

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC)
COMPANY FOR APPROVAL OF AN ALTERNATIVE) CASE NO. 98-426
METHOD OF REGULATION OF ITS RATES AND SERVICE)

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O R D E R

COMMENTARY

Louisville Gas and Electric Company (“LG&E”) is a privately owned electric and gas utility that generates, transmits, distributes, and sells electricity to approximately 356,000 consumers in Jefferson County and in portions of Bullitt, Hardin, Henry, Meade, Oldham, Shelby, Spencer, and Trimble counties.¹ LG&E is a wholly owned subsidiary of LG&E Energy Corporation, a non-utility holding company.

BACKGROUND

On July 14, 1997, LG&E and Kentucky Utilities Company (“KU”) filed a joint application for approval of a merger. As part of the application, docketed as Case No. 97-300,² LG&E committed to cap its base electric rates for five years from the date of the merger. In addition, it committed to share equally the net merger savings for the first five years between shareholders and the LG&E and KU ratepayers through the use of a monthly billing credit. Based on LG&E’s commitment to these ratepayer benefits, as well as the Commission’s determination that the transaction was in the public

¹ LG&E distributes and sells natural gas to approximately 284,000 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.

² Case No. 97-300, Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Approval of Merger.

interest, the transfer and change in control was approved by Order dated September 12, 1997 (“Merger Order”).

During the review and investigation of the merger application, some of the intervenors alleged that LG&E and KU were earning an excessive rate of return and that the appropriate solution was to give ratepayers a larger share of the merger savings. The Commission, however, found insufficient evidence in the record to support a finding at that time that earnings were excessive. The Commission did find that continued monitoring of LG&E’s and KU’s financial reports was appropriate, and that a rate investigation could be initiated “should circumstances warrant.”³

In approving the merger, the Commission also recognized that the electric utility industry is undergoing restructuring in many jurisdictions and competition is emerging in both wholesale and retail markets. To ensure that LG&E and KU were prepared to operate in this new environment, the Commission directed that after the merger each utility separately file detailed plans to either continue having its rates set on a rate of return basis, which considers operating and capital costs, or to adopt a non-traditional (or alternative) form of rate regulation, which considers factors other than, or in addition to, costs.

More specifically, the Merger Order stated:

If either utility elects to remain under traditional rate-of-return regulation, it should state the reasons and include an analysis and proposals relative to its earnings at that time. Alternatively, if either utility elects non-traditional regulation, the reasons for this choice should be disclosed, along with the details of a proposal and how it will achieve the Commission’s goals of providing incentives to utilities and a sharing of resulting benefits with ratepayers. The

³ Case No. 97-300, September 12, 1997 Order at 14.

Commission will then determine, based on all relevant financial information, as well as then current economic and regulatory conditions, whether changes should be made to the existing regulation of LG&E and KU.⁴

LG&E and KU were directed to file their respective detailed plans to address future regulation by September 14, 1998 or the consummation of the merger, whichever was later. Since the merger was consummated on May 4, 1998, the due date for filing the detailed plans was September 14, 1998.

CASE PROCEDURE

On August 14, 1998, LG&E filed a letter giving notice of its intent to file an application on or after September 14, 1998 for approval of an alternative form of rate regulation. LG&E subsequently filed a motion on August 31, 1998 requesting a four week extension of time, from September 14, 1998 to October 12, 1998, to file its application. By Order dated September 10, 1998 the Commission granted LG&E the four week filing extension.

LG&E then filed on October 12, 1998 its application for Commission approval of an alternative form of rate regulation. The alternative form proposed is commonly known as performance-based rate-making (“PBR”) and consisted of three targeted incentives tied to three specific operational areas.

The following parties requested and were granted full intervention: the Attorney General’s Office; Kentucky Industrial Utility Customers (“KIUC”); the International Brotherhood of Electrical Workers, Local 2100; Metro Human Needs Alliance, Inc. (“MHNA”) and People Organized and Working for Energy Reform “(POWER”); the

⁴ Id. at 35.

United States Department of Defense and other Federal Executive Agencies; the Kentucky Natural Resources and Environmental Protection Cabinet, through its Division of Energy; the city of Louisville; the Kentucky Association for Community Action, Inc. ("KACA"); Kentucky Resources Council, Inc. ("KRC"); Robert Madison; the Louisville and Jefferson County Metropolitan Sewer District ("MSD"),⁵ and Jefferson County, Kentucky.

