COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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

O R D E R

On July 1, 1988, the Commission entered an Order approving new gas and electric rates for Louisville Gas and Electric Company ("LG&E"). Petitions for rehearing were subsequently filed and rehearing was granted on limited issues by Order entered August 10, 1988. The rehearing issues now pending include the retirements of sulfur dioxide removal systems ("SDRS") and gas plant, year-end volumes of business, other interest expense, rate of return, gas revenue allocation, forfeited discounts, gas customer charge, and adjusting revenue requirements to reflect the exclusion of 25 percent of Trimble County construction work in progress ("CWIP"). With respect to this last issue, rehearing was granted only to preserve this issue in the event the Commission ultimately modified its decision in Case No. 9934.[1] Based on today's Order in Case No. 9934, which substantially affirms the original decision in that case, no further consideration of this issue is warranted. The remaining issues on rehearing are discussed in the following sections of this Order.

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[1] Case No. 9934, A Formal Review of the Current Status of Trimble County Unit No. 1.

Public hearings were held on September 20, 21, 22 and 26, 1988 at the Commission's offices in Frankfort, Kentucky. Briefs have been filed and all information requested at the hearing has been provided.

Retirements of SDRS and Gas Plant

LG&E argues in its application for rehearing that because no notice was given, capital would be reduced to reflect the extraordinary property loss adjustments and since no return was allowed on the retired utility plant, the resulting lower return was confiscatory and unlawful. In its brief on rehearing, LG&E argues three specific points: the determination of extraordinary retirement is not supported by the evidence of record or generally accepted accounting principles ("GAAP") and is therefore erroneous; the adjustment to its capital structure violates the prudent investor standard and is therefore confiscatory; and, the Commission should provide for shorter amortization periods if the retirements are extraordinary.

In the July 1, 1988 Order, the Commission determined that the early retirement of certain SDRS and the abandonment of the underground gas storage fields ("gas plant") should have been treated as extraordinary property losses. The Commission instructed LG&E to establish deferred asset accounts and begin an amortization of those assets. The Commission also reduced LG&E's rate base and capital to properly reflect the retirements and abandonments as extraordinary property losses for rate-making purposes. Thus, LG&E would be allowed to recover the total costs of the utility

plant no longer in service, but would not be allowed to earn a return on the plant retirements and abandonments.

LG&E claims that the extraordinary retirement determination is not supported by the evidence of record or GAAP and is therefore erroneous. LG&E has offered several arguments in support of its position. First, the Uniform System of Accounts ("USoA") is based on group or composite depreciation accounting. Since this accounting method does not recognize gains or losses at the time of retirement, and LG&E uses this methodology, no losses existed when the retirements and abandonments occurred. Second, the retirements and abandonments were not material to the dollar value of the gross plant and corresponding accumulated provision for depreciation. Third, the Commission found Accounting Principles Board ("APB") Opinion No. 30 to be a guiding authority, the "chosen standard" on the issue of extraordinary retirements. Finally, LG&E believes the retirements and abandonments in question should be considered ordinary in nature because the National Association of Regulatory Utility Commissioners ("NARUC") Public Utilities Depreciation Practices Manual, states that:

> [E]arly retirements brought about by technological and social changes should properly be considered in depreciation accruals and should not be considered extraordinary retirements.[2]

An examination of these arguments clearly indicates that they are flawed and unpersuasive. LG&E's witness, Jay Price, supports

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2 LG&E Brief on Rehearing filed November 9, 1988, page 12.

the assertion that the USoA is based on group or composite depreciation accounting primarily on a statement in the description of Account No. 108, Accumulated Provision for Depreciation of Electric Utility Plant. That description states:

> [F]or general ledger and balance sheet purposes, this account shall be regarded and treated as a single composite provision for depreciation.[3]

A "composite provision for depreciation" does not mandate the use of composite depreciation accounting. This reference merely indicates that Account No. 108 is representative of the total depreciation accruals associated with utility plant in service. The continuation of the sentence referred to by Mr. Price indicates that subsidiary records should be maintained to segregate the accumulated depreciation contained in Account No. 108 into various related plant categories. This section of the USoA is not intended to prescribe how depreciation accruals should be determined. It neither requires nor prohibits the use of composite depreciation accounting methodology. Therefore, Mr. Price's reference is used in an inappropriate context. The USoA does not state which accounting methodologies are to be used in determining depreciation accruals. For example, the accounting treatment outlined in the USoA for ordinary retirements, while similar to the composite method, does not <u>require</u> composite depreciation accounting.

Mr. Price defines materiality as the relationship between the accumulated depreciation provision and the gross plant. In his

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3 Price Prepared Rehearing Testimony, page 10.

prepared testimony, he included a calculation of the accumulated depreciation as a percentage of gross plant for the steam production plant and the underground gas storage plant.[4] For the steam production plant, Mr. Price states that the percentages are within the "range of reasonableness" for the functional group and consistent with industry averages. Yet, Mr. Price has not defined this "range of reasonableness" or provided the industry averages for the functional group for comparison. Mr. Price's calculations for the underground gas storage plant show a 32 percentage point drop in the reserve percentage in the year of the gas plant abandonment. However, he does not find the drop to be of concern. Mr. Price notes that the reserve ratio is on the increase. The fact that this ratio drop does not concern Mr. Price is inconsistent with LG&E's actions taken at the time of the abandonment of the gas storage plant, which was to increase the depreciation rate. An increase to the depreciation rate would indicate a concern for the level of this ratio. The USoA defines the materiality standard for extraordinary items as ". . . an item should be more than approximately 5 percent of income, computed before extraordinary items."[5] This definition does not state whether the tax effect should be reflected in this calculation. However, if the tax effect is to be reflected, it would have to include the applicable deferred taxes as an offset to any tax expense determined.

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4 Ibid., pages 15-16.

