COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR APPROVAL OF ITS 2004 COMPLIANCE PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE	))))	CASE NO. 2004-00421

O R D E R

On December 20, 2004, the Louisville Gas and Electric Company ("LG&E"), pursuant to KRS 278.183, filed an application seeking approval of an amended compliance plan for purposes of recovering the costs of new and additional pollution control facilities and to amend its Environmental Cost Recovery ("ECR") tariff. LG&E asserts that it will need these facilities and will incur the related compliance costs to comply with the requirements of the Clean Air Act Amendments of 1990 ("CAA"),[1] the Resource Conservation and Recovery Act,[2] and other federal, state, or local environmental requirements applicable to combustion waste and by-products from facilities used for the generation of energy from coal. LG&E proposed that its amended ECR tariff become effective for service rendered on and after July 1, 2005.

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"), and Kentucky Industrial Utility Customers, Inc. ("KIUC"). A consolidated hearing was held on May 10, 2005 for this case and Case No. 2004-

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

[2] As amended, 42 U.S.C.A. § 6901 *et seq.*

00426,[3] 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 391,000 consumers in Jefferson County and in portions of 8 other counties.[4] LG&E is a wholly owned subsidiary of LG&E Energy LLC, a non-utility holding company.[5]

KRS 278.183 provides that a utility is entitled to the current recovery of its costs of complying with the CAA as amended and those federal, state, or local environmental requirements that apply to 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 and a tariff addition containing the terms and conditions of the proposed surcharge applied to

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[3] Case No. 2004-00426, The Application of Kentucky Utilities Company for a Certificate of Public Convenience and Necessity to Construct Flue Gas Desulfurization Systems and Approval of Its 2004 Compliance Plan for Recovery by Environmental Surcharge.

[4] The 8 counties are Bullitt, Hardin, Henry, Meade, Oldham, Shelby, Spencer, and Trimble. LG&E also distributes and sells natural gas to approximately 312,000 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.

[5] LG&E Energy LLC is a Kentucky limited liability company and is an indirect subsidiary of E.ON AG, a German multi-national energy corporation.

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;
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> (b) Establish a reasonable return on compliance-related capital expenditures; and
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> (c) Approve the application of the surcharge.

LG&E's original compliance plan and environmental surcharge were approved by the Commission in 1995 ("1995 Plan") in Case No. 1994-00332.[6] The 1995 Plan was comprised of capital projects involving sulfur dioxide ("SO_2") removal systems, low nitrogen oxide ("NOx") burners, and other pollution control equipment required by federal, state, or local environmental regulations applicable to coal combustion and by-products. The ECR tariff for the 1995 Plan provided 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 the 1995 Plan environmental capital expenditures was based on the actual cost of LG&E's October 1993 pollution control bond issue.[7]

LG&E added new pollution control facilities to its compliance plan and environmental surcharge through amendments that were approved by the Commission

[6] Case No. 1994-00332, 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.

[7] Id. at 24.

in 2001 ("2001 Plan") in Case No. 2000-00386.[8] The 2001 Plan contained a capital project involving selective catalytic reduction NOx reduction technology facilities and other pollution control equipment required by the emission limits mandated by the Environmental Protection Agency ("EPA") and the CAA. The ECR tariff for the 2001 Plan amended the ECR tariff for the 1995 Plan and provided for a formula to calculate the ES revenue requirement and applicable monthly surcharge factor.

In Case No. 2000-00386 the rates of return on the 1995 and 2001 Plan environmental capital expenditures were separated. For the 1995 Plan, the rate of return was based on the weighted average cost of LG&E's pollution control debt as of December 31, 2000;[9] but the rate of return on the 2001 Plan environmental capital expenditures was based on LG&E's overall rate of return on capital, reflecting LG&E's electric capital structure and corresponding debt and preferred stock cost rates as of December 31, 2000.[10] For both the 1995 and 2001 Plans, the cost of debt and preferred stock were to be reviewed and re-established during the 6-month surcharge review cases. In addition, at the 6-month surcharge reviews a "true-up" calculation would reflect changes during the review period in the cost of debt.

