFF)	

O R D E R

On October 20, 2000, Louisville Gas and Electric Company (“LG&E”) filed an application, pursuant to KRS 278.183, seeking Commission approval of an amended environmental compliance plan consisting of new and additional pollution control facilities and to amend its Environmental Cost Recovery (“ECR”) Surcharge tariff. LG&E will need these facilities and will incur the related compliance costs in order to comply with the nitrogen oxide (“NOx”) and other emission limits mandated by the Environmental Protection Agency (“EPA”) and the Clean Air Act.¹ LG&E proposed that its amended ECR Surcharge tariff become effective for bills rendered on and after May 1, 2001.

The following parties requested and were granted full intervention: the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention (“AG”); Kentucky Industrial Utility Customers, Inc. (“KIUC”); and Robert Madison. A consolidated hearing was held on March 8, 2001 for this case and Case

¹ As amended, 42 U.S.C.A. § 7401 et seq.

No. 2000-439,² the companion case for Kentucky Utilities Company (“KU”). All information requested at the public hearing has been filed, and the parties have submitted briefs.

BACKGROUND

LG&E is a privately owned electric and gas utility that generates, transmits, distributes, and sells electricity to approximately 370,000 consumers in Jefferson County and in portions of Bullitt, Hardin, Henry, Meade, Oldham, Shelby, Spencer, and Trimble counties.³ LG&E is a wholly owned subsidiary of LG&E Energy Corporation, a non-utility holding company.⁴

KRS 278.183 provides that a utility shall be entitled to the current recovery of its costs of complying with the Clean Air Act as amended and those federal, state, or local environmental requirements that apply to coal combustion wastes and by-products from facilities utilized for the production of energy from coal. Pursuant to KRS 278.183(2), a utility seeking to recover its environmental compliance costs through an environmental surcharge must first submit to the Commission a plan that addresses compliance with the applicable environmental requirements. The plan must also include the utility’s testimony concerning a reasonable return on compliance-related capital expenditures

² Case No. 2000-439, The Application of Kentucky Utilities Company for Approval of an Amended Compliance Plan for Purposes of Recovering the Costs of New and Additional Pollution Control Facilities and to Amend Its Environmental Surcharge Tariff.

³ LG&E distributes and sells natural gas to approximately 293,000 consumers in Jefferson County and in portions of Barren, Bullitt, Green, Hardin, Hart, Henry, Larue, Marion, Meade, Metcalfe, Nelson, Oldham, Shelby, Trimble, and Washington counties.

⁴ LG&E Energy Corporation is a wholly owned subsidiary of Powergen plc, an international holding company based in the United Kingdom.

and a tariff addition containing the terms and conditions of the proposed surcharge applied to individual rate classes. Within 6 months of submission, the Commission must conduct a hearing to:

- (a) Consider and approve the compliance plan and rate surcharge if the plan and rate surcharge are found reasonable and cost-effective for compliance with the applicable environmental requirements;
- (b) Establish a reasonable return on compliance-related capital expenditures; and
- (c) Approve the application of the surcharge.

LG&E currently has a compliance plan and environmental surcharge that were approved by the Commission in 1995 in Case No. 94-332.⁵ This existing compliance plan (“1995 Plan”) is comprised of five capital projects at various generating stations involving sulfur dioxide removal systems and associated air quality equipment, facilities to control emissions of reactive particles, continuous emission monitoring systems, an electrostatic precipitator, and low NOx burners with associated boiler control systems. The current ECR Surcharge tariff provides for a formula to calculate the retail monthly environmental surcharge gross revenue requirement (“ES revenue requirement”) and applicable monthly surcharge factor. The rate of return authorized for environmental capital expenditures is 5.60 percent, which was based on the actual cost of LG&E’s October 1993 pollution control bond issue.⁶

⁵ Case No. 94-332, The Application of Louisville Gas and Electric Company for Approval of Compliance Plan and to Assess A Surcharge Pursuant to KRS 278.183 to Recover Costs of Compliance with Environmental Requirements of Coal Combustion Wastes and By-Products, final Order dated April 6, 1995.

⁶ Id. at 24.

AMENDED COMPLIANCE PLAN

LG&E is adding new pollution control facilities to the 1995 Plan to reflect its plans for complying with the EPA's mandate to reduce NOx emissions to 0.15 lbs. NOx/mmBtu by May 1, 2003. The amended compliance plan ("2001 Plan") proposed by LG&E calls for one additional capital project that includes the following facilities:⁷

- 1) The addition of Selective Catalytic Reduction ("SCR") NOx Reduction Technology facilities at Trimble County 1 and Mill Creek 3 and 4.
- 2) The addition of Neural Network Technology, Overfire Air Systems and Burner modifications at Cane Run 4, 5, and 6 and Mill Creek 1, 2, 3, and 4.

The 2001 Plan, which will supplement the 1995 Plan, has a total estimated capital cost of \$157.8 million.⁸ LG&E was granted a Certificate of Public Convenience and Necessity to construct the SCR NOx control technologies in Case No. 2000-112.⁹

In support of the 2001 Plan, LG&E presented testimony and a copy of its February 2000 NOx Compliance Study. This evidence shows that the facilities in the 2001 Plan are related to compliance with the Clean Air Act as amended and other governmental regulations pertaining to coal combustion wastes and by-products

⁷ Bellar Direct Testimony, LEB Exhibit 1. Although the construction of an advanced low NOx burner system at Trimble County 1 was originally included in LG&E's 2001 Plan, it was subsequently deleted. See LG&E letter filed March 6, 2001 and Transcript of Evidence ("T.E."), March 8, 2001, at 69-72.

⁸ The original estimated cost of the 2001 Plan was \$163.4 million. The Trimble County 1 advanced low NOx burner system was estimated to cost \$5.6 million. The elimination of that construction lowered the total estimated cost to \$157.8 million. See Bellar Direct Testimony, LEB Exhibit 1, page 3 of 3.

⁹ Case No. 2000-112, Application of Kentucky Utilities Company and Louisville Gas and Electric Company for a Certificate of Public Convenience and Necessity to Construct Selective Catalytic Reduction (SCR) NOx Control Technologies, final Order dated June 22, 2000.

resulting from the production of electricity from coal. Furthermore, the NOx Compliance Study shows that LG&E sufficiently analyzed alternative compliance methods and selected methods that are cost effective.

The AG and KIUC have not challenged the reasonableness or the cost effectiveness of the 2001 Plan. Mr. Madison argues that the Commission should indefinitely delay the implementation date of the 2001 Plan due to pending litigation over the EPA's NOx emission limits. This litigation, he contends, brings into question LG&E's need for the proposed facilities. He also notes that, under LG&E's construction schedule, the facilities will be completed four months before the May 1, 2003 compliance date and this, he argues, justifies at least a four-month delay in implementation of the 2001 Plan.¹⁰

The Commission is not persuaded by Mr. Madison's arguments. The EPA compliance dates for NOx emission limits were not suspended pending the various court challenges; therefore, LG&E must still comply with those limits by the established timetable. If LG&E delays implementation, it risks significant dollar penalties or the possible loss of necessary EPA operating permits.¹¹ Taking the "wait and see" approach advocated by Mr. Madison does not constitute a reasonable or prudent option under the circumstances of this case.

Based on a review of LG&E's 2001 Plan and our June 22, 2000 Order in Case No. 2000-112, the Commission finds that the 2001 Plan is reasonable and cost-effective, and should be approved.

¹⁰ Madison Brief at 2.

¹¹ T.E., March 8, 2001, at 67-68.