5 USoA, Electric and Gas General Instructions, Item No. 7.

The Commission takes strong exception to LG&E's characterization that APB Opinion No. 30 was the guiding authority or "chosen standard" the Commission used in determining that the retirements and abandonments were extraordinary. In the July 1, 1988 Order, the Commission explicitly stated on page 17: "These restrictions [the USoA definition of extraordinary] are similar to those prescribed by GAAP." The Order then repeated APB Opinion No. 30's definition of extraordinary. APB Opinion No. 30 was referenced for comparison purposes only. The Commission is required by KRS 278.220 to utilize a USoA which conforms as nearly as practicable to the system adopted or approved by the Federal Energy Regulatory Commission. It is the Commission's adopted USoA for Class A and B Electric Utilities which is the guiding authority.

A standard of GAAP provides some needed clarification to the issue of accounting for extraordinary property loss. In the Statement of Financial Accounting Standards ("SFAS") No. 71, Accounting for the Effects of Certain Types of Regulation, the relationship of regulatory-prescribed accounting to GAAP is addressed. Paragraph 55 of SFAS No. 71 states, in part,

> This Statement [SFAS No. 71] does not address an enterprise's regulatory accounting. Regulators may require regulated enterprises to maintain their accounts in a form that permits the regulator to obtain the information needed for regulatory purposes. This Statement neither limits a regulator's actions nor endorses them. Regulators' actions are based on many considerations. Accounting addresses the effects of those actions.

The Commission finds this last sentence of SFAS No. 71 places most of LG&E's arguments in the proper perspective. The accounting treatment does not dictate the decision in a regulatory proceeding

such as this rate case. Contrary to LG&E's arguments that GAAP or composite asset depreciation accounting determine the Commission's rate-making decision on extraordinary property losses, the accounting treatment is dictated by the Commission's decision. The accounting treatment must address the effects of the rate-making decisions.

By its reliance on the NARUC Depreciation Manual, LG&E is now saying that the retirements and abandonments were the result of "technological and social changes." However, this position on rehearing is inconsistent with its prior position. Regarding the SDRS retirements, LG&E had stated in early 1988 that:

> [T]echnological improvements were not reasons for early retirement. . . the scrubbers [SDRS], installed at various times during the past decade, have experienced considerable downtime in recent years because of recurring abrasion and corrosion problems.[6]

And with respect to the gas plant, LG&E has stated only that the abandonment was based on the recommendations of an outside consultant.[7] LG&E has submitted no evidence to support its present claim that the abandonment was the result of either technological or social changes.

LG&E further argues that, even if the retirements are extraordinary, the adjustment of its capital structure violates the prudent investor standard and is therefore confiscatory. LG&E

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6 Response to the Commission's Order dated January 15, 1988, Item No. 69(e).

7 Response to Kentucky Industrial Utility Customers' ("KIUC") Second Data Request filed February 1, 1988, Item No. 16.

claims that the denial of the opportunity to earn a return on prudently invested capital has created an imbalance between its stockholders and ratepayers.

LG&E questions why its capital structure should be adjusted for rate-making purposes when the adjusting entries for the retirements and abandonments affect the rate base calculation. As LG&E correctly notes, its revenue requirements in this rate case were determined by applying rate of return to its adjusted capital structure. And as the Commission found in the July 1, 1988 Order, LG&E should not be allowed to earn a return on utility plant no longer in service. Since the revenue requirements were determined from the capital structure, and not rate base, the concurrent adjustment to the capital structure was essential to insure that LG&E's ratepayers are not being forced to pay a return on plant that provides them no service.

LG&E notes in its brief on rehearing that:

> . . . some commissions have allowed the utility to earn a return or carrying charge on the unamortized balance of a retirement loss where the property, as here, was used and useful and benefited the ratepayers but did not last its expected life.[8]

LG&E has cited several cases to support this proposition. The Commission's review of decisions from other jurisdictions indicates that the rate treatment afforded plant retirements and abandonments is not uniform but appears to vary with the facts and circumstances of each case. As noted in one of the cases cited by LG&E:

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8 LG&E's Brief on Rehearing filed November 9, 1988, page 23.

> Regulatory authorities are not in agreement as to the treatment to be accorded property losses caused by what is termed "obsolence" brought about by the retirement of property before the investment therein has been fully recouped. . . . Some commissions have adopted. . . the elimination of the losses from the rate base and the disallowance of any carrying charges on the unrecovered balance.[9]

The Commission is also concerned that the interests of LG&E's stockholders and ratepayers be properly balanced. The Commission takes notice of two cases which it believes properly address this concern. The North Carolina Utilities Commission has held that certain abandonment losses should be excluded from rate base and the utility not be allowed a return on the unamortized balance, concluding that,

> [T]his treatment provides the most equitable allocation of the loss between the utility and the consumer. It would be inequitable to place the entire loss of expenditures that were prudent when made on the utility. Thus, amortization should be allowed. However, on the other hand, the ratepayer must not bear the entire risk of the company's investment. A middle ground must be found on which the company bears some of the risk of abandonment and the ratepayer is protected from unreasonably high rates.[10]

Similarly, the Massachusetts Department of Public Utilities, in a case involving the retirement of a scrubber, has found that:

> The company is not entitled to earn a return on this item, which has been completely retired and was not used or useful at any time during the test year. At the same time, the stockholders alone should not be required to absorb the loss. The investment was a management decision which cannot reasonably be called an imprudent

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9 Consolidated Edison Co. of New York, 56 PUR3d 337, 374 (N.Y.P.S.C. 1964).