[8] Case No. 2000-00386, The Application of Louisville Gas and Electric 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 Cost Recovery Surcharge Tariff, final Order dated April 18, 2001.

[9] Id. at 19.

[10] Id. at 24-27. During rehearing the Commission included short-term debt and accounts receivable financing in LG&E's electric capital structure along with the corresponding cost rates as of December 31, 2000. See Orders on Rehearing dated May 14, 2001 and August 30, 2001.

As part of Case No. 2002-00193,[11] LG&E's surcharge mechanism was modified to utilize the base-current methodology. Prior to the modification, LG&E's surcharge mechanism was based on the incremental approach. Under the base-current methodology, all retirements and replacements recognized as offsets in the monthly surcharge filings through April 30, 2001 were incorporated in the base period surcharge factor. Only retirements or replacements of pollution control plant in service occurring since April 30, 2001 are reflected in the monthly surcharge filings as part of the current period surcharge factor. The determination of the ES revenue requirements for the 1995 and 2001 Plans were otherwise not changed by the adoption of the base-current methodology.

LG&E's second amendment to its environmental compliance plan and surcharge mechanism was in Case No. 2002-00147.[12] The approved amendment to the compliance plan approved by the Commission in 2003 ("2003 Plan") consisted of capital projects that included the conversion and additions to existing flue gas desulfurization systems ("scrubber"), the upgrade of existing electrostatic precipitators, and the restoration of a water system. The separation of the 1995 Plan and the 2001 Plan ES revenue requirements was maintained, and no changes were made to the surcharge mechanism or calculation of the ES revenue requirements and monthly surcharge factor

[11] Case No. 2002-00193, 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, 2000, October 31, 2000, October 31, 2001, and April 30, 2002 and for the Two-Year Billing Period Ending April 30, 2001, final Order dated October 22, 2002.

[12] Case No. 2002-00147, The Application of Louisville Gas and Electric Company for Approval of Its 2002 Compliance Plan for Recovery by Environmental Surcharge, final Order dated February 11, 2003 and rehearing Order dated September 4, 2003.

for the 1995 Plan and the 2001 Plan. For the 2003 Plan, the surcharge mechanism, calculation of the ES revenue requirement, and the calculation of the monthly surcharge factor were similar to that used for the 1995 and 2001 Plans. In Case No. 2002-00147, the rate of return applied to the 1995 Plan and 2001 Plan environmental capital expenditures remained the same as approved in Case No. 2000-00386. For the 2003 Plan environmental capital expenditures, the overall rate of return on capital was approved, consistent with the approach outlined for the 2001 Plan in Case No. 2000-00386.

In Case No. 2003-00433,[13] the capital expenditures and operating expenses associated with the 1995 Plan were included for recovery through LG&E's base rates. These costs were removed from LG&E's environmental surcharge, with the environmental surcharge providing recovery of the costs associated with the 2001 and 2003 Plans.

2005 COMPLIANCE PLAN

LG&E is adding new pollution control facilities to its previously approved Compliance Plans to reflect its continuing efforts to control fly and bottom ash, sulfur dioxide emissions, and scrubber sludge disposal. The third amendment to the compliance plan ("2005 Plan") proposed by LG&E calls for seven projects that include the following facilities:

(1) Vertical and horizontal expansion of the existing Mill Creek landfill and the transfer of approximately 1 million tons of ash from the Mill Creek ash pond to the expanded Mill Creek landfill.

[13] Case No. 2003-00433, An Adjustment of the Gas and Electric Rates, Terms, and Conditions of Louisville Gas and Electric Company, final Order dated June 30, 2004.

(2) Vertical expansion of the existing landfill at Cane Run.

(3) Refurbishment of the existing scrubbers at Trimble County Unit 1 and Cane Run Units 5 and 6.

(4) Improvement of scrubber performance at Trimble County Unit 1 by installing a dibasic acid injection system and the addition of module wall Performance Enhancing Plates and the modification of the existing slurry spray headers.