LG&E requested that a series of informal conferences be held at the Commission's offices to discuss the issues raised in LG&E's application, as well as issues raised by intervenors. During the course of these conferences, opportunities were afforded for discovery. The first informal conference was held on November 4, 1998 for LG&E to make a presentation on the alternative rate-making plan proposed in its application. During the conference, intervenors alleged that LG&E's existing rates were excessive and should be reduced. Although LG&E did not agree that its existing rates were excessive, it did agree to discuss its recent level of earnings and what is a reasonable return on equity.

The next informal conference was held on November 20, 1998 to discuss generally the subject of alternative rate-making and specifically LG&E's earnings. Subsequent informal conferences were convened on December 17 and 18, 1998, to discuss the specific components of LG&E's alternative regulation plan and LG&E's earnings, and on January 28, 1999, to discuss the intervenors' alternative proposals to LG&E's application and the intervenors' positions on LG&E's earnings.

⁵ MSD's letter requesting to withdraw as an intervenor is granted herein.

At the request of LG&E and the intervenors, another conference was set for February 25, 1999 to discuss settlement of the issues in LG&E's application and the issue of LG&E's earnings. Two days before the conference, LG&E requested a two week delay. Since the parties were unable to mutually agree on a new date, the conference was cancelled.

On February 8, 1999, the Commission issued a procedural schedule to investigate LG&E's application. The schedule provided for discovery, intervenor testimony, and a hearing on June 15, 1999. LG&E subsequently filed on March 5, 1999 an Amended Application, supplementing its original application by proposing additional ratepayer benefits and protections. The most significant benefit was a five year schedule of bill reductions based on LG&E's analysis of its earnings and rate of return. By Order entered April 13, 1999, the Commission accepted for filing the Amended Application and allowed the proposed tariffs to become effective on July 2, 1999 subject to future change.

Apparently, the intervenors' inability to resolve with LG&E the issues raised concerning its level of earnings led KIUC to file a formal rate complaint on March 18, 1999. KIUC's complaint alleged that LG&E's electric rates were excessive; were no longer fair, just and reasonable; and should be reduced. The Commission found that KIUC had established a prima facie case and, due to common issues of fact raised in the rate complaint and LG&E's Amended Application, consolidated KIUC's rate complaint into this proceeding.

The procedural schedule was revised to allow all parties an opportunity to address the new issues raised by LG&E's Amended Application and KIUC's rate

complaint. Consolidated hearings were held on August 31, 1999 and September 1-3 and 7-8, 1999 for this case and the companion KU case. The parties have filed initial and reply briefs and this case now stands submitted for a decision.

ALTERNATIVE REGULATION

Alternative regulation is a tool used by regulators and utilities to create new behavioral and operational activities by the participating utility that emulate the actions of a firm in a competitive market. All of the major utility industries—telecommunications, electricity, natural gas, and water—have utilized some form of alternative regulation in one or more jurisdictions across the nation. Titles such as “price caps,” “performance based rates,” and “earnings sharing mechanisms” all describe distinct forms of alternative regulation that consider non-cost factors when establishing rates.

In a June 1998 report prepared for LG&E, Laurits R. Christensen Associates, Inc. developed a detailed outline of the most widely recognized forms of performance-based regulation or alternative regulation.⁶ The Christensen Report discusses the three major forms of alternative regulation: 1) rate and revenue indexes; 2) earnings sharing mechanisms; and 3) benchmarking. An appendix to the report provides an in-depth matrix of specific alternative regulation plans that fall within these three major forms of alternative regulation, with a further index by jurisdiction.

According to the Christensen Report, performance-based regulation can be implemented in the form of rate and revenue indexing (often referred to as “price caps” and “rate caps,” respectively), earnings sharing mechanisms, and benchmark

⁶ LG&E’s Response to Metro Human Needs Alliance Request for Information, dated December 15, 1998, Item A4 Attachment (“Christensen Report”).

regulation. Rate and revenue indexing, which have been accepted by regulators in this country and Great Britain, measure the “escalation in the company’s prices...by one or more actual price indexes.”⁷ The actual prices are limited by the growth in a “price cap index” that does not reflect company actions. The price cap index can be a measure of economy-wide inflation, a subindex of several economic inputs, or an index of prices charged by competing service providers. Rate and revenue indexing plans often include sharing mechanisms so the ratepayers will receive a portion of the benefits achieved. This type of performance-based regulation is widely found in the telecommunications industry, but has found applications in the energy sector as well.