10 Carolina Power and Light Company, 55 PUR4th 582, 601 (1983).

> expenditure. It was simply a project that did not mature as expected.
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> It is ordered that the item be deducted from the rate base, but that it be amortized at the same rate as the overall rate of return granted herein until it is fully written off. In that way the ratepayers will properly bear their share of the investment, but will be paying no return on it and will be paying for it over a limited period.
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> The stockholders are also bearing a part of the burden of the investment. They are being required to forego a return. [citation omitted.][11]

The Commission finds that the interest of LG&E's stockholders and ratepayers should be balanced to the extent possible. The rates established in this case must be fair, just, and reasonable to both groups. While the prudent investor standard bears consideration, its adoption by the Commission is not constitutionally mandated. As the United States Supreme Court recently said in discussing the prudent investor rule,

> The designation of a single theory of rate making as a constitutional requirement would unnecessarily foreclose alternatives which could benefit both consumers and investors. The Constitution within broad limits leaves the States free to decide what rate-setting methodology best meets their needs in balancing the interests of the utility and the public.

Duquesne Light Co. v. Barasch, 488 U.S. ___, 120 L.Ed. 646 (1989). The prudent investor rule is only one factor to be considered in meeting the statutory requirement for fair, just, and reasonable rates.

Finally, LG&E argues that if the retirements are extraordinary, then the Commission should provide for shorter amortization

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[11] Boston Edison Company, 16 PUR4th 1, 6-7 (Mass. D.P.U. 1976).

periods. LG&E bases this argument on the statements of Mr. Price concerning his experience with other commissions and the examples offered by Lane Kollen, witness for KIUC. LG&E proposes that the appropriate amortization period is 3 to 5 years. The Commission's original decision was to utilize 18- and 19-year amortization periods for the gas and electric extraordinary property losses.

The Commission is concerned with LG&E's proposal, set forth in its brief on rehearing, that the amortization period should be 3 to 5 years. Mr. Price made no recommendation on an amortization period in his testimony. As quoted on page 25 of LG&E's brief on rehearing, Mr. Price stated his experience was that extraordinary property losses are usually amortized over 5 or 10 years. The July 1, 1988 Order stated on page 15 that LG&E could not cite a publication or pronouncement which established that 3 to 5 years was the normal amortization period for extraordinary losses. Furthermore, as noted on page 20 of the Order, LG&E's witness testified that the use of a 5-year amortization period would generate a revenue requirement higher than that generated using LG&E's original accounting and rate-making approach for the retirements and abandonments. The Commission also notes that in its original brief in this proceeding, LG&E requested a 5-year amortization period, not a range of 3 to 5 years.

In the July 1, 1988 Order, the Commission considered the undepreciated balance of the assets retired, the impact on operating expenses, and the ultimate effect on the ratepayers and stockholders in determining a proper amortization period. Based on a review of the evidence on rehearing, the Commission finds that

justification has been shown to utilize an amortization period that is shorter than the remaining service life. The remaining service lives, 18 and 19 years respectively for the gas and electric property, are almost 50 percent of the original service lives. Requiring LG&E stockholders to await such a lengthy period of time to recover their investment, with no return being allowed on the investment, is not reasonable under the circumstances of this case. Considering LG&E's arguments that such losses should be amortized over 5-10 years, as well as the examples cited in KIUC's testimony, the Commission finds that an amortization period of 10 years is reasonable. A 10-year amortization period produces a reasonable balance between the shareholders' recovery of the investment and the ratepayers' payment for investments in utility plant that are no longer providing utility service. In using a 10-year amortization period rather than the remaining service life, LG&E will be recovering the SDRS and gas plant capitalization costs more rapidly than it would have using the remaining service life. In accordance with the decision to use a 10-year amortization, the Commission has increased the annual amortization expense for the electric extraordinary property losses from $849,592 to $1,614,225 and the gas extraordinary property losses annual amortization expense from $220,318 to $396,572. These increases have been included in the revised revenue requirements determined herein.

During the rehearing proceedings, a side issue has developed over the reference in the July 1, 1988 Order to Account No. 182, Extraordinary Property Losses. The Commission has reviewed this

matter and determined that the account number is incorrect. The account intended to be referenced in that Order was Account No. 182.1, Extraordinary Property Losses. The Commission finds that all references to Account No. 182 in the July 1, 1988 Order should be changed to Account No. 182.1.

Therefore, except for the revision to Account No. 182 and the utilization of a 10-year amortization for the extraordinary property losses, it is the opinion of the Commission that the requirement of extraordinary property loss treatment for the losses experienced with the early retirement of the SDRS and the abandonment of the gas plant should not be changed.

Adjustment to Annualize Year-End Electric Volumes of Business

LG&E was granted rehearing on the Year-End Volumes of Business Adjustment. LG&E maintained that the Commission overlooked the effect of the revenue requirement reduction ordered by the Commission in Case No. 9781,[12] effective July 2, 1987 and the revenue change for transfers between rate schedules. As set out in LG&E's application for rehearing, the effect of these items would increase the adjusted operating ratio from 39.84 percent to 41.57 percent and increase pro forma electric operating and maintenance expenses by $62,757.

In its Order of July 1, 1988, the Commission stated that the approach used by LG&E to determine the expense portion of this

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12 Case No. 9781, Effects of the Federal Tax Reform Act of 1986 on the Rates of Louisville Gas and Electric Company - Electric.

adjustment did not provide an accurate determination of the level of expenses associated with serving additional customers and that it would be more appropriate to use an adjusted operating ratio. The Commission determined the adjusted ratio using actual test-year revenues adjusted for sales to other utilities and actual test-year operation and maintenance expenses adjusted for wages and salaries. This ratio was then applied to the annualized revenue associated with serving additional customers to determine the expense portion of this adjustment.

In his prepared rehearing testimony, John Hart, Jr. stated that LG&E did not challenge the Commission's methodology of using an adjusted operating ratio, but believes the Commission made an error by its failure to recognize the revenue changes in the calculation of the ratio used to determine the expense adjustment. Mr. Hart notes that by failing to adjust revenues by the $19,660,352 for the unreflected portion of the rate reduction ordered in Case No. 9781 and by $1,838 to reflect the transfers between rate schedules, the Commission has overstated the revenues used in calculating the adjusted operating ratio. At the public hearing, Mr. Hart indicated that the rate reduction should be reflected in order to get a realistic relationship between revenues and expenses.