LG&E has indicated that it will continue to monitor the evolution of NOx control technologies, review the status of regulatory rulings and pending litigation, and update and refine cost estimates.¹² In the event it is determined that one or more of the facilities approved in the 2001 Plan is no longer required for environmental compliance, LG&E will be expected to promptly inform the Commission in writing of any change in compliance strategy. The Commission also reminds LG&E that only the capital expenditures and operating costs associated with the 1995 Plan and 2001 Plan can be recovered through the surcharge mechanism.

SURCHARGE MECHANISM AND CALCULATION

LG&E has proposed to incorporate the capital expenditures and operating expenses associated with the 2001 Plan into the existing surcharge mechanism used for the 1995 Plan. LG&E has generally discussed its amended surcharge as one mechanism while recognizing that, until the surcharge is incorporated into base rates, there will be different rates of return applied to the 1995 and 2001 Plans. Because of these differences, the Commission believes that the surcharge mechanisms for the 1995 and 2001 Plans should be examined separately.

1995 Plan

LG&E proposed no changes in the surcharge mechanism or calculation of the ES revenue requirement and monthly surcharge factor for the 1995 Plan. LG&E did disclose that it had recently completed a new depreciation study and that it planned to implement new depreciation rates on January 1, 2001 based on that study. Although LG&E intended to reflect the new depreciation rates in the determination of the 1995

¹² Joint Post-Hearing Brief of LG&E and KU at 7.

Plan monthly surcharge factor beginning with the expense month of January 2001, the new depreciation rates were not included in that monthly surcharge report.¹³ LG&E contends that implementing new depreciation rates is not an issue in this environmental surcharge case.¹⁴ LG&E argues that it is consistent with past Commission practice to implement the new depreciation rates now, while their impact on the costs recovered through the surcharge is examined subsequently during the 6-month surcharge reviews.¹⁵

KIUC opposes the use of the new depreciation rates to determine the environmental surcharge factor for both the 1995 and 2001 Plans. KIUC contends that the new rates should not be used until the new depreciation study is filed with the Commission as part of a formal investigation and review, and the Commission has determined that any changes in depreciation rates are due to appropriate changes in the useful life of the environmental surcharge investments, rather than due to changes in depreciation methodology or assumptions.¹⁶

Although LG&E filed copies of its new depreciation study with the Commission on February 20, 2001, it was not filed as part of the record in this case, nor was the study

¹³ Response to the Commission Staff's 3rd Data Request dated February 27, 2001, Item 4. In correspondence from LG&E to the Commission's Executive Director dated March 27, 2001, LG&E informed the Commission that the environmental surcharge filing made on March 22, 2001 did include the effect of using the new depreciation rates when calculating the February 2001 expense month amounts.

¹⁴ Joint Post-Hearing Brief of LG&E and KU at 39.

¹⁵ Response to the Commission Staff's 3rd Data Request dated February 27, 2001, Item 4(b).

¹⁶ Kollen Direct Testimony at 28.

accompanied by an application seeking formal approval of the new rates. LG&E has acknowledged that while the Commission has not required formal approval before new depreciation rates are used for accounting purposes, approval is needed before new depreciation rates can be used for rate-making purposes.¹⁷

The determination of depreciation rates requires a complex, technical analysis of physical plant and is performed infrequently. A reasonable level of depreciation expense is an appropriate cost to be recovered from ratepayers, either through base rates or the environmental surcharge. As such, the Commission does not agree with the distinction LG&E seeks to make between the rate-making approach used to determine base rates and the determination of the environmental surcharge under KRS 278.183. Whether costs are to be recovered through base rates or through the environmental surcharge, both approaches focus on the reasonable level of costs to provide service. Until new depreciation rates have been reviewed and found reasonable for rate-making purposes, the depreciation expense resulting from the use of the new depreciation rates cannot be considered a reasonable cost. The only reasonable cost for depreciation expense is the cost calculated by using the depreciation rates that have already been accepted for rate-making purposes.

The Commission agrees with KIUC and finds that LG&E should not include the impact of the new depreciation rates when calculating the depreciation expense included in either the 1995 or 2001 Plan monthly surcharge factor. If LG&E has already reflected the new depreciation rates in its monthly surcharge factor it should

¹⁷ Response to the Commission Staff's 3rd Data Request dated February 27, 2001, Item 4(e).

immediately cease using the new rates and reinstate the previous depreciation rates. These previous depreciation rates should also be used to calculate the depreciation expense associated with the 2001 Plan.¹⁸ LG&E may utilize the new depreciation rates for rate-making and environmental surcharge purposes only after it has filed an application for, and received, Commission approval. Any depreciation expense based on the new depreciation rates that has been included in the 1995 Plan monthly surcharge factor should be adjusted consistent with this Order as part of the appropriate 6-month surcharge review.

2001 Plan

LG&E proposed that the environmental surcharge mechanism for the 2001 Plan be similar to that used for the 1995 Plan. Under this approach, an ES revenue requirement is divided by the revenue for the current expense month,¹⁹ resulting in a monthly surcharge factor. The ES revenue requirement is determined for the current expense month, and is comprised of a return on the 2001 Plan Environmental

¹⁸ The Commission notes that since depreciation expense on the 2001 Plan facilities will not commence until the facilities are in service, it is likely that the Commission will have ruled on LG&E's new depreciation rates. Under those circumstances, the depreciation rates approved by the Commission in that case should be applied to the 2001 Plan facilities.

¹⁹ The current expense month is defined as the second month preceding the month in which the environmental surcharge is billed.

Compliance Rate Base (“Rate Base”) plus specified environmental compliance operating expenses.²⁰

Rate Base. The rate base used in the environmental surcharge mechanism may include the following components: eligible pollution control (“PC”) plant in service, accumulated depreciation associated with the PC plant in service, eligible PC construction work in progress (“CWIP”), inventories, supplies, cash working capital allowance,²¹ deferred income taxes, and deferred investment tax credits. The rate base is also adjusted for eligible PC plant in service, accumulated depreciation, and deferred taxes relating to replacements and retirements of PC plant in service that are already included in existing rates.

LG&E’s 1995 Plan rate base does not include a cash working capital allowance because LG&E elected not to seek inclusion in its surcharge of operation and maintenance (“O&M”) expenses associated with the 1995 Plan. In the 2001 Plan, LG&E has proposed to include a cash working capital allowance component reflecting O&M expenses associated with NOx control projects, specifically the expenses recorded in Subaccount Nos. 506105, Operation of SCR Facilities, and 512101, Maintenance of SCR Facilities.

²⁰ Willhite Direct Testimony, RLW Exhibit 2. The proposed ECR Surcharge tariff includes an offset to the ES revenue requirement reflecting the proceeds from the sale of by-products and emission allowance sales. However, LG&E has not identified any salable by-products associated with NOx emission controls, and a NOx emission allowance market has not been established. Consequently, these items are not included in the surcharge mechanism for the 2001 Plan.

²¹ The cash working capital allowance is determined in a manner similar to that used when determining the allowance for base rate purposes. The eligible O&M expenses, exclusive of expenses already included in base rates, are multiplied by 1/8th to determine the cash working capital allowance.

KIUC opposes the inclusion of a cash working capital allowance in the 2001 Plan rate base. KIUC argues that LG&E has not provided any evidence in support of an actual cash working capital requirement. KIUC contends that LG&E's actual cash flow has been accelerated due to the factoring of its accounts receivable and that to allow a cash working capital allowance would treat LG&E as if it had never engaged in its accounts receivable financing program.²²

LG&E disagrees with KIUC, stating that the inclusion of a cash working capital allowance based on the 1/8th formula approach is consistent with past decisions of the Commission. LG&E contends that the concept of a working capital allowance goes beyond just cash working capital, but includes plant materials, supplies, and prepayments.²³ LG&E notes that KIUC has presented no evidence to support its contention that the 1/8th formula is not appropriate, only stating its belief that LG&E has a negative working capital requirement.²⁴

The Commission is not persuaded by KIUC's argument concerning the cash working capital allowance. KIUC has acknowledged that the level and timing of all cash receipts and disbursements are normally considered in a proper determination of cash working capital, an analysis commonly referred to as a "lead/lag study." However, KIUC relies solely upon the existence of the accounts receivable financing to support its

²² Kollen Direct Testimony at 25-26.