(5) Purchase of emission allowances required to maintain compliance with CAA requirements.

The 2005 Plan has a total estimated capital expenditure of $50.7 million, with LG&E proposing an additional one-time charge of approximately $6.0 million for the transfer of ash from the ash pond to the landfill at Mill Creek.[14]

In support of the 2005 Plan, LG&E presented testimony, an analysis by Fuller, Mossbarger, Scott & May Engineers that evaluated the options available at the Mill Creek site for handling ash, and other internal reviews and evaluations. The AG and KIUC have not challenged the reasonableness or cost-effectiveness of LG&E's proposed 2005 Plan.

The evidence shows that all the projects in the 2005 Plan are both related to and necessary for compliance with the CAA as amended and other governmental regulations pertaining to combustion wastes and by-products resulting from the production of electricity from coal. The submitted analysis shows that LG&E sufficiently reviewed and evaluated the available options and selected the options that are reasonable. Based upon this review, the Commission finds that the projects are

[14] Malloy Direct Testimony at 7 and Exhibit JPM-1.

reasonable, cost-effective means of compliance with environmental regulations and should be approved as the 2005 Plan.

SURCHARGE MECHANISM AND CALCULATION

LG&E proposed no changes in the surcharge mechanism or calculation of the ES revenue requirements and monthly surcharge factor for the 2001 and 2003 Plans. For the 2005 Plan, LG&E proposed that the environmental surcharge mechanism be similar to that used for the 2003 Plan. The current period ES revenue requirement is determined for the current expense month and is comprised of a return on the 2005 Plan Environmental Compliance Rate Base ("Rate Base") plus specified environmental compliance operating expenses.[15] The addition of the 2005 Plan will require a revision to the monthly surcharge reporting formats. LG&E provided sample monthly reporting formats that show the addition of emission allowances and the ash pond deferral.[16]

Rate Base

LG&E's proposed 2005 Plan Rate Base used in the environmental surcharge mechanism includes the following components: eligible pollution control plant in service ("PC plant"), accumulated depreciation associated with the PC plant, eligible pollution control construction work in progress ("PC CWIP"), deferred income taxes, deferred investment tax credits, cash working capital allowance, and emission allowance inventory. The Rate Base would be adjusted for eligible PC plant, accumulated depreciation, and deferred taxes relating to replacements and retirements of PC plant that are already included in existing rates.

[15] Conroy Direct Testimony, Exhibit RMC-4 at 3 of 11.

[16] Id. at 1-10 of 10.

As noted previously, LG&E proposed an additional one-time charge of approximately $6.0 million for the transfer of ash from the ash pond to the landfill at Mill Creek. KIUC opposed LG&E's proposal to expense the estimated $6.0 million cost for the ash transfer, noting that LG&E stated that the transfer would restore and maintain the current useful life of the ash pond and that the expense is an inherent and essential component of the capital project. Because the ash transfer would restore and maintain the useful life of the ash pond, KIUC recommended that the expense be deferred and amortized over 4 years. KIUC further suggested that the unamortized balance of the deferred asset be included in the 2005 Plan Rate Base.[17]

In response to KIUC, LG&E repeated its belief that the one-time charge should be reflected as an expense in the same period that it is incurred. However, LG&E acknowledged that in its brief in Case No. 2002-00147 it had agreed to the alternative deferral of the expense with an amortization over 4 years, but with the condition that the unamortized balance of the deferral be included in the Rate Base.[18] In this proceeding, LG&E reiterated that, if the Commission adopted KIUC's recommended treatment of this charge, it should allow a return on the unamortized balance of the deferral.[19]

The Commission agrees with KIUC that the one-time charge for the ash transfer should be deferred and amortized over 4 years. The ash transfer will extend the useful life of the ash pond at Mill Creek, and the cost to accomplish this life-extension should

[17] Kollen Direct Testimony at 22-24.

[18] The one-time charge for the ash transfer had been included as a component of a project included in LG&E's 2003 Plan. However, the Commission did not include that project in the approved 2003 Plan.