The Commission finds that LG&E's position is correct and that the $19,660,352 unreflected portion of the rate reduction ordered in Case No. 9781 should be considered in the determination of the adjusted operating ratio. Case No. 9781 was established for the sole purpose of passing the tax savings from the Tax Reform Act of

1986 ("Tax Reform Act") to the ratepayers. In its final Order in that proceeding, the Commission stated that, consistent with the objectives of the Order of December 11, 1986 establishing that case, the reduction in revenues should flow the savings associated with the Tax Reform Act to LG&E's ratepayers while having a neutral impact on LG&E's earnings. It is therefore reasonable to reflect this reduction in the determination of the adjusted operating ratio since it was the Commission's intention to reduce revenues to reflect only the change in LG&E's tax expense.

The adjusted operating ratio resulting from the recognition of the $19,660,352 reduction in revenues is 41.57 and the increase in LG&E's electric operating and maintenance expenses is $62,757 as calculated by Mr. Hart.

Other Interest Expense

LG&E was also granted rehearing on the issue of other interest expense. LG&E asserted in its application for rehearing that the Commission's computation was correct for determining the interest expense for long-term debt and trust demand notes; however, the calculation denied recovery of interest expense attributable to items other than long-term debt and trust demand notes.

In his prepared rehearing testimony, M. Lee Fowler of LG&E stated that other interest expense was included in LG&E's calculation of interest expense and that LG&E was entitled to recovery of this item. In addition, Mr. Fowler discussed the benefits LG&E's customers receive from the funds associated with each item and discussed their recurring nature. As shown in Fowler Rehearing

Exhibit 1, other interest expense is comprised of the following items:

Interest on Customer Deposits	$104,441
Interest on Federal Income Tax Deficiencies	384,831
Interest on Other Tax Deficiencies	2,537
Interest on Gas Refunds	6,095
Interest on Deferred Compensation	7,860
TOTAL OTHER INTEREST EXPENSE	$505,764

Mr. Fowler proposed two methods of incorporating the other interest expense in LG&E's rates. One method would be to include the $505,764 interest with the interest for long-term debt. This would result in a debt cost rate of 7.71 percent rather than the 7.62 percent used by the Commission and would produce a revenue requirement $553,036 greater than that allowed by the Commission. The alternate method would be to make a cost-of-service adjustment of $505,764.

In the prepared rehearing testimony, LG&E indicated that this interest expense was ongoing and recurring at the test-year level and further argued that the interest should be recovered from the ratepayers because it was incurred for their benefit.

LG&E indicated that customer deposits benefit the consumers as a financing mechanism analogous to permanent debt financing and as an item which improves its bad debt experience. However, LG&E ignored its own tariffs which state that deposits may be required to insure payment of bills indicating that deposits are not required from all customers. LG&E also failed to consider the effect that its collection policies or other economic factors may

have upon its bad debt experience. In addition, LG&E provided no evidence in this proceeding which demonstrated the degree to which its bad debt experience had been improved as a result of customer deposits.

With reference to the tax deficiencies, LG&E argues that the customers benefit from reduced cost of service and improved cash flow as a result of attempts to reduce tax liabilities. LG&E also states that to disallow the recovery of interest associated with these items would only serve to encourage overpayment of estimated federal taxes. LG&E should be aware that the Commission encourages neither overpayment nor underpayment of taxes. The Commission encourages utilities to minimize operating expenses and to make reasonable effort to improve cash flow. However, the extent to which the amounts provided by the customers for LG&E's tax expense differs from LG&E's actual tax payments is affected by LG&E's tax policies and by tax laws. Interest and/or penalties arising from these underpayments and deficiencies in tax payments should not be recovered from the customers who have already provided a reasonable level of funds to meet LG&E's tax expense.

LG&E argued that it is required to pay interest on gas refunds and that the customer benefits through lower rates. LG&E agreed that the purpose of the payment of interest on these refunds was to reimburse the customers for the use of their funds as a result of overpayment of gas bills during the period the funds were retained by the company. LG&E also agreed that to include this interest in rates would result in the customer paying interest to himself but argued that this was always the case.

However, if this proposal was accepted, the expense would offset the interest being returned to the customer and would not result in the intended reimbursement.

LG&E also argued that the consumer benefits from LG&E's deferred compensation plan through LG&E's ability to retain and motivate employees to achieve the greatest efficiency in operations. The Commission allows LG&E to recover through rates reasonable wages, salaries, and fringe benefits. The extent that the wage and salary payments may be lower due to items such as deferred compensation, has not been demonstrated and the interest on deferred compensation should not be charged to ratepayers. Moreover, many deferred compensation plans require that such funds be invested. The investment of these funds would foreclose their use for other purposes and would have provided a source of interest income.

LG&E appears to believe that the funds associated with the other interest are an additional source of funding rate base and operations, that this availability solely benefits the ratepayers, and therefore should be recovered from LG&E's ratepayers. As LG&E indicated, these funds may allow for short-term improvements in cash flow; however, this is of benefit to both the customers and shareholders. The use of these funds may allow LG&E to maintain a higher level of income-producing investments than it would be able to maintain if these funds were not available. Such funds may also allow LG&E to reduce its liabilities without reducing those investments.

LG&E did not propose to include any income below the line in the determination of revenue requirements. Interest expense and interest income are "below the line" items and are included in neither operating income nor operating expenses. In its determination of net operating income found reasonable, the Commission provides revenues to cover the cost of debt included in LG&E's capital and supporting rate base. Traditionally, the Commission uses the end-of-test-year capital structure. In this proceeding, the Commission adopted adjustments to end-of-test-year capital and capital ratios proposed by LG&E. The Commission further adjusted capital to reflect the effect of the extraordinary property loss treatment of the SDRS and Gas Storage Field retirements. In this proceeding, the net income found reasonable for LG&E was determined to be $132,346,683. This amount includes $46,823,683 for the debt portion of LG&E's capital. That amount was the result of applying the debt cost rate, proposed by LG&E, of 7.62 percent to the $614,484,032 adjusted debt capital. In addition, the Commission included an adjustment to income tax to reflect the tax effect of interest expense associated with LG&E's capital. The results of both calculations reflect the use of the adjusted debt capital and the 7.62 percent embedded cost of debt originally proposed by LG&E.