²³ Willhite Rebuttal Testimony at 4-5.

²⁴ Joint Post-Hearing Brief of LG&E and KU at 41.

contention that LG&E's actual cash working capital requirement is less than zero.²⁵ Such an argument ignores the impacts of other variables that would be considered in a lead/lag study. Absent a lead/lag study or other analysis demonstrating that LG&E does not have a cash working capital requirement, the Commission finds that it is appropriate to utilize the 1/8th formula approach in the 2001 Plan rate base determination.

The Commission finds that the 2001 Plan rate base should be comprised of eligible PC plant in service, accumulated depreciation associated with the PC plant in service, eligible PC CWIP, cash working capital allowance, deferred income taxes, and deferred investment tax credits. As is done for the 1995 Plan rate base, the 2001 Plan rate base should be adjusted for eligible PC plant in service, accumulated depreciation, and deferred taxes to reflect the retirement or replacement of PC plant in service that is already included in existing rates. Inventories and supplies have been excluded from this rate base calculation. LG&E did not identify any inventories or supplies that would be needed or maintained for the new NOx facilities.

Operating Expenses. LG&E proposed that the monthly environmental compliance operating expenses for the 2001 Plan should include: Subaccount Nos. 506105 and 512101, depreciation expense, property taxes, and insurance expense. Subaccount Nos. 506105 and 512101 represent new expenses and would not require any offset for expenses already included in existing base rates. Depreciation expense would reflect the rates contained in the new depreciation study. The property taxes and

²⁵ Response to the Commission Staff's Data Request to KIUC dated February 2, 2001, Items 11(a) and 11(b).

insurance expense are functions of the value of the PC plant in service and the monthly expense amounts would reflect that calculation.

The Commission finds that LG&E's proposal to utilize two new subaccounts to track and record the operation and maintenance expenses associated with the 2001 Plan is reasonable and should be approved. As discussed previously in this Order, these subaccounts will be used in the $1/8^{\text{th}}$ formula to determine the cash working capital allowance included in the 2001 Plan rate base. When determining this cash working capital allowance, the calculation should reflect the most recent 12-month totals for these subaccounts as of the current expense month.²⁶

Concerning the depreciation expense, as discussed previously in this Order, the Commission has found that LG&E should not use the new depreciation study rates to calculate the depreciation expense included in the ES revenue requirement until the new rates are approved for rate-making purposes.

The Commission finds LG&E's proposal concerning the recovery of property taxes and insurance expense associated with the 2001 Plan to be reasonable and it should be approved. To the extent that retirements and replacements of PC plant in service already included in base rates impact the determination of these expenses, LG&E should include the necessary adjustment to the expense reported for the current expense month.

The Commission anticipates that LG&E will not incur expenses recorded in Subaccount Nos. 506105 and 512101 or depreciation expense until the 2001 Plan

²⁶ Until LG&E has accumulated 12 months' worth of expenses in these subaccounts, it should use the cumulative balance of these expenses in the calculation of the cash working capital allowance.

facilities have gone into service. If a monthly surcharge factor includes these expenses prior to the 2001 Plan facilities going into service, LG&E should submit as part of the monthly surcharge filing a written explanation documenting why the expense has been incurred. The inclusion of that expense would be subject to review during the appropriate 6-month surcharge review.

Transmission Revenues

The ES revenue requirement is allocated between wholesale and retail customers of LG&E on the basis of revenues. KIUC argues that all transmission service revenues should be included in the wholesale and other jurisdictional revenues so LG&E will not be able to minimize the allocation of the ES revenue requirement. More specifically, KIUC recommends that the Commission require LG&E to include transmission service revenues booked to Account No. 456, Other Electric Revenues, in the wholesale and other jurisdictional revenues as a matter of consistent revenue recognition for allocation purposes.²⁷

LG&E disagrees with KIUC, noting that the Commission in the October 17, 2000 Order in Case No. 2000-105²⁸ found that other revenues from sources not associated with the generation of electricity or resulting in environmental costs to LG&E should be excluded from total company revenues. LG&E argues that KIUC has presented no reasons for the Commission to reverse its decision in Case No. 2000-105. However,

²⁷ Kollen Direct Testimony at 29-30.

²⁸ Case No. 2000-105, An Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Louisville Gas and Electric Company for the Six-Month Billing Periods Ending April 30, 1998, October 31, 1998, and October 31, 1999, and for the Two-Year Billing Period Ending April 30, 1999.

LG&E requests that the Commission clarify that the decision in Case No. 2000-105 should be extended to remove revenues paid by LG&E pursuant to the Open Access Transmission Tariff (“OATT”) for use of its own transmission facilities when making off-system sales. LG&E argues that these revenues are not associated with its generating units and do not have associated environmental costs.²⁹

The Commission finds that KIUC has not presented sufficient reasons in this proceeding to justify a change in the findings set forth in the October 17, 2000 Order in Case No. 2000-105. The Commission also finds that LG&E’s request to extend the exclusion to the revenues it pays pursuant to the OATT is consistent with the decision in Case No. 2000-105 and should be approved.

The Commission notes that the decision in Case No. 2000-105 to exclude certain other electric revenues from the total company revenues used to determine allocations has only been in effect for approximately 6 months, while LG&E’s request to extend this exclusion to the OATT revenues was only made 2 months ago.³⁰ Due to these circumstances, the Commission will be willing to reconsider the exclusion of these revenues during LG&E’s next surcharge review case if KIUC wishes to renew its objection at that time. In addition, the current levels of these transmission revenues do not appear to have a significant impact on the jurisdictional allocation of the ES revenue requirement. The Commission will continue to monitor these transmission revenues in future 6-month surcharge reviews. In the event the exclusion of LG&E’s transmission

²⁹ Willhite Rebuttal Testimony at 7-8.

³⁰ LG&E’s Rebuttal Testimony was filed on February 22, 2001.

revenues in determining the jurisdictional allocation of the ES revenue requirement becomes significant, the Commission may on its own initiative revisit this exclusion.

RATE OF RETURN

LG&E proposed that the rate of return applied to the 1995 Plan rate base continue to be the 5.60 percent rate authorized in Case No. 94-332, until there is a “roll-in”³¹ of the environmental surcharge into existing base rates. For the 2001 Plan rate base, LG&E proposed that it be allowed to earn the overall rate of return³² upon the approval of the 2001 Plan by the Commission. After the roll-in, LG&E proposed that both the 1995 Plan and 2001 Plan rate bases earn the overall rate of return.³³

In its November 16, 2000 Order, the Commission determined that issues relating to the future roll-in of the existing surcharge into base rates were beyond the scope of this proceeding and that such issues would be addressed during the 2-year reviews of LG&E’s environmental surcharge.³⁴ Based on this decision, the Commission finds that LG&E’s proposal concerning the rate of return on the 1995 Plan rate base after roll-in

³¹ Pursuant to KRS 278.183(3), during the 2-year surcharge reviews the Commission shall, to the extent appropriate, incorporate surcharge amounts found just and reasonable into the existing base rates of the utility. This incorporation into base rates is referred to as a “roll-in.”