[19] Blake Rebuttal Testimony at 9-10.

be treated as a capital expenditure. Concerning the inclusion of the unamortized balance of the deferral in Rate Base, generally the Commission in base rate cases for electric and gas utilities has not included the unamortized balance of deferred expenses in rate base. Here, however, KRS 278.183 specifically provides that a reasonable cost to include in the environmental surcharge is a reasonable return on construction and other capital expenditures. Because the Commission finds that the ash transfer costs should be treated like a capital expenditure, we also find a return on those costs is reasonable and will include the unamortized balance of the deferred costs in the environmental Rate Base.

The Commission finds that the 2005 Plan Rate Base should be comprised of PC plant, accumulated depreciation associated with the PC plant, eligible PC CWIP, deferred income taxes, deferred investment tax credits, cash working capital allowance, emission allowance inventory, and the deferral of the ash pond expense. Consistent with the base-current methodology,[20] the 2005 Plan Rate Base should be adjusted for eligible PC plant, accumulated depreciation, and deferred taxes to reflect any retirement or replacement of PC plant that is already included in existing rates.

Currently, the SO_2 emission allowance inventory is not part of LG&E's environmental compliance rate base. LG&E has proposed to include the SO_2 emission allowance inventory in its environmental compliance rate base. LG&E has also proposed to include the purchase of additional SO_2 emission allowances as part of its amendment to its environmental compliance plan. The AG and KIUC did not oppose

[20] As noted previously in this Order, any retirements or replacements of PC plant in service occurring since April 30, 2001 are reflected in the monthly surcharge filings as part of the current period surcharge factor.

the inclusion of the SO_2 emission allowance inventory in rate base or the purchase of allowances as part of the approved compliance plan.

The Commission finds that LG&E's SO_2 emission allowance inventory should be included as a component of the environmental compliance rate base. The Commission reminds LG&E, however, that only its SO_2 emission allowance inventory associated with coal-fired generation can be included to earn a return through the surcharge mechanism, as provided by KRS 278.183. The Commission takes administrative notice of its reasons for rejecting KU's position in Case No. 2004-00426 concerning the inclusion of SO_2 emission allowances assigned to gas-fired combustion turbines and affirms those reasons in this proceeding.

The Commission notes in the compliance plan amendment that LG&E envisions the possibility of SO_2 emission allowance purchases from or sales to KU. LG&E and KU have proposed that any purchases or sales of emission allowances between the two regulated utilities should be priced at the market price. LG&E argued that to transfer allowances at prices less than market denies customers the full benefits of the excess allowances. LG&E did state, however, that if the Commission found that the transfers should be priced at the weighted average cost, it was not opposed to that pricing method for purposes of this proceeding.[21] When asked if the Corporate Policies and

[21] Response to the Commission Staff's First Data Request dated January 26, 2005, Item 11(b).

Guidelines for Intercompany Transactions ("Guidelines")[22] required the purchase or sale of allowances at cost, LG&E stated,

> The reference in these Guidelines to asset transfers clearly applies to capital assets included in rate base. For such assets, the utility is allowed the opportunity to earn a fair, just and reasonable return on the cost of such assets. The policy of transferring assets at cost between LG&E and KU in the Guidelines reflects that as between two full rate-of-return regulated utilities, the cost of the asset essentially represents the fair market price of the asset because each Company earns a regulated return (i.e. regulation's substitute for the fair market rate of return) on its rate base assets. Thus, transferring the assets at cost is the functional equivalent of transferring the assets at their fair market value as between the two utility companies.[23]

The Commission believes that the SO_2 emission allowances clearly are tangible assets of LG&E. Allowances can be publicly traded or bought and sold in transactions between two parties. The Federal Energy Regulatory Commission ("FERC") Uniform System of Accounts classifies the allowances as assets. The inventory of SO_2 emission allowances are capital assets that LG&E has proposed to include in its environmental compliance Rate Base. The Guidelines clearly require that the transfer or sale of assets between LG&E and KU will be priced at cost. LG&E has stated that neither FERC nor the Securities and Exchange Commission requires that emission allowance transfers between LG&E and KU be at market. LG&E further has stated that the provisions of

[22] See Case No. 1997-00300, Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Approval of Merger, final Order dated September 12, 1997. LG&E and KU requested the Commission's approval of the Guidelines to govern their merged activities. The Commission ordered LG&E and KU to comply with the Guidelines after the merger.