LG&E now argues that the total debt capital rate should be 7.71 percent which would require an increase of $553,036 in the revenue provided to cover the cost of debt, or that the Commission should make a cost-of-service adjustment of $505,764 to cover the other interest expense excluded by the Commission. At the hear-

ing, LG&E stated that its capital was lower than it would have been because the company had to borrow less due to the availability of the funds associated with this interest. LG&E could not identify which item of capital was lower, but assumed it was debt because of the short-term nature of these funds. However, in calculating the new 7.71 percent debt cost, LG&E included the other interest with the interest on the first-mortgage bonds, the long-term portion of debt, rather than with the interest on the short-term trust demand notes.

Based on all the evidence of record, the Commission finds that it is not appropriate to recover the other interest expense of $505,764 from LG&E's ratepayers. LG&E has not met its statutory burden of proof on this issue. This interest is not evidenced by either short-term or long-term debt and is not properly includable in LG&E's capitalization. The company is required to pay interest for the temporary retention of certain of these funds. In addition, the use of these funds may allow LG&E to earn additional income from investments which benefit the shareholders. Moreover, in its determination of revenue requirements, the Commission utilized the capitalization proposed by LG&E, adjusted for the extraordinary loss treatment previously discussed, and the embedded cost of debt also as proposed by LG&E. Therefore, the adjustment for other interest expense requested in LG&E's rehearing petition is denied.

After applying the combined state and federal income tax rate of 38.785 percent to the expense adjustments granted herein, the Commission finds that the combined operating income should be

decreased by $614,381 over that amount determined in the Commission's Order of July 1, 1988.

The adjusted net operating income determined herein is as follows:

	Gas	Electric	Total
Operating Revenues	$52,020,765	$460,363,195	$512,383,960
Operating Expenses	44,640,553	349,474,361	394,114,914
ADJUSTED NET OPERATING INCOME	$ 7,380,212	$110,888,834	$118,269,046

Net Original Cost

As a result of the increase in electric operating and maintenance expenses, the amount of cash working capital included in the net original cost rate base has been increased by $7,845.

The net original cost rate base devoted to electric and gas operations is now determined by the Commission to be as follows:

	Gas	Electric	Total
Net Original Cost Rate Base	$131,334,032	$1,195,112,228	$1,326,446,260

Rate of Return

On rehearing LG&E requested that the Commission reconsider the allowed rate of return on equity ("ROE") of 12.75 percent granted in the Commission's July 1, 1988 Order. Charles A. Markel, vice president and treasurer of LG&E, recommended that "at the very least the Commission should set the allowed return on

equity no lower than the upper end of the range found reasonable" in that Order, 13.25 percent.[13] Mr. Markel's recommendation was based on his opinion that the July 1 Order disallowing for retail rate-making 25 percent of Trimble County Unit 1 ("Trimble County") increased the investor's perception of risk and thus the required ROE. Mr. Markel testified that this increase in risk was perceived from his conversations with rating agencies which have expressed concern over the effect this Order would have on LG&E, and by the 5.5 percent decline in LG&E's stock price from July 1 to August 5, 1988. Duff and Phelps, Inc., a financial rating agency, lowered its rating of LG&E stock from a "2" to a "3" and expressed concern that the Commission may require a refund of a large proportion of the $22 million of rate relief granted.[14] Mr. Markel also testified that LG&E's stock price declined by 5.5 percent between July 1 and August 5, 1988, while the New York Stock Exchange ("NYSE") Utility Index and the Standard & Poor's 500 Index ("S&P's 500") declined only .6 percent and .2 percent, respectively. Mr. Markel used these numbers to calculate a "net" decline in prices of 4.9 percent and 5.3 percent, respectively, to "be applied to the allowed rate of return, 12.75 percent, to determine the higher return required by investors."[15] This resulted in an estimated return of 13.41 percent using the NYSE

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13 Markel Rehearing Testimony, page 9.

14 Ibid., pages 6-7.

15 Ibid., page 9.

Utility Index, and 13.46 percent using S&P's 500 Index, with a recommendation of at least 13.25 percent.

Carl G.K. Weaver, economist and principal with M.S. Gerber and Associates, testified for the Attorney General that the 12.75 percent ROE granted by the Commission was more than fair and generous. Mr. Weaver affirmed his original recommendation for a return in the range of 11.5 to 12.5 percent. He applied the discounted cash flow ("DCF") model to LG&E and the same four comparable companies used in his direct testimony.[16] Utilizing an 8.3 percent dividend yield and growth rates of both 3 percent and 4 percent resulted in a range of 11.5 to 12.6 percent ROE. Mr. Weaver also criticized Mr. Markel's use of the NYSE Utility Index, because many of the companies included in that index are not comparable with LG&E, and the S&P's 500 Index because it is not representative of the events occurring in the utility industry.[17] Further, Mr. Weaver contends that Mr. Markel's selection of an arbitrary period from July 1 to August 5 uses spot data and is biased, and that there is no theoretical basis for the model Mr. Markel used in determining ROE.[18]

David H. Kinloch, witness for the Utility Rate Cutters of Kentucky, Inc. and the Louisville Paddlewheel Alliance, Inc.,

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16 Weaver Rehearing Testimony, page 5.