The Christensen Report describes the advantages of comprehensive rate indexing, which can produce stronger incentives than those produced by traditional cost-of-service regulation. Incentives are comprehensive when a wide range of cost containment, product development, and marketing incentives are encouraged.⁸ There is also a potential boost in efficiency by relaxing operating restrictions, and by lowering regulatory costs. Rate indexing also increases regulatory risk and business risk. Regulatory risk can be increased when the terms of the rate indexing plan are chosen arbitrarily, which could significantly weaken a plan’s incentives. Other utilities may then be discouraged from seeking this type of regulation. Business risk may be increased if the pricing restrictions do not track trends in external business conditions, which affect a utility’s unit cost.⁹

⁷ Christensen Report at 11.

⁸ Id. at 27.

⁹ Id. at 28.

Stand-alone earnings sharing mechanisms (“ESMs”) are the most widely used form of comprehensive alternative regulation in the energy industry, according to the Christensen Report.¹⁰ An ESM automatically adjusts a utility’s approved rates when its earned rate of return falls outside a pre-established range for a specified time period. Mechanisms are established to assign earnings surpluses or deficits between the utility and its customers. Return on equity (“ROE”) is the most widely-used measure for an ESM.

ESMs have been used in several recent alternative regulation cases of electric utilities.¹¹ The ESM function is also commonly used in tandem with rate and revenue indexing plans. Rate and revenue indexing plans generally provide greater incentives to cut costs and develop new products than do ESMs. However, ESMs do not increase the business and regulatory risks to the utility to the same extent as rate and revenue indexing plans. The Christensen Report states that an ESM can “extend the time period during which the company can operate without regulatory intervention,”¹² meaning that the filing of rate cases can be delayed. Finally, ESMs are relatively easy to understand, and provide transparent benefits to both the utility and its customers through the sharing of increases in earnings. ESMs align the interests of the shareholders and customers, since both parties directly benefit from an increase in efficiency, reductions in costs, and increases in revenues.

¹⁰ Id. at Appendix.

¹¹ Id. at 38.

¹² Id. at 41.

The last form of performance-based rates discussed by the Christensen Report is benchmark regulation. This form of performance-based regulation uses external performance standards, i.e., those that are insensitive to the actions of utility managers, to evaluate the efficiency of one or more indicators of the utility's activity. There are a variety of performance indicators or benchmarks, which can include non-energy on-site services, reliability, telephone services, metering and billing, customer satisfaction, employee safety, education, and transmission quality.¹³ Such plans are considered comprehensive when "they cover all of the utility performance dimensions that matter to customers."¹⁴

Performance benchmarks typically compare a utility's current activity level to that in a previous period or compare the utility's performance to a corresponding indicator of a peer group of utilities. In the time-sensitive benchmark, a utility is rewarded relative to recent history. Under a peer group benchmark, the utility is rewarded when its performance improves relative to the peer group.

The Christensen Report describes three comprehensive benchmark regulation plans in detail. The first, Mississippi Power Company's ("MPC") Performance Evaluation Plan ("PEP"), was established through a collaborative process between MPC and representatives of its regulator and its customers. The PEP provided for quarterly adjustments to rates and allowed returns based upon MPC's performance in the following indicators: customer price, customer satisfaction, service reliability, equivalent availability, construction performance, contribution to load factor, and employee

¹³ Id. at Appendix.

¹⁴ Id. at 43.

safety.¹⁵ MPC's allowed earnings range was determined using the performance indicators according to a formula.¹⁶ The PEP has since been revised and now includes only three performance categories: retail price, customer satisfaction, and service reliability. Some indicators, such as the customer price indicator, are benchmarked against peers, and others have time-sensitive benchmarks. Both PEPs allowed for sharing related to retail prices.¹⁷

The second comprehensive benchmark regulation plan involves Niagra Mohawk Power Corp. Again, this alternative regulation plan was established through a collaborative process. This plan utilized the ratio of utility cost to an index of utility output quantities and benchmarked those results against the same measure of unit cost of other regional utilities. One advantage of this index was its ability to have an objective and consistent measure of capital cost.¹⁸

The final plan described is a performance-based regulation plan for Southern Bell Telephone of Georgia. This plan features an earnings sharing mechanism based on service quality and total factor productivity growth.¹⁹

¹⁵ Id. at 47.

¹⁶ Individual indicators are evaluated against a benchmark and given a score between 0 and 10, with 10 being the highest score. Then the indicator scores are weighted and summed to arrive at an overall company performance rating. The overall performance rating is then used to determine the allowed earnings range for the company. Id. at 47-48.

¹⁷ Id. at 50.

¹⁸ Id. at 52-54.

¹⁹ Id. at 55.