[23] Response to the Commission Staff's Second Data Request dated February 23, 2005, Item 7(a).

KRS 278.2207(2) do not apply because emission allowances are neither a service nor a product offered by LG&E to KU.[24]

Therefore, the Commission finds that, from the date of this Order, any future SO_2 emission allowance purchases from or sales to KU should be priced at weighted average cost. In future proceedings, LG&E may submit evidence supporting a change in this pricing method.

Operating Expenses

Other than the one-time charge for the ash transfer, LG&E stated its belief that the 2005 Plan would not result in any operation and maintenance ("O&M") expense changes from the levels already included in existing base rates. Consequently, LG&E did not seek environmental surcharge recovery of any incremental expenses associated with the 2005 Plan.[25]

In addition to the one-time ash transfer cost, LG&E proposed that the monthly environmental compliance operating expenses for the 2005 Plan should include: depreciation expense, property taxes, insurance, and emission allowance expense. The depreciation expense, property taxes, and insurance expense are functions of the value of the PC plant and the monthly expense amounts would reflect that calculation.

The AG and KIUC did not oppose the inclusion of the operating expenses proposed by KU for the 2005 Plan. KIUC did raise the concern that LG&E had not sufficiently acknowledged LG&E's obligation to reflect all cost reductions associated

[24] Response to the Commission Staff's First Data Request dated January 26, 2005, Item 11(a) and 11(b).

[25] Scott Direct Testimony at 4.

with the retirement of environmental plant included in existing rates. KIUC recommended that the Commission reiterate the general principle stated in the Orders in Case No. 2002-00147 and require that LG&E credit environmental surcharge expenses for reductions in all environmental expenses related to the retirement of plant included in existing rates.[26] LG&E has stated that retirements of plant are expected, and when the 2005 Plan projects are completed, the accumulated depreciation and all associated retirement work in process charges would be removed from the accumulated depreciation reserve and the monthly surcharge filings would be adjusted to reflect the retirements in conformity with prior Commission Orders.[27]

The Commission finds LG&E's proposal concerning the recovery of depreciation expense, property taxes, insurance, and emission allowance expense associated with the 2005 Plan to be reasonable, and it should be approved. Concerning the impact of retirements, while LG&E's statements recognize prior Commission Orders concerning retirements, its focus fails to directly acknowledge the impact retirements could have on environmental surcharge operating expenses. Thus, the Commission agrees with KIUC and reminds LG&E that to the extent retirements or replacements of PC plant in service already included in base rates impact the determination of the surcharge operating 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 the discussed operating expenses until the 2005 Plan facilities have gone into service. If a monthly surcharge

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[26] Kollen Direct Testimony at 25-27.

[27] Scott Direct Testimony at 7.

factor includes these expenses prior to the 2005 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.

Capital Structure

The AG recommended and LG&E agreed that the capital structure utilized to determine the overall rate of return on capital should reflect the capital structure ratios as of December 31, 2004.[28] KIUC did not object to the use of the capital structure as of December 31, 2004.[29] LG&E acknowledged that the capital structure it had provided in data responses was for total company rather than electric operations only, and it provided an electric operations capital structure as of December 31, 2004.[30]

The Commission finds LG&E's electric operations capital structure is:

	Percent
Long-Term Debt	41.35
Short-Term Debt	5.44
Preferred Stock	3.54
Common Equity	49.67
Total Electric Operations Capital Structure	100.00

Surcharge Formula

LG&E has proposed that the surcharge formula utilized to calculate the monthly ES revenue requirement and surcharge factor be the same as was established for the

[28] Weaver Testimony at 47 and Blake Rebuttal Testimony at 5.

[29] Kollen Direct Testimony at 18-19.