³² Overall rate of return as used in LG&E’s application refers to the weighted average cost of capital for its electric operations. The overall rate of return includes short-term and long-term debt, preferred stock, and common equity. The preferred stock and common equity components are “grossed up” to recognize the effects of income taxes on the overall rate of return.

³³ See Hewett Direct Testimony at 4; Willhite Direct Testimony at 3-4; Response to the Commission Staff’s 1st Data Request dated November 21, 2000, Item 9; and Response to the Commission Staff’s 2nd Data Request dated December 21, 2000, Item 5.

³⁴ See November 16, 2000 Order at 3.

should be deferred to LG&E's next 2-year review. If LG&E wishes to propose changing the rate of return on the 1995 rate base from the pollution control bond rate to an overall rate of return during that review, it should submit prepared testimony at that time discussing how this can be accomplished with the results being reasonable for both LG&E and its ratepayers. The rates of return to be applied to the rate bases effective on the date of this Order are addressed separately.

1995 Plan

As noted previously, LG&E's rate of return on its 1995 Plan rate base was set in 1995 and reflects the actual cost of its October 1993 pollution control bond issue. LG&E proposes that this rate of return continue to be applied to the 1995 Plan rate base when calculating the ES revenue requirements.

KIUC argues that the rate of return should be updated to reflect the actual costs of a pollution control debt issue refinanced in August 2000. This would lower the rate of return to 4.40 percent.³⁵ KIUC has expressed the belief that the rate of return for the 1995 Plan rate base should be adjusted monthly. However, as a practical matter, KIUC notes that changes in the weighted average cost of pollution control debt are infrequent, and the August 2000 refinancing was the only change that has occurred since the implementation of LG&E's surcharge.³⁶ Mr. Madison agrees with KIUC and argues that the 4.40 percent rate of return should be applied to the 1995 Plan rate base.³⁷

³⁵ Kollen Direct Testimony at 9 and 18.

³⁶ Response to the Commission Staff's 1st Data Request to KIUC dated February 2, 2001, Item 6.

³⁷ Madison Brief at 4.

LG&E disagrees with KIUC's proposal, noting that the proceeds from the August 2000 refinancing were not used to pay for LG&E's 1995 Plan facilities. LG&E argues that the Commission struck a balance between base rates and the surcharge by excluding the surcharge environmental costs when setting base rates in Case No. 98-426.³⁸ LG&E contends that the Commission should reject what it characterizes as KIUC's attempt to tip that balance unfairly in this proceeding.³⁹

LG&E provided an analysis of the weighted average cost of its pollution control debt as of December 31, 2000. This analysis shows that since 1995, LG&E has issued six series of pollution control bond debt, the most recent being in August 2000. The analysis further shows that 9 of the 13 pollution control bond debt issues outstanding are priced using variable interest rates.⁴⁰ The weighted average cost of LG&E's pollution control debt as of December 31, 2000 is 5.28 percent.⁴¹ LG&E argues that a comparison of this weighted average cost to the currently authorized rate of return of 5.60 percent demonstrates the reasonableness of continuing to use the 5.60 percent rate of return. LG&E further argues that the need to avoid volatility in rates and the

³⁸ Case No. 98-426, Application of Louisville Gas and Electric Company for Approval of an Alternative Method of Regulation of Its Rates and Service.

³⁹ Hewett Rebuttal Testimony at 2-3.

⁴⁰ Response to the Commission Staff's 3rd Data Request dated February 27, 2001, Item 1(b), page 1 of 2. Of the \$564,200,000 outstanding in pollution control bond debt, \$425,535,000 or approximately 75 percent is priced using variable interest rates.

⁴¹ Id.

proximity of the surcharge roll-in also supports its position not to change the rate of return on the 1995 Plan rate base.⁴²

The rate of return applied to the 1995 Plan rate base has not been revised or adjusted for nearly 6 years. The Commission believes it is reasonable to continue to utilize the interest rates on LG&E's pollution control bond debt as the rate of return. While the rate of return set in 1995 reflected what was at that time the most recent issue of pollution control bond debt, it is appropriate to now use the weighted average cost of that debt as the rate of return. By continuing to utilize the pollution control bond debt to set the rate of return on the 1995 Plan rate base, the Commission is not finding that the 1995 Plan was funded solely by pollution control bond debt. Rather, the Commission believes that continuing to use the pollution control bond debt interest rate, instead of an overall rate of return, continues to be a reasonable approach.

The Commission finds that it is appropriate and reasonable to use the weighted average cost of LG&E's pollution control debt as of December 31, 2000 as the rate of return on the 1995 Plan rate base. KIUC has not demonstrated that its proposal is reasonable and the information contained in the analysis of the weighted average cost of pollution control bond debt shows KIUC's assumptions to be incorrect. Further, the Commission is not persuaded by LG&E's claims that the weighted average cost analysis demonstrates the reasonableness of the current surcharge rate of return or that the change would be insignificant.

⁴² During the public hearing, LG&E acknowledged that neither volatility nor the proximity of the surcharge roll-in were reasons not to adjust the rate of return. Rather, LG&E stated that it did not believe that there was a significant change to make it worth the effort. See T.E., March 8, 2001, at 50-53.

As noted previously, a sizable portion of LG&E's pollution control bond debt is subject to variable interest rate pricing. The Commission finds that during the 6-month surcharge reviews there should be a calculation of a "true-up" to reflect changes during that period in the weighted average cost of pollution control debt, with the over- or under-recovery of the environmental surcharge adjusted accordingly.

2001 Plan

LG&E proposed that its overall rate of return based on its current capital costs be applied to the 2001 Plan rate base. LG&E requested that its overall rate of return include the 11.50 percent return on common equity found reasonable for its electric operations by the Commission's January 7, 2000 Order in Case No. 98-426.⁴³ LG&E also requested that this return on equity remain unchanged until the Commission changes the 11.50 percent equity component in its Earnings Sharing Mechanism ("ESM"). If the return on common equity is changed for the ESM, LG&E proposed that the return on equity in its surcharge be reviewed in the following 2-year surcharge review.⁴⁴

LG&E also proposed that the capital structure and cost rates for debt and preferred stock be updated every 6 months beginning with the first expense month for each 6-month review proceeding,⁴⁵ with the Commission reviewing the effects of the updates during the 6-month surcharge reviews. LG&E acknowledged that in the

⁴³ Hewett Direct Testimony at 5-6. LG&E also included rate of return testimony that indicated the reasonable cost of common equity was between 11.50 and 12.50 percent. See Rosenberg Direct Testimony at 2 and 30.

⁴⁴ Id. at 5-7.

⁴⁵ Id. at 6.

surcharge approved for American Electric Power (“AEP”), the Commission determined that the debt portion of the cost of capital would be fixed during each 6-month period, and would be reviewed and re-established during each subsequent 6-month surcharge review case.⁴⁶ However, LG&E contends that its proposal is more consistent with the provisions of KRS 278.183, assesses the surcharge based on timely and current information, and that prior approval of the issuance of evidences of debt is already addressed by KRS 278.300.⁴⁷ In addition, LG&E proposed that the calculation of the cost rate for its long-term debt will reflect the benefits of LG&E’s accounts receivable financing program.⁴⁸

KIUC opposes LG&E’s proposal to apply the overall rate of return to the 2001 Plan rate base. KIUC states that the rate of return must reflect the actual costs of LG&E, as well as reflect just and reasonable costs. KIUC contends that due to the constant changes in the capital structure, debt costs, and preferred stock costs, the rate of return should be computed for each surcharge expense month. KIUC argues that the

⁴⁶ Case No. 96-489, Application of Kentucky Power Company d/b/a American Electric Power to Assess a Surcharge Under KRS 278.183 to Recover Costs of Compliance with the Clean Air Act and Those Environmental Requirements Which Apply to Coal Combustion Waste and By-Products, final Order dated May 27, 1997, at 35.