The Christensen Report describes comprehensive benchmark regulation as a way to “strengthen utility performance incentives relative to cost of service regulation with short rate case cycles.”²⁰ This style of regulation can also reduce regulatory and business risk by using a mechanism to share deviations of actual performance from targeted performance. However, the Christensen Report also points out that comprehensive benchmarking provides no opportunity to redesign existing rates or to implement new rates or services.²¹

The Christensen Report goes on to discuss service quality benchmarking which is becoming an important component of comprehensive indexing and benchmarking plans.²² Service quality benchmarking compares the actual performance of service quality of the utility with a set of standard benchmarks. This measurement evaluates service quality based on proxy data related to the service, market-based measures of value, and customer surveys. The Christensen Report suggests that judgmental factors be used in establishing the benchmarks for an electric utility since there are no industry-wide quality standards.²³ These benchmarks can be based against recent utility performance, or against data available for a peer group of utilities. Penalties and rewards for service quality range from actual dollar figures to basis points on ROE. The Christensen Report does not discuss how best to share service quality benchmarking rewards and penalties between the utility and its customers.

²⁰ Id.

²¹ Id. at 56.

²² Id.

²³ Id. at 59.

Finally, the Christensen Report discusses non-comprehensive benchmark plans. These plans are similar to the comprehensive plans in that they involve performance indicators, performance benchmarks and award mechanisms but dissimilar in that they do not cover all dimensions of performance.²⁴ According to the Christensen Report, many of the benchmark plans approved for energy utilities are non-comprehensive and feature a small number of narrowly-focused performance variables such as: fuel procurement performance, generator management, and demand-side management performance. The Christensen Report notes that the performance areas can be targeted to meet the special concern of the regulatory community, but the company may sacrifice a degree of overall performance in pursuit of award payments. Non-comprehensive benchmark plans also generally do not include sharing. As the Christensen Report states, sharing can help reduce regulatory and business risk.²⁵

LG&E ALTERNATIVE REGULATION PLAN

LG&E's original application proposed a PBR consisting of three incentives tied to its fuel costs, generation performance, and service quality. LG&E developed its PBR with the assistance of two consultants who prepared the Christensen Report. LG&E asserted that these three components, when coupled with the five year price cap offered as a condition of merger in Case No. 97-300, results in a comprehensive PBR. LG&E subsequently amended its application to include the following additional provisions: 1) a five year cap on gas base rates; 2) a five year schedule of annual bill reductions; 3) a one year extension to its existing five year commitment to annually

²⁴ Id. at 72.

²⁵ Id. at 73.

credit ratepayers with half of the net merger savings; 4) a one year extension to its existing five year rate cap; and 5) low-income customer assistance.

Fuel Cost Recovery Mechanism

The fuel cost recovery (“FCR”) mechanism LG&E proposes replaces the uniform fuel adjustment clause (“FAC”) under which LG&E has historically operated pursuant to 807 KAR 5:056. Under the FAC, a utility recovers its actual costs of fuel burned, subject to after-the-fact reviews by the Commission as to the reasonableness of those costs. Under the proposed FCR, the percentage change in the prices LG&E pays for fuel would be compared to the percentage change in a fuel price index composed of spot-market prices paid for fuel by electric utilities in a five-state area, including Kentucky.²⁶ When the percentage change in LG&E’s fuel prices is less than the percentage change in the index, LG&E will have “outperformed” the index. The dollar amount arising from the difference in the two percentages will be shared between shareholders and ratepayers by charging ratepayers for a level of fuel costs based upon the average of the two percentages. When the percentage change in LG&E’s fuel prices exceeds the percentage change in the index, the percentage change in fuel costs charged to ratepayers will be limited to the percentage change in the index.

LG&E states that it proposed the FCR to provide a continuing incentive to aggressively negotiate with fuel suppliers and transporters on price terms and to manage its fuel and energy procurement practices with greater efficiency and

²⁶ The five states are Kentucky, Indiana, Ohio, Virginia and West Virginia. The fuel index prices would be those prices published in the Federal Energy Regulatory Commission’s “FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.”

innovation.²⁷ In LG&E's opinion, the FCR will encourage it to seek competitive advantages through partnerships with coal companies, through the greater use of alternative fuels, through increases in fuel blending, and by studying procurement practices and strategies of other regional utilities. LG&E states that the FAC has limited its ability to continue to reduce fuel costs because it creates an incentive to use conservative procurement strategies, as opposed to riskier procurement methods, to ensure that costs are not subsequently disallowed by the Commission. LG&E asserts that the FCR was designed to replace the FAC's after-the-fact prudence test with a real-life prudence test based on the market price for coal.²⁸

The intervenors make several arguments against implementation of the FCR. KIUC states that LG&E already has a self-interest in improving fuel cost performance in both absolute and relative terms, because such improvements result in higher margins on competitive off-system sales.²⁹ KIUC asserts that under the FCR, ratepayers will only receive one-half of any fuel cost savings, whereas under the FAC, ratepayers receive 100 percent of any fuel cost savings. KIUC discounts any real value to the FCR, arguing that under a traditional FAC, any fuel cost not procured in an optimal manner should be disallowed.³⁰

²⁷ Willhite Direct Testimony, filed October 12, 1998, at 8-9.