[30] Blake Rebuttal Testimony at 5 and Exhibit KWB-1 at 1 and 2 of 4.

2001 and 2003 Plans.[31] The AG and KIUC did not oppose LG&E's proposal. The Commission finds LG&E's proposal concerning the surcharge formula used to calculate the monthly ES revenue requirement and surcharge factor is reasonable and should be approved.

RATE OF RETURN

LG&E proposed that it be allowed to earn the overall rate of return on capital for the 2001, 2003, and 2005 Plan Rate Bases. None of the intervenors opposed the use of the overall rate of return on capital.

Cost of Preferred Stock and Debt

As discussed previously in this Order, KU and the AG agreed that the capital structure as of December 31, 2004 should be used to determine the overall rate of return on capital.[32] The Commission has found reasonable the electric operations capital structure as of December 31, 2004 for the surcharge mechanism purposes.

LG&E provided the cost of its preferred stock, long-term debt, and short-term debt as of December 31, 2004. Those costs were 3.30 percent for preferred stock, 3.92 percent for long-term debt, and 1.90 percent for short-term debt.[33] The AG and KIUC did not object to the cost of preferred stock and short-term debt provided by LG&E, and KIUC did not object to the cost of long-term debt. The Commission has reviewed the determination of the preferred stock and short-term debt cost rates of 3.30 percent and

[31] Conroy Direct Testimony, Exhibit RMC-1.

[32] KIUC did not object to using the capital structure as of December 31, 2004.

[33] Response to the AG's First Data Request dated January 26, 2005, Item 11.

1.90 percent, respectively, and finds both are reasonable for surcharge mechanism purposes.

The AG objected to the use of the cost of long-term debt determined by LG&E. The AG advocated that the pollution control bonds cost of 2.301 percent should be used as the cost of long-term debt in the determination of the overall rate of return on capital. The AG argues that the total cost of long-term debt is higher than the cost of pollution control bond debt, which results in the surcharge being higher than the actual capital costs that are required on environmental assets.[34]

LG&E opposed the AG's recommendation, noting that there are significant limits on the amount of pollution control bond financing available to it to fund its environmental compliance capital expenditures. LG&E argued that the Commission has found in previous environmental surcharge cases that capital expenditures are financed by numerous sources of capital, that it generally is not possible to match the capital expenditure with the source of capital, and that previous environmental compliance plans were not exclusively funded with pollution control bond debt. Finally, LG&E disagreed with the AG's argument that it would recover in excess of its actual costs if the overall rate of return on capital reflected the actual cost of all long-term debt.[35]

The Commission is not persuaded by the AG's arguments. In early environmental surcharge proceedings, KU and LG&E only requested the pollution control bond cost rate for the rate of return on environmental compliance capital expenditures, and the Commission approved that request. Those orders, however, did

[34] Weaver Testimony at 47-48.

[35] Blake Rebuttal Testimony at 5-8.

not find that all environmental compliance capital expenditures were solely funded by pollution control bond debt. In subsequent orders, the Commission has recognized that all components of a utility's capital structure are used to fund compliance capital expenditures, including all types of long-term debt. Consequently, it is reasonable to use the cost of LG&E's long-term debt, and not just the pollution control bond debt cost, to determined the overall rate of return on capital for the environmental compliance capital expenditures in this case.

Therefore, the Commission finds that the cost of long-term debt to be used for surcharge mechanism purposes is 3.92 percent.

Cost of Equity

The AG estimated LG&E's required return on equity ("ROE") using four methods: a constant-growth discounted cash flow model ("DCF"), a multi-stage DCF model, a Capital Asset Pricing Model ("CAPM"), and a Bond-Yield-Risk Premium method. The AG placed greater emphasis on the constant growth DCF model in his analysis because it has greater use by participants in the capital markets than other methods and has been taught in finance classes for over 50 years.[36]

The AG performed his analyses on a proxy group of eight electric companies. The AG used the following criteria to select his companies: (1) *Value Line* financial strength rating; (2) *Value Line's* recommendation to purchase; (3) no recent sale or purchase of major assets; (4) no merger activities; (5) a contiguous operating system; (6) fuel mix for electric generation; (7) percentage of electric revenues to overall revenues; and (8) equity percentage. The AG also provided a general economic