⁴⁷ Response to the Commission Staff’s 2nd Data Request dated December 21, 2000, Item 1(a).

⁴⁸ Willhite Rebuttal Testimony at 2. As explained by LG&E, the accounts receivable financing program, also referred to as off-balance sheet financing, allows LG&E to accelerate its receipt of cash collections from accounts receivable and meet cash needs. This off-balance sheet financing should be some of the lowest cost financing available to LG&E and it allows LG&E to avoid using more costly forms of financing, which LG&E contends results in a direct benefit to its ratepayers.

rate of return should reflect LG&E's actual costs of financing, which includes the costs of various types of short-term debt.

KIUC further argues that the rate of return applied to the 2001 Plan rate base should reflect first the issuance of the various types of short-term debt, especially during construction when LG&E includes CWIP in the surcharge rate base.⁴⁹ KIUC contends that only when the 2001 Plan rate base exceeds LG&E's short-term debt should an overall rate of return be applied, with that rate of return adjusted to remove short-term debt. KIUC believes that this approach is reasonable, as the applied rate of return will actually reflect how LG&E finances the 2001 Plan rate base. KIUC also believes its proposal corrects LG&E's failure to provide any benefit of its lower cost short-term debt to ratepayers either through base rates or the environmental surcharge.⁵⁰ With respect to the accounts receivable financing, KIUC argues that it should be reflected as short-term debt for environmental surcharge purposes.⁵¹

Mr. Madison objects to LG&E's request for an 11.50 percent return on common equity and claims that LG&E's rate of return analysis was significantly flawed and should be rejected by the Commission. Mr. Madison proposes that the return on

⁴⁹ Kollen Direct Testimony at 10-13.

⁵⁰ Id. at 18-19. KIUC has further clarified its position, stating that during the time the 2001 Plan rate base reflects only CWIP, the rate of return should recognize that those expenditures are financed first with short-term debt. Once the CWIP is placed in service, KIUC agrees that the rate of return should reflect the overall rate of return. See KIUC Main Brief at 8.

⁵¹ Kollen Direct Testimony at 20.

common equity should be no greater than 6.00 percent, with an overall rate of return of no more than 8.00 percent.⁵²

LG&E disagrees with KIUC's argument that the rate of return applied to the 2001 Plan rate base must reflect actual costs. LG&E argues that KIUC has misinterpreted the requirements of KRS 278.183 by confusing the entitlement to a reasonable rate of return with the actual cost requirement to be applied during the surcharge review proceedings. LG&E notes that KIUC's proposal to adjust the rate of return monthly would make the surcharge computation more complicated, eliminate efforts previously made to avoid surcharge factor volatility, and be more burdensome to administer. LG&E also rejects KIUC's assumption that the 2001 Plan facilities will be funded exclusively with short-term debt. LG&E contends that the 2001 Plan facilities will actually be funded with all sources of capital, and that the applied rate of return should reflect this fact. Finally, LG&E disagrees with KIUC's claim that ratepayers have not and will not receive the benefits of LG&E's short-term financing. LG&E argues that the benefits of short-term financing will be recognized in the ESM calculations as well as in the overall rate of return proposed for the surcharge calculations.⁵³

The Commission is not persuaded by KIUC's arguments. Pursuant to KRS 278.183(1), among the costs recoverable through the surcharge is a reasonable return on construction and other capital expenditures. KRS 278.183(2)(b) requires that the

⁵² Madison Brief at 4. However, Mr. Madison acknowledged that his recommended rates of return were based in part on "unconventional" analysis and his observations during previous LG&E cases. See Response to the Commission Staff's 1st Data Request to Mr. Madison dated February 2, 2001, Item 3.

⁵³ Hewett Rebuttal Testimony at 4-10.

Commission establish a reasonable return on the compliance-related capital expenditures. Given this requirement, the Commission believes that a reasonable return on the capital expenditures included in the surcharge constitutes part of the total actual costs incurred by the utility. Concerning the financing of utility plant, it has long been recognized in the utility industry that capital expenditures are financed by numerous sources of capital, and that it is generally not possible to match a capital expenditure with a specific source of capital. KIUC has acknowledged that neither it nor LG&E stated that the 2001 Plan capital expenditures will be financed exclusively with short-term debt.⁵⁴ Absent such evidence, the Commission cannot find it reasonable or appropriate to set the rate of return on the 2001 Plan rate base at the cost of LG&E's short-term debt, either during the CWIP phase or after the facilities are in service.

The Commission finds that the overall rate of return approach as proposed by LG&E is reasonable and should be approved, with the following modifications. The overall rate of return will reflect the costs associated with LG&E's short-term debt, to the extent LG&E has short-term debt, long-term debt, preferred stock, and common equity. The overall rate of return should be grossed up to reflect the income tax effect resulting from the returns on preferred stock and common equity. The return on common equity should be 11.50 percent, which corresponds to the equity return incorporated in LG&E's ESM. The surcharge return on equity should remain unchanged unless the return on equity reflected in the ESM is changed or discontinued. If either event occurs, the

⁵⁴ Response to the Commission Staff's 1st Data Request to KIUC dated February 2, 2001, Item 2.

surcharge return on common equity should be reviewed during the subsequent 2-year surcharge review.

Concerning the accounts receivable financing, the Commission finds it reasonable to reflect the cost savings from this financing when calculating the cost of LG&E's long-term debt. However, the only way to properly reflect the accounts receivable financing in the calculation is to include both the outstanding balance of accounts receivable financing and the corresponding interest expense.⁵⁵ To recognize only the interest expense, as originally proposed by LG&E, results in an increase in the blended cost of long-term debt, but does not directly pass on to ratepayers any benefits of this type of financing. The Commission notes, however, that the accounts receivable financing will only be reflected in the calculation of the long-term debt cost, not included as part of the balance of long-term debt or recognized in the capital structure.

Regarding the establishment of the capital structure and cost rates for debt and preferred stock, the Commission disagrees with LG&E's arguments. KRS 278.183(2)(b) clearly states that the Commission must establish the reasonable return for the compliance plan. Further, LG&E has not demonstrated why its proposal is more reasonable than the approach adopted by the Commission for the AEP surcharge. Finally, LG&E's references to the requirements of KRS 278.300 are misplaced. While that statute requires financings to be reasonable at the time of their initial issuance,

⁵⁵ See Response to the Commission Staff's 2nd Data Request dated December 21, 2000, Item 2. The proposed ESC Form 4.2 showed the calculation of the cost of long-term debt including only the interest expense associated with the accounts receivable financing. However, the only way to properly recognize the account receivable financing and provide the benefits to ratepayers is to include both the principal and interest expense in the calculations. See Joint Hearing Exhibit 2 and the Joint Post-Hearing Brief of LG&E and KU, Tables 3 and 4 and footnote 40.

those financings must be continuously reviewed to ensure that they are reasonable for inclusion in the surcharge.

The Commission finds that it is reasonable for the cost of debt and preferred stock to be initially determined as described in this Order and subsequently reviewed and re-established during the 6-month surcharge review cases. The Commission also finds that it is reasonable to utilize LG&E's electric capital structure and corresponding debt and preferred stock cost rates as of December 31, 2000. Appendix A to this Order presents the Commission's determination of the overall rate of return to be applied to the 2001 Plan rate base effective on the date of this Order. The Commission will utilize the December 31, 2000 financial information submitted in Case No. 2001-054⁵⁶ to calculate this initial overall rate of return. However, due to questions in that proceeding concerning the short-term debt as of December 31, 2000, the Commission will not include short-term debt in the calculations shown in Appendix A.⁵⁷ In addition, due to the starting date of the accounts receivable financing program, the effects of that financing cannot be reflected at this time. As shown in Appendix A, the overall rate of return before tax gross up is 8.73 percent.