17 Ibid., pages 14-15.

18 Ibid., pages 15-16.

testified in response to Mr. Markel's "assertion that investors have reacted negatively to the Commission's Order removing 25 percent of the burden of the unneeded Trimble County Plant from the ratepayers" and recommended no change to ROE.[19] Mr. Kinloch contends that the Commission's Order has simply eliminated the uncertainty of how Trimble County will be treated from a rate-making standpoint and that it is LG&E's decision to either finish or cancel the plant. Further, Mr. Kinloch contends that any negative reaction by investors to the Commission's Order "was very minor and short lived" and that over the past 2 months, LG&E's stock performance has been almost identical to that of other utilities listed on the NYSE.[20]

LG&E has asked the Commission to reconsider and grant an increase in ROE because LG&E perceives increased risks to investors. In evaluating the testimony, the Commission finds that the evidence does not justify an increase in ROE. There are several reasons why the Commission is not convinced that the decline in LG&E's stock price between July 1 and August 5, 1988 is an adequate indication of greater risk. First, the Commission believes it is very difficult to associate any one cause to a change in a company's stock price and almost impossible to do so over a 35-day period as suggested by Mr. Markel. Assuming a relatively efficient market, it would seem more appropriate to

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[19] Kinloch Rehearing Testimony, pages 1 and 9.

[20] Ibid., pages 8-9.

look at the stock's closing price on the next trading day after the Commission's Order. The evidence demonstrates that there was no price change on the first trading day following the Commission's Order.[21] Second, by the time of the rehearing, LG&E's stock price had completely recovered all of its previous decline. The Commission further notes that LG&E's stock has continued to trade within the band of $30.125 to $35.625, which has existed unchanged over a 52-week period both before and after the Commission's Order. This represents approximately a plus/minus 16.8 percent average fluctuation between the 52-week high/low and low/high stock prices.[22] Further, considering the overall volatility of both stocks and interest rates over the past year, the Commission does not believe that the degree of fluctuation in LG&E's stock price is either unreasonable or unusual. Finally, when LG&E's stock price performance is compared with the nine benchmark utilities selected by LG&E's witness, Dr. Olson, the evidence shows that between July 1 and the rehearing date LG&E's stock outperformed all but two of the nine utilities.[23]

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21 Since July 1 was a Friday and the market was closed Monday for the July 4 holiday, there were 4 days between the Commission's Order and the next trading day of July 5 for investors to absorb all relevant information pertaining to the Order.

22 $35.625 - 30.125 = $5.50

($5.50/30.125 + $5.50/35.625) /2 = 16.8 percent

23 Jefferson County, Cross-Examination, Exhibit No. 1

Therefore, based on a consideration of all of the evidence, the Commission is of the opinion and finds that an ROE in the range of 12.25 to 13.25 percent continues to be fair, just, and reasonable. An ROE in this range should allow LG&E to attract capital at a reasonable cost to ensure continued service and provide for any necessary expansion to meet future requirements, and also result in the lowest possible cost to ratepayers. A return on equity of 12.75 percent will best meet the above objectives.

Revenue Requirements

In its July 1, 1988 Order, the Commission determined that LG&E needed additional annual operating income of $13,463,256 to produce a rate of return of 12.75 percent on common equity. After provision for income taxes, LG&E was found to have an overall revenue deficiency of $21,993,394, which was the additional revenue granted. Based on the adjustments granted in this Order, LG&E needs additional annual operating revenue of $614,381 over the amount previously determined. After provision for state and federal income taxes, the overall revenue deficiency from the revenues previously granted is $1,003,645, which is the amount of additional revenue granted herein.

Based on the changes in net original cost rate base and the adjustments addressed in this Order, a breakdown between gas and electric operations of the required operating income and the increase in revenue allowed herein is as follows:

	Gas	Electric	Total
Net Operating Income Found Reasonable	$13,103,903	$119,242,780	$132,346,683
Adjusted Net Operating Income	7,380,212	110,888,834	118,269,046
Net Operating Income Deficiency	5,723,691	8,353,946	14,077,637
Additional Revenue Required	9,350,145	13,646,894	22,997,039
Revenue Granted in July 1, 1988 Order	9,174,017	12,819,377	21,993,394
Additional Revenue Required Herein	176,128	827,517	1,003,645

The additional revenue granted herein will provide the 9.98 percent rate of return on the net original cost rate base and the 9.94 percent overall return on total capitalization originally granted by the Commission in this proceeding.

The rates and charges set forth in Appendix A, are fair, just, and reasonable to be charged by LG&E for service rendered. The rates in Appendix A are designed to produce gross operating revenues, based on the adjusted test year of $645,801,380. These operating revenues include $470,382,524 in electric revenues and $175,418,856 in gas revenues.

Gas Revenue Increase Allocation

The Commission granted rehearing to the Attorney General ("AG") and the Kentucky Legal Services Programs, Inc. ("Residential Intervenors") on the issue of the allocation of additional gas revenues authorized by the July 1, 1988 Order. The AG has asserted that cost-of-service studies, which require

various subjective assumptions and methodology selections, should not be the sole basis for allocating an increase in required revenues.[24] Furthermore, the AG has contended that, given the limitations of a cost-of-service study, the class rates of return should be expressed as a range rather than a single number.[25]

The Residential Intervenors have similarly contended that, although cost-of-service studies represent an important tool for cost allocation and rate design, they are not infallible and are driven by their assumptions.[26] They have also expressed agreement with the AG that cost-of-service studies must be viewed as providing a range of information rather than a pinpoint calculation.[27]

KIUC has contended that ample evidence had been presented to support the Commission's approval and use of LG&E's cost-of-service study in this proceeding.[28] LG&E, which did not request rehearing on this issue, has stated that the intervenors have not shown through clear and convincing evidence that the determination of the Commission's July 1, 1988 Order to allocate the gas revenue increase was unreasonable or unfair.[29]

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24 Rehearing Brief of the Attorney General, page 5.