[36] Weaver Testimony at 31.

analysis and an analysis of risk measures for his proxy group to develop his recommendation. Within his analysis, the AG made several adjustments. First, he adjusted the results by 25 basis points to compensate for any risk increase associated with the elimination of the Earning Sharing Mechanism, discontinued in LG&E's last rate case.[37] Second, he adjusted the two DCF analyses by 100 basis points to allow for an expected increase in interest rates. The effect of this adjustment on the average result was an increase of 50 basis points.

The AG's methodology generated an ROE range of 9.75 percent to 10.25 percent, but he recommended using the lower portion of the range, 9.75 to 10.00 percent, for three reasons. First, the environmental compliance operation is a somewhat self-contained operation within LG&E. Second, there is little risk associated with environmental compliance revenues and expenses. Third, financial theory regarding risk and return indicates that there is a risk/return trade-off, and lower risk securities have a lower required rate of return.[38]

KIUC estimated LG&E's required ROE using a DCF model and two CAPM analyses. KIUC did not rely on the results of the CAPM analyses in developing its recommendation, citing problems with CAPM components in determining the required return as its reason, as well as the need for a considerable amount of judgment in determining those components.[39] KIUC performed its analysis on a comparison group of eleven companies selected from the February 2005 issue of the C.A. Turner Utility

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[37] Id. at 41.

[38] Id. at 42.

[39] Baudino Direct Testimony at 28.

Report. The companies were selected if they: (1) were rated either A/A or A/Baa/BBB by Moody's and Standard and Poor's; (2) had at least 50 percent of revenues from electric operations; (3) had not recently cut or eliminated dividends; (4) were not recently involved in mergers or restructuring; and (5) had not recently experienced significant earnings fluctuations. KIUC also supplied a general economic and risk discussion. Based on the results of the DCF analysis, KIUC recommends an ROE of 8.7 percent.[40]

In its rebuttal testimony, LG&E criticized the AG's and KIUC's ROE recommendations as substantially understated. In support of its argument, LG&E performed a comparison of the allowed returns for the AG's and KIUC's proxy groups that showed the recommended returns were below that of the average allowed returns nationally. While LG&E did not suggest that the Commission base its decision on other commissions' awards, it presented the information to show the unreasonableness of the AG's recommendation. LG&E concentrated its rebuttal on the AG's analysis and further criticized the AG's methodology and inputs for the models used in his analysis, claiming mathematic errors and data problems create a downward bias in the results. When LG&E modified the AG's calculations, its results showed an average ROE of 10.55 percent to 11.55 percent, supporting LG&E's recommended ROE of 11.0 percent.[41]

The AG and KIUC, along with the other parties involved in LG&E's last rate case, signed a settlement agreement that specifically addressed the ROE that would apply to environmental projects. That settlement language states:

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[40] Id. at 33.

[41] Rosenberg Rebuttal Testimony at 21.

> The signatories hereto, including the AG, agree that, after the date hereof, orders approving cost recovery of LG&E's and KU's environmental projects pursuant to KRS 278.183 shall be based upon an 11.0% return on common equity until directed by order of the Commission that a different rate of return shall be utilized.[42]

During the May 10, 2005 hearing, each ROE witness was questioned as to what had changed since June 2004 that would affect the required ROE. KIUC's response was that interest rates had decreased, the AG responded that the measured cost of equity had declined since then, and LG&E responded that nothing had changed. Given the large difference between KIUC's recommendation of 8.7 percent and the 11.0 percent agreed upon one year ago, the Commission is not convinced that the economy or business conditions have changed enough to warrant such a dramatic decrease in the ROE.