The Commission is aware that the capital structure and the cost of debt and preferred stock can fluctuate from month to month. As noted previously, KIUC proposes that the rate of return should be computed monthly to recognize these

⁵⁶ Case No. 2001-054, The Annual Earnings Sharing Mechanism Filing of the Louisville Gas and Electric Company.

⁵⁷ See Case No. 2001-054, Commission Staff's 1st Data Request to LG&E dated April 5, 2001, Item 4. After the clarification of the short-term debt issue in this case, the Commission would be willing to revise the determination of LG&E's overall rate of return to include short-term debt.

changes. However, there is insufficient evidence of such rate volatility to make it reasonable to perform this calculation monthly. However, the Commission does find it is reasonable that during the 6-month surcharge reviews there should be a calculation of a “true-up” to reflect the changes during that period in the capital structure and cost of debt and preferred stock, with the over- or under-recovery of the environmental surcharge accordingly adjusted. This approach is similar to that established for the 1995 Plan rate of return.

The Commission notes that during the CWIP phase of the 2001 Plan, the environmental rate base and capitalization should be equal. However, after the facilities go into service, it is likely environmental surcharge rate base and capitalization will no longer be equal, primarily due to the deduction of accumulated deferred income taxes from the rate base. The Commission finds that until the 2001 Plan facilities go into service, the overall rate of return will be directly applied to the 2001 Plan rate base. The Commission further finds that after the 2001 Plan facilities go into service, the rate of return applied to the 2001 Plan rate base will be determined in a manner consistent with the approach followed in Case No. 98-426, as agreed to by LG&E.⁵⁸

SURCHARGE FORMULAS

As there are differences between the 1995 Plan and 2001 Plan, it is necessary to state LG&E’s environmental surcharge as the sum of two formulas.

1995 Plan

The monthly ES revenue requirement, 1995E(m), is as follows:

$$1995E(m) = [(RB/12) (ROR)] + OE - BAS$$

⁵⁸ Joint Post-Hearing Brief of LG&E and KU at 35-36.

Where:

1995E(m)	=	1995 Plan ES Revenue Requirement
RB	=	Environmental Compliance Rate Base, adjusted for eligible Pollution Control Plant in Service and Accumulated Depreciation already included in existing rates
ROR	=	Rate of Return on Environmental Compliance Rate Base, designated as the Weighted Average Cost of Pollution Control Bond Debt
OE	=	Operating Expenses [Depreciation and Amortization Expense, Property and Other Applicable Taxes, Insurance Expense, Emission Allowance Expense, Surcharge Consultant Fee, and Permit Fees; adjusted for the Average Month Expense already included in existing rates]
BAS	=	Net Proceeds from By-Product and Allowance Sales

2001 Plan

The monthly ES revenue requirement, 2001E(m) is as follows:

$$2001E(m) = [(RB/12) (ROR + (ROR - DR) (TR/(1 - TR)))] + OE$$

Where:

2001E(m)	=	2001 Plan ES Revenue Requirement
RB	=	Environmental Compliance Rate Base, adjusted for eligible Pollution Control Plant in Service, Accumulated Depreciation, and Deferred Taxes already included in existing rates
ROR	=	Rate of Return on Environmental Compliance Rate Base, designated as the overall rate of return [cost of short-term debt, long-term debt, preferred stock, and common equity]
DR	=	Debt Rate [cost of short-term and long-term debt]
TR	=	Composite Federal and State Income Tax Rate
OE	=	Operating Expenses: Depreciation and Amortization Expense, Property and Other Applicable Taxes, Insurance Expense; adjusted for the Average Month Expense already

included in existing rates. Includes operation and maintenance expense associated with NOx control projects, as recorded in Account Nos. 506105 and 512101

The sum of the 1995E(m) and 2001E(m), Total E(m), is multiplied by the Jurisdictional Allocation Factor⁵⁹ to arrive at the Net Jurisdictional E(m). After recognizing any adjustments for over- or under-recoveries, the Net Jurisdictional E(m) is divided by Jurisdictional R(m),⁶⁰ resulting in the Jurisdictional Environmental Surcharge Billing Factor.

The addition of the 2001 Plan will require a revision to the monthly surcharge reporting formats. While LG&E provided sample monthly reporting formats,⁶¹ the Commission believes additional modifications are required. Appendix B to this Order contains the monthly surcharge reporting formats that are to be submitted by LG&E for all environmental surcharge filings after the date of this Order.

OTHER ISSUES

Mr. Madison advocates that only the LG&E customers residing in Jefferson County should be paying the environmental surcharge. He bases this position on his

⁵⁹ The Jurisdictional Allocation Factor is calculated by dividing the current expense month's Kentucky jurisdictional revenues by the current expense month's Total Company revenues. Environmental surcharge revenues are excluded from both components of the calculation. There will be no change in the calculation due to the addition of the 2001 Plan.

⁶⁰ Jurisdictional R(m) is the average monthly jurisdictional revenue for the 12 months ending with the current expense month. This average amount is exclusive of the environmental surcharge revenues, and is unchanged due to the addition of the 2001 Plan.

⁶¹ See Response to KIUC's 2nd Data Request dated December 21, 2000, Item 16. The sample reporting formats filed were based on the current KU filings. No sample formats were provided reflecting the current LG&E filings.

perception that Jefferson County is the only area within the LG&E service territory that has air quality problems. Mr. Madison argues that the citizens of Jefferson County are the only ones benefiting from the equipment installed or being installed to deal with the air quality problems, and he also claims that LG&E does not charge the environmental surcharge to its off-system sales customers.⁶²

The environmental surcharge deals with compliance costs reflecting federal, state, and local environmental requirements. The environmental compliance costs that LG&E incurs to operate its generating stations in both Jefferson and Trimble counties constitute reasonable operating expenses and are a component of the total cost of providing electricity. LG&E is entitled under KRS 278.183 to recover these costs from all its customers, regardless of the environmental requirements in effect where the customer lives. Contrary to Mr. Madison's assertion, a portion of the monthly environmental surcharge is allocated to LG&E's off-system sales. While this portion of the surcharge may not be separately identified on the bills to off-system sales customers, LG&E must either include this cost in its price for off-system power or reflect a corresponding reduction in its margins on those sales. The Commission finds Mr. Madison's arguments and recommendation to be unreasonable and therefore rejects them.

IT IS THEREFORE ORDERED that:

1. LG&E's 2001 Plan consisting of one additional capital project to meet federal, state, and local environmental regulations is approved.

⁶² Madison Brief at 5-6.

2. LG&E's ECR Surcharge tariff as modified herein is approved for service rendered on and after May 1, 2001.

3. LG&E's proposed ECR Surcharge tariff is denied.

4. LG&E's rate of return on the 1995 Plan shall be reset to 5.28 percent. During subsequent 6-month surcharge reviews, the rate of return on the 1995 Plan shall be trued-up to recognize changes in the weighted average cost of LG&E's pollution control debt. The result of this true-up process shall be included in the determination of the over- or under-recovery of the surcharge for that review period.

5. LG&E's initial rate of return on the 2001 Plan shall be set at LG&E's overall rate of return as of December 31, 2000 as discussed in the findings herein. The calculation of the initial overall rate of return is shown in Appendix A to this Order.

6. The return on common equity contained in the 2001 Plan overall rate of return shall be 11.50 percent and shall remain unchanged unless the return on common equity in LG&E's ESM is changed or discontinued. Upon such events, the return on common equity used in the 2001 Plan overall rate of return shall be reviewed during the subsequent 2-year surcharge review.