²⁸ Haimberger Rebuttal Testimony, filed August 5, 1999, at 4.

²⁹ Kollen Direct Testimony, filed March 18, 1999, at 40-41.

³⁰ Id. at 41.

KIUC claims that LG&E has failed to present any persuasive arguments to demonstrate that the FCR is an improvement over the FAC,³¹ or that the FCR actually can or will result in lower fuel costs.³² While the current FAC tracks the actual cost of fuel as it is used and allows its recovery on a dollar-for-dollar basis, the FCR only measures changes in the purchase price of fuel and, therefore, does not reflect improvements in generation as does the FAC.³³ Because the FCR measures changes in LG&E's fuel prices for all fuel purchases compared to changes in an index based on spot-market fuel prices, KIUC contends that it does not explicitly address the greater volatility of the spot market compared to contract coal purchases.³⁴

KRC argues that since the FCR addresses the cost of fuel, rather than the quantity of fuel burned, it creates no incentive for more efficient generation.³⁵ KRC argues that sufficient incentive to reduce fuel costs already exists under the FAC since LG&E retains the margins from increases in off-system sales.³⁶ KRC also contends that if LG&E is trying to simulate competitive markets, neither the FAC nor the FCR are appropriate.³⁷ KRC argues that the FCR is flawed for failing to address the type of fuel

³¹ Id. at 44.

³² Id.

³³ Id.

³⁴ Id. at 45.

³⁵ Reply Brief of KRC at 2.

³⁶ Id.

³⁷ Id.

used and that, because the focus is only on fuel costs, LG&E might seek out cheaper coal from operators with poor environmental compliance records.³⁸

Other issues concerning the FCR were raised during the hearing. One was the use of a fuel price index based on mostly out-of-state utilities that in recent years have consistently paid higher costs for fuel than LG&E.³⁹ To avoid using a fuel price index that would provide rewards but create little or no incentives, it was suggested that LG&E's own recent fuel costs be used as the benchmark against which its future fuel costs should be compared.⁴⁰ Another issue raised was LG&E's lack of detail in explaining how it would modify its existing fuel procurement practices to achieve fuel cost savings under the FCR compared to the fuel costs it would incur under the FAC.⁴¹

In response to the argument that the FCR is unnecessary because the FAC already provides an incentive to improve cost performance, LG&E asserts that the FCR was developed in response to the Commission's September 12, 1997 Order in Case No. 97-300. Specifically, that Order stated that any non-traditional form of regulation should provide incentives to the utility and share benefits with the ratepayers.⁴² LG&E

³⁸ Id.

³⁹ Transcript of Evidence ("T.E."), Volume I, August 31, 1999, at 274-279 and Volume II, September 1, 1999, at 199-213.

⁴⁰ T.E., Volume II, September 1, 1999, at 199-213.

⁴¹ T.E., Volume II, September 1, 1999, at 174-175 and at 182-183.

⁴² Case No. 97-300, September 12, 1997 Order at 34-35.

claims the FCR achieves both of these goals. On KIUC's claim that the FCR has no value to ratepayers, LG&E argues that KIUC has not factored in future incentives assuming the FCR is approved.⁴³ On KRC's claim that neither the FCR nor the FAC should be allowed in a model moving toward competition, LG&E states the concern is premature and can be addressed only after restructuring.⁴⁴ On KRC's claim that providing incentives to reduce fuel costs might encourage purchases from operators or permittees with poorer environmental compliance records, LG&E submits that state and federal legislatures, not the Commission, are the proper forums for this issue.⁴⁵

The Commission is not persuaded by LG&E's arguments that the FCR is either necessary or appropriate. The Commission finds that significant incentives for LG&E to keep fuel costs at a minimum level already exist, including a review of its fuel costs through the administrative process established under 807 KAR 5:056, the increased margins realized from inter-system sales, and the increased opportunity to consummate profitable inter-system sales. Further, while the Commission's directive in Case No. 97-300 established that any non-traditional or alternative regulation plan should both create incentives for the utility and should share benefits with the ratepayers, it did not direct LG&E to replace its FAC or to adopt any particular form of alternative regulation.

The Commission also finds the FCR itself to be flawed in many respects. LG&E has presented no compelling basis for comparing its fuel prices, which reflect the mix of its