25 Ibid.

26 Rehearing Brief of Residential Intervenors, page 5.

27 Ibid., page 6.

28 Brief of KIUC on Rehearing, page 33.

29 LG&E's Brief on Rehearing, page 40.

Furthermore, LG&E has asserted that the rates approved in that Order provide a more equitable recovery of costs among all customer classes.[30]

After considering all the evidence in this case, the Commission remains convinced that the gas cost-of-service study filed by LG&E provides an adequate starting point for rate design and that the rates approved in its July 1, 1988 Order do not violate the principles of rate continuity and gradualism. The Commission, therefore, affirms its decision on the allocation of the gas revenue increase.

Although the Commission was not convinced by the evidence presented by the AG and Residential Intervenors that the gas revenue increase allocation was unreasonable, we do agree that cost-of-service studies are based on varying assumptions and methodologies. This condition was recently recognized in another case where the Commission found that,

> [The witness] has stated that, given the imprecise nature of cost-of-service studies, multiple methodologies should be utilized in order to develop a cost-of-service range. The Commission is of the opinion that a well documented and carefully separated multiple-methodology approach to cost-of-service studies will provide it additional information for rate design. Therefore, Columbia is encouraged to submit cost-of-service studies of this sort in future rate proceedings.[31]

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30 Ibid., page 41.

31 Case No. 10201, An Adjustment of Rates of Columbia Gas of Kentucky, Inc., Order dated October 21, 1988, page 54.

Similarly, the Commission encourages all interested parties in this proceeding to file, in future rate cases, well-documented and researched cost-of-service studies that reflect reasonable assumptions and allocation methodologies.

Gas Customer Charge

The Commission granted the AG rehearing on the gas residential customer charge. The AG argued that the increase from $2.91 to $4.55 for the customer charge was too high and violated the principles of rate gradualism, rate stability, and the avoidance of rate shock. LG&E's cost-of-service study in this case indicated that the residential customer charge should be $9.19, an increase of 215 percent, but LG&E requested the charge be increased only to $5.50, an increase of 89 percent. In the July 1, 1988 Order, the Commission, citing principles of rate continuity, authorized a residential gas customer charge of only $4.55, an increase of 56 percent.

The AG argues that low-volume gas customers will bear a disproportionate share of the increase in the customer charge while the high-volume gas users receive an unfair benefit. The AG further argues that this high fixed charge reduces the customer's ability to control his bill, and that this will reduce the customer's incentive to implement conservation efforts. The AG also cites recent Commission decisions in other gas rate cases where the residential customer charges were increased no more than 50 percent.

The Commission is very sensitive to the issue of affordability of gas and electric service. In particular, the Commission

well recognizes that there are many residential customers on low and fixed incomes who have great difficulty in paying their monthly utility bills. While the Commission firmly believes that utility rates should, over time, be moving to a full cost-of-service basis, the principles of rate gradualism and rate continuity must also be reflected. Implementing these important principles in this case, the Commission finds that it is reasonable and appropriate to limit the increase in residential customer charge to a maximum of 50 percent. The non-residential gas customer charge will also be adjusted to reflect the 50 percent maximum to maintain its historical two to one ratio with the residential customer charge. This limitation will reduce the monthly customer charge in Tariff G-1 from $4.55 to $4.35 for residential and $9.25 to $8.70 for non-residential. The Tariff G-1 distribution charge will, of necessity, be increased to offset the loss of revenue from this reduction in the customer charge.

Forfeited Discounts

The Commission granted rehearing to the Residential Intervenors on the issue of forfeited discounts. LG&E's tariffs have for many years included a prompt payment provision. The monthly bills are rendered at the approved rates plus an amount, for residential customers, of 5 percent. If the bill is paid within 15 days, the 5 percent is deducted. While these amounts are commonly referred to as late-payment penalties, they are accounted for under the USoA as forfeited discounts.

In 1987, LG&E received $2,358,017 in energy assistance payments on behalf of low-income customers. The Residential

Intervenors contend that the entire amount of these assistance payments was applied to the forfeited discounts, leaving nothing to be applied to the customers' bills for gas or electric consumption. Further, Residential Intervenors argued that 80 percent of all residential forfeited discounts were paid by low-income customers through energy assistance payments.

Robert F. Owens, witness for the Residential Intervenors, testified regarding the financial inability of many LG&E customers to pay their bills when due. One particular problem experienced by low-income utility customers is that to be eligible for energy assistance funds, they must first be sent a notice of termination for nonpayment. And to receive such a termination notice, their bills must remain unpaid long enough to have forfeited the 5 percent discount for prompt payment.

The Commission finds that there is insufficient evidence to demonstrate that all energy assistance payments are used to pay only forfeited discounts. The prompt payment provision in LG&E's tariffs operates as an incentive to encourage customers to timely pay their bills. Prompt payment of bills is essential to LG&E's cash flow. Approximately 90 percent of LG&E's customers pay their bills on time and thereby avoid forfeiting the discount. If the discount was eliminated, the rates for all residential customers would have to be increased by almost $3 million to offset the forfeited discount revenues. The Commission finds that it is fair and equitable for LG&E to continue its practice of collecting these revenues from those customers who created the cost by not pay their bills when due.

Revenue Allocation

In its consideration of the rehearing issues, the Commission has in this Order authorized LG&E additional electric and gas revenues. The electric revenue increase will be allocated to the rate classes in the same manner that was utilized in the July 1, 1988 Order. The increase to each class of electric service will be applied to the energy charge. The gas revenue increase will be collected from the distribution charge in the G-1 class.

IT IS THEREFORE ORDERED that:

1. The rates set forth in Appendix A, attached hereto and incorporated by reference, be and they hereby are approved for service rendered on and after the date of this Order.

2. Within 30 days from the date of this Order, LG&E shall file with the Commission its revised tariff sheets setting forth the rates approved herein.

Done at Frankfort, Kentucky, this 20th day of April, 1989.