While the Commission agrees with LG&E that other commissions' ROE awards should not necessarily determine the ROE awarded in this case, such awards do indicate a reasonableness measure for a company's allowed ROE. Furthermore, the Commission takes note that 10.5 percent was determined to be a reasonable ROE one year ago in LG&E's most recent general rate case. Although we realize that conditions today are not totally identical to conditions that existed in June 2004, the Commission, based on the ROE evidence presented in this proceeding, concludes that a range of 10.0 to 11.0 percent, with a midpoint of 10.5 percent, continues to be a reasonable ROE for LG&E.

[42] Case No. 2003-00433, June 30, 2004 Order, Appendix C, Article III, Section 3.1.

Summary

Applying the rates of 3.92 percent for long-term debt, 1.90 percent for short-term debt, 3.30 percent for preferred stock, and 10.50 percent for common equity to the capital structure produces an overall rate of return on capital of 7.06 percent.

LG&E has noted the need to recognize a "gross up" of the cost rates for its preferred stock and common equity to reflect the effects of income taxes. KIUC and LG&E agreed that the gross up factor needed to reflect the impact of the new Internal Revenue Code Section 199 Domestic Manufacturing Deduction and the reduction in the Kentucky corporate income tax rate.[43] LG&E recalculated the gross up factor to reflect these tax changes, resulting in a gross up factor of 61.5558 percent.[44]

Applying this gross up factor to the weighted average costs of preferred stock and common equity results in an overall rate of return on capital of 10.39 percent. The Commission finds this is the reasonable rate of return for LG&E's entire environmental compliance Rate Base as of the date of this Order.

SURCHARGE ALLOCATION

LG&E proposed to use total revenue to allocate the revenue requirement associated with its proposed projects, which would result in all retail customer classes receiving equal percentage increases in the environmental surcharge components of their electric bills. The total revenue method has been used to allocate the approved environmental revenue requirement in all prior LG&E environmental surcharge cases.

[43] House Bill 272, 2005 Regular Session of the Kentucky General Assembly.

[44] Scott Rebuttal Testimony at 2 and Exhibit VLS-1.

Although KIUC made no specific allocation proposal in this proceeding, in Case No. 2004-00426 involving LG&E's sister company, KU, it proposed an alternative allocation method using total revenue net of fuel revenue. Although KIUC favors LG&E using the "net revenue" approach, because the cost of LG&E's projects is much less than the cost of KU's projects, KIUC stated that the issue of an appropriate allocation method is not as important in this case as it is in the KU case.

Nevertheless, the Commission takes notice of the positions of the parties on this issue in the KU case. For the same reasons expressed in our decision order in the KU case, Case No. 2004-00426, we find that KIUC's allocation proposal is inappropriate and that the total revenue allocation method proposed by LG&E should be used to allocate its environmental revenue requirement.

IT IS THEREFORE ORDERED that:

1. LG&E's 2005 Plan consisting of seven additional capital projects to meet federal, state, and local environmental regulations is approved.

2. LG&E's proposed ECR tariff is approved and shall be effective for service rendered on or after July 1, 2005.

3. LG&E's rate of return on the 2001, 2003, and 2005 Plan capital expenditures, reflecting the gross up for income taxes, shall be 10.39 percent. The true-up process for the cost of debt shall be the same as authorized in Case No. 2000-00386.

4. LG&E's SO_2 emission allowance inventory included in the environmental surcharge Rate Base shall include only those allowances assigned to generating units producing electricity from the burning of coal.

5. The sale to KU of SO_2 emission allowances shall be at LG&E's weighted average cost of its SO_2 emission allowances. The purchase from KU of SO_2 emission allowances shall be at KU's weighted average cost of KU's SO_2 emission allowances.

6. LG&E shall continue to use total revenues as the basis for allocating the environmental revenue requirement.

7. The monthly surcharge reporting formats proposed by LG&E are approved, with the modification of including the unamortized balance of the deferred ash transfer cost in the Rate Base and the associated amortization expense as an operating expense. Previous reporting formats shall no longer be submitted.

8. Within 10 days of the date of this Order, LG&E shall file with the Commission revised tariff sheets setting out the ECR tariff approved in this Order.

Done at Frankfort, Kentucky, this 20th day of June, 2005.

By the Commission

ATTEST:

Executive Director