7. The cost of debt and preferred stock contained in the 2001 Plan overall rate of return shall initially be set as shown in Appendix A. During subsequent 6-month surcharge reviews, the cost of debt and preferred stock shall be reviewed and re-established.

8. During subsequent 6-month surcharge reviews, the overall rate of return on the 2001 Plan shall be trued-up to recognize changes in the cost of debt, preferred stock, and changes in LG&E's electric capital structure. The result of this true-up

process shall be included in the determination of the over- or under-recovery of the surcharge for that review period.

9. KIUC's proposal to include transmission revenues in the determination of the jurisdictional allocation factor is denied. LG&E's request to clarify the revenue exclusion granted in Case No. 2000-105 to include OATT revenues is granted.

10. The reporting formats included in Appendix B shall be used for each monthly surcharge filing. Previous reporting formats shall no longer be submitted.

11. LG&E shall not use its new depreciation rates to calculate the depreciation expense included in its monthly surcharge factor until it has filed a formal application for, and received Commission approval of, the new depreciation rates. Any depreciation expense collected through the surcharge reflecting the unapproved use of the new depreciation rates shall be adjusted during the appropriate 6-month surcharge review.

12. Within 10 days of the date of this Order, LG&E shall file with the Commission revised tariff sheets setting out the ECR Surcharge tariff as modified and approved herein.

Done at Frankfort, Kentucky, this 18th day of April, 2001.

By the Commission

ATTEST:


Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2000-386 DATED April 18, 2001

Calculation of the Overall Rate of Return for the 2001 Plan Rate Base

The calculation of this initial overall rate of return for the 2001 Plan Rate Base is based on financial information provided by LG&E in Case No. 2001-054. However, as noted in the Order, short-term debt has been excluded due to questions about the short-term debt included in Case No. 2001-054. Thus, the capitalization and capital structure reflected in these calculations are different from that included in Case No. 2001-054.

Overall Rate of Return –
Weighted Average Cost of Capital as of December 31, 2000

	Adjusted Electric Capitalization	Percent of Total	Annual Cost Rate	Weighted Cost of Capital
Short-Term Debt	0	0.00%	0.000%	0.00%
Long-Term Debt	481,717,637	38.97%	5.380%	2.10%
Preferred Stock	82,118,688	6.64%	5.748%	.38%
Common Equity	672,340,563	54.39%	11.500%	6.25%
Totals	1,236,176,888	100.00%		8.73%

Overall Rate of Return –
Adjusted for Income Tax Gross-Up

$$ROR + (ROR - DR) (TR / (1 - TR))$$

ROR	=	.0873
DR	=	.0210
TR	=	.403625 [Federal rate = 35.00%; State rate = 8.25%]
1 - TR	=	.596375

Overall Rate of Return, Adjusted for Income Tax Gross-Up =
.0873 + (.0873 - .0210)(.403625/.596375) = .0873 + .0449 = .1322

Overall Rate of Return, Adjusted for Income Tax Gross-Up = 13.22%

Adjusted Electric Capitalization

	Total Co. Balances @ 12/31/2000	Total Co. Capital Structure	Electric Rate Base Percentage	Electric Capitalization	Adjustments to Electric Capitalization	Adjusted Electric Capitalization
Short-Term Debt	0	0.00%	82.37%	0	0	
Long-Term Debt	606,800,000	40.98%	82.37%	499,821,160	(18,103,523)	481,717,637
Preferred Stock	95,140,347	6.42%	82.37%	78,367,104	3,751,584	82,118,688
Common Equity	778,928,362	52.60%	82.37%	641,603,292	30,737,271	672,340,563
Total Capitalization	1,480,868,709	100.00%		1,219,791,556	16,385,332	1,236,176,892

Adjustments to Electric Capitalization:

	Electric Capitalization	Percent of Total	Trimble Co. Inventories	Other Investments	JDIC	Environment Surcharges
Short-Term Debt	0	0.00%	0	0	0	
Long-Term Debt	499,821,160	40.98%	(617,219)	(224,174)	24,788,416	(42,050,000)
Preferred Stock	78,367,104	6.42%	(96,694)	(35,120)	3,883,398	
Common Equity	641,603,292	52.60%	(792,233)	(287,740)	31,817,244	
Totals	1,219,791,556	100.00%	(1,506,146)	(547,034)	60,489,058	(42,050,000)

Annual Cost Rate

Short-Term Debt:	Principal Amount	Interest Expense	Amortized Loss	Total Cost
(List Issue)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Embedded Cost of Short-Term Debt (Total Cost / Principal Amount) 0.000%

Long-Term Debt:	Interest Rate	Principal Amount	Annual Interest Exp.
First Mortgage Bonds	6.000%	42,600,000	2,556,000
Pollution Control Bonds – Series R	6.550%	41,665,000	2,729,058
Series S	4.498%	31,000,000	1,394,225
Series T	*4.622%	60,000,000	2,773,080
Series U	*4.603%	35,200,000	1,620,115

Series V	*5.625%	102,000,000	5,737,500
Series W	5.450%	26,000,000	1,417,000
Series X	5.900%	40,000,000	2,360,000
Series 00-A JC	*4.620%	25,000,000	1,155,000
Series 00-A TC	*4.590%	83,335,000	3,825,077
Series 96-A JC	*4.715%	22,500,000	1,060,875
Series 96-A TC	*4.882%	27,500,000	1,342,633
Series 97-A JC	*5.000%	35,000,000	1,750,000
Series 97-A TC	*4.788%	35,000,000	1,675,835
Interest Rate Swap		0	10,323,097
Interest Rate Swap		<u>0</u>	<u>(10,114,821)</u>
Subtotal Long-Term Debt		606,800,000	31,604,674
Adjustments –			
Accounts Receivable Securitization		0	0
Amortized (Gain)/Loss		-	<u>1,134,312</u>
Long-Term Debt with Adjustments		<u>606,800,000</u>	<u>32,738,986</u>
Weighted Average Cost of Debt (Annual Interest Expense / Principal Amount)	5.395%		
Less: Environmental Surcharge Rate Base at 5.60%		<u>42,050,546</u>	<u>2,354,831</u>
Long-Term Debt Exclusive of Environmental Surcharge		<u>564,749,454</u>	<u>30,384,155</u>
Weighted Average Cost of Debt, exclusive of Environmental Surcharge			<u>5.380%</u>
* denotes composite interest rate at end of current month			
Preferred Stock:			
	Issue Amount	Net Proceeds	Annual Interest Expense
5.000% Series	21,507,175	21,512,874	1,075,359
5.850% Series	50,000,000	48,911,720	2,925,000
5.875% Series	<u>25,000,000</u>	<u>24,715,753</u>	<u>1,468,750</u>
Totals	<u>96,507,175</u>	<u>95,140,347</u>	<u>5,469,109</u>
Weighted Average Cost of Preferred Stock (Annual Interest Expense / Net Proceeds)			<u>5.748%</u>

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2000-386 DATED April 18, 2001

Environmental Surcharge Monthly Report Formats

These report formats shall be used by LG&E for all monthly surcharge filings submitted after the date of this Order. These report formats will replace all previously approved report formats developed for LG&E's environmental surcharge filings. LG&E will not modify any format without the prior consent of the Commission Staff.

Index of Formats

- ES Form 1.0
Calculation of Total E(m) and Retail Environmental Surcharge Billing Factor
- ES Form 2.00
Revenue Requirements of Environmental Compliance Costs
- ES Form 2.10
Plant, CWIP, Depreciation Expense, and Deferred Taxes – 1995 Plan
(Requires additional supporting information, as noted on format)
- ES Form 2.11
Plant, CWIP, Depreciation Expense, and Deferred Taxes – 2001 Plan
- ES Form 2.2
O&M Expenses and Determination of Case Working Capital Allowance
- ES Form 3.0
Monthly Average Revenue Computation R(m)
- ES Form 3.1
Reconciliation of Reported Revenues

**Louisville Gas & Electric Company
Environmental Surcharge Report
Calculation of Total E(m) and
Retail Environmental Surcharge Billing Factor**

For the Expense Month of

Calculation of Total E(m)

$$\text{Total E(m)} = 1995\text{E(m)} + 2001\text{E(m)}$$

1995E(m) = [(RB/12) (ROR)] + OE – BAS, where

- RB = Environmental Compliance Rate Base for the 1995 Plan
- ROR = Rate of Return on the 1995 Plan Rate Base
- OE = Pollution Control Operating Expenses for the 1995 Plan
- BAS = Net Proceeds from By-Product and Allowance Sales

2001E(m) = [(RB/12) (ROR + (ROR – DR) (TR/(1 – TR)))] + OE, where

- RB = Environmental Compliance Rate Base for the 2001 Plan
- ROR = Rate of Return on the 2001 Plan Rate Base
- DR = Debt Rate (both short-term and long-term debt)
- TR = Composite Federal and State Income Tax Rate
- OE = Pollution Control Operating Expenses for the 2001 Plan

	<u>1995 Plan</u>	<u>2001 Plan</u>
RB =	0	0
RB/12 =	0	0
ROR [1995 Plan] =	5.28%	---
(ROR + (ROR – DR) (TR/(1 – TR))) [2001 Plan] =	---	13.22%
OE =	0	0
BAS =	0	---
1995E(m) =	<u>0</u>	<u>0</u>
2001E(m) =		0
 Total E(m) [1995E(m) + 2001E(m)] =		 0

Calculation of Retail Environmental Surcharge Billing Factor

Retail Allocation Ratio for Expense Month	=	0.00%
Retail E(m) = Total E(m) x Retail Allocation Ratio	=	0
Adjustment for Over/(Under) Recovery	=	0
Net Retail E(m) = Retail E(m) +/- Adjust. for Over/(Under) Recovery	=	0
Retail R(m):		
Average Monthly Retail Revenue for the 12 Months Ending with the Current Expense Month	=	0
Retail Environmental Surcharge Billing Factor:		
Net Retail E(m) / Retail R(m) (% of Revenue)	=	0.00%

Effective Date for Billing: {Date}

Submitted by: _____
{Title}

Date Submitted: {Date}

**Louisville Gas & Electric Company
Environmental Surcharge Report
Revenue Requirements of Environmental Compliance Costs
For the Expense Month of**

Determination of Environmental Compliance Rate Base

	1995 Plan		2001 Plan	
Eligible Pollution Control Plant		0		0
Eligible Pollution Control CWIP excluding AFUDC		0		0
Cash Working Capital Allowance		0		0
Subtotal		0		0
Deductions:				
Accumulated Depreciation on Eligible Pollution Control Plant	0		0	
Pollution Control Deferred Income Taxes	0		0	
Pollution Control Deferred Investment Tax Credit	0		0	
Subtotal		0		0
Environmental Compliance Rate Base		0		0

Determination of Pollution Control Operating Expenses

	1995 Plan	2001 Plan
Monthly Operations & Maintenance Expense		0
Monthly Depreciation & Amortization Expense	0	0
Monthly Property & Other Applicable Taxes (Net of pre-1993 amounts)	0	0
Monthly Insurance Expense (Net of pre-1993 amounts)	0	0
Monthly Emission Allowance Expense	0	
Monthly Surcharge Consultant Fee	0	
Monthly Permitting Fees	0	
Less: Average Monthly Expenses Already Included in Existing Rates (1995 Plan Only)	37,874	
Total Pollution Control Operating Expenses	0	0

Net Proceeds from By-Product and Allowance Sales (1995 Plan Only)

	Gross Proceeds	Sales Expenses	Net Proceeds
Allowance Sales	0	0	0
Scrubber By-Products Sales	0	0	0
Total Proceeds from Sales	0	0	0

**Louisville Gas & Electric Company – Environmental Surcharge Report
Plant, CWIP, Depreciation Expense, and Deferred Taxes – 1995 Plan
For the Month Ended**

(1)	(2)	(3)	(4)	(5)	(6)	
Description	Eligible Plant in Service	Eligible Accumulated Depreciation	CWIP Amount Excluding AFUDC	Eligible Net Plant in Service (2)+(3)+(4)	Deferred Tax Balance as of --/--/--	De E
Mill Creek Air Quality Systems Improvements						
Mill Creek Reactive Particle Emission Project						
Continuous Emission Monitoring Systems						
Cane Run Unit 4 Precipitator						
Nitrogen Oxide Emission Controls						
Subtotal						
Less: Plant in Existing Rates						
Less: Expenditures Before January 1, 1993						
Net Totals						

Supporting detail for the "Expenditures Before January 1, 1993" shall be submitted with this form. An acceptable format for this detail is the information provided by the Kentucky Utilities Company for its corresponding adjustment. See Case No. 2000-439, Response to the 1st Data Request to KIUC dated November 20, 2000, Item 17, pages 9 through 11 of 100.

**Louisville Gas & Electric Company – Environmental Surcharge Report
Plant, CWIP, Depreciation Expense, and Deferred Taxes – 2001 Plan
For the Month Ended**

(1)	(2)	(3)	(4)	(5)	(6)	
Description	Eligible Plant in Service	Eligible Accumulated Depreciation	CWIP Amount Excluding AFUDC	Eligible Net Plant in Service (2)+(3)+(4)	Deferred Tax Balance as of --/--/--	De E
(List)						
(List)						
(List)						
Subtotal						
Less: Retirements and Replacement resulting from implementation of 2001 Plan						
Net Totals						

When applicable, LG&E shall reflect a "Retirement and Replacement" adjustment in the month facilities associated with the 2001 Plan are placed in service.

**Louisville Gas & Electric Company
Environmental Surcharge Report
O&M Expenses and Determination of Cash Working Capital Allowance
2001 Plan Only**

For the Month Ended

O&M Expenses – Acct. Nos. 506105 & 512101	
11 th Previous Month	
10 th Previous Month	
9 th Previous Month	
8 th Previous Month	
7 th Previous Month	
6 th Previous Month	
5 th Previous Month	
4 th Previous Month	
3 rd Previous Month	
2 nd Previous Month	
Previous Month	
Current Month	
Total 12 Month O&M Expense	
Determination of Cash Working Capital Allowance	
Total 12 Month O&M Expense	
One Eighth (1/8) of Total 12 Month O&M Expense	1/8
Pollution Control Cash Working Capital Allowance	

The Current Month O&M Expense shall be reported on ES Form 2.00 as “Monthly Operations & Maintenance Expense.” The Cash Working Capital Allowance shall reflect the cumulative total of O&M expenses incurred by LG&E during the first 12 months under the 2001 Plan. Once 12 months of O&M expense has been incurred, the Cash Working Capital Allowance shall reflect the most recent 12 months of activity.

(Identify)		
Total Kentucky Retail Revenues for Environmental Surcharge Purposes		
Non-Jurisdictional Revenues:		
(Identify)		
(Identify)		
(Identify)		
Total Non-Jurisdictional Revenues for Environmental Surcharge Purposes		
Total Company Revenues for Environmental Surcharge Purposes		
Reconciling Revenues:		
(Identify)		
(Identify)		
(Identify)		
Total Company Revenues per Income Statement		