PUBLIC SERVICE COMMISSION

Did not participate.
Chairman

Vice Chairman

Commissioner

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 10064 DATED 4/20/89

The following rates and charges are prescribed for the customers in the area served by Louisville Gas and Electric Company. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

ELECTRIC SERVICE

RESIDENTIAL RATE (RATE SCHEDULE R)

RATE:

Winter Rate: (Applicable during 8 monthly billing periods of October through May)

First 600 kilowatt-hours per month	6.034¢ per Kwh
Additional kilowatt-hours per month	4.729¢ per Kwh

Summer Rate: (Applicable during 4 monthly billing periods of June through September)

All kilowatt-hours per month 6.603¢ per Kwh

WATER HEATING RATE (RATE SCHEDULE WH)

RATE: 4.771¢ per kilowatt-hour.

GENERAL SERVICE RATE* (RATE SCHEDULE GS)

RATE:

Customer Charge:

Winter Rate: (Applicable during 8 monthly billing periods of October through May)

All kilowatt-hours per month 6.465¢ per Kwh

Summer Rate: (Applicable during 4 monthly billing periods of June through September)

All kilowatt-hours per month 7.243¢ per Kwh

SPECIAL RATE FOR ELECTRIC SPACE HEATING SERVICE
RATE SCHEDULE GS

RATE:

For all consumption recorded on the separate meter during the heating season the rate shall be 4.735¢ per kilowatt-hour.

LARGE COMMERCIAL RATE
(RATE SCHEDULE LC)

RATE:

Energy Charge:

All kilowatt-hours per month 3.281¢

LARGE COMMERCIAL TIME-OF-DAY RATE

RATE:

Energy Charge: 3.281¢ per Kwh

INDUSTRIAL POWER
(RATE SCHEDULE LP)

RATE:

Energy Charge:

All kilowatt-hours per month 2.840¢ per Kwh

INDUSTRIAL POWER TIME-OF-DAY RATE
(RATE SCHEDULE LP-TOD)

RATE:

Energy Charge: 2.840¢ per Kwh

OUTDOOR LIGHTING SERVICE
(RATE SCHEDULE OL)

RATES:

Overhead Service Mercury Vapor	Rate Per Light Per Month
100 watt*	$6.94
175 watt	7.92
250 watt	9.01
400 watt	11.06
400 watt floodlight	11.06
1000 watt	20.40
1000 watt floodlight	20.40
High Pressure Sodium Vapor	
250 watt	11.74
Underground Service **Mercury Vapor**	
100 Watt - Top Mounted	$12.02
175 Watt - Top Mounted	12.86

* Restricted to those units in service on 5-31-79.

PUBLIC STREET LIGHTING SERVICE
(RATE SCHEDULE PSL)

RATE:

TYPE OF UNIT

Overhead Service	Support	Rate Per Light Per Year
100 Watt Mercury Vapor (open bottom fixture)(1)	Wood Pole	$74.88
175 Watt Mercury Vapor	Wood Pole	88.29
250 Watt Mercury Vapor	Wood Pole	100.99
400 Watt Mercury Vapor	Wood Pole	121.72
400 Watt Mercury Vapor Floodlight	Wood Pole	121.72
Underground Service		
175 Watt Mercury Vapor	Metal Pole	180.74
250 Watt Mercury Vapor	Metal Pole	193.92

400 Watt Mercury Vapor	Metal Pole	229.14
400 Watt Mercury Vapor	Alum. Pole	229.14
400 Watt Mercury Vapor on State of KY Aluminum Pole		137.24
250 Watt High Pressure Sodium Vapor	Metal Pole	246.05
250 Watt high Pressure Sodium Vapor	Alum. Pole	246.05
1500 Lumen Incandescent (3)	8-1/2' Metal Pole	99.29
6000 Lumen Incandescent (3)	Metal Pole	132.14

(1) Restricted to those units in service on 5/31/79
(2) Restricted to those units in service on 1/19/77
(3) Restricted to those units in service on 3/1/67

TRAFFIC LIGHTING ENERGY RATE
(RATE SCHEDULE TLE)

RATE:

5.334¢ per kilowatt-hour

SPECIAL CONTRACT FOR ELECTRIC SERVICE
ARICO ALLOYS AND CARBIDE SPECIAL CONTRACT

Energy Charge
All KWH 2.011¢ per KWH

SPECIAL CONTRACT FOR ELECTRIC SERVICE
E. I. DUPONT DE NEMOURS SPECIAL CONTRACT

Energy Charge

2.134¢ per Kwh

SPECIAL CONTRACT FOR ELECTRIC SERVICE
FORT KNOX SPECIAL CONTRACT

Energy Charge: All Kwh per month 2.748¢ per Kwh

SPECIAL CONTRACT FOR ELECTRIC SERVICE
LOUISVILLE WATER COMPANY SPECIAL CONTRACT

Energy Charge

2.267¢ per Kwh

GAS SERVICES

GENERAL GAS RATE
G-1

RATE:

	RATE PER 100 CUBIC FEET	
	Customer Charge (Per Month)	Distribution Cost Component
Rate G-1		
Residential	$4.35	
Non-Residential	$8.70	
April Thru October		
First 1000 CCF/Month		$0.11025
Over 1000 CCF/Month		$0.06025
November Thru March		
All CCF		$0.11025

SUMMER AIR CONDITIONING SERVICE UNDER GAS RATE G-1

RATE:

The rate for "Summer Air Conditioning Consumption," as described in the manner hereinafter prescribed, shall be as follows:

Charge Per 100 Cubic Feet:

Distribution Cost Component 6.025¢ Per 100 Cubic Feet

GAS TRANSPORTATION SERVICE/STANDBY
RATE TS

RATE:

	RATE PER MCF
	Distribution Charge
Rate G-1	
April Thru October	
First 100 MCF/Month	$1.1025
Over 100 MCF/Month	$0.6025
November Thru March	
All CCF	$1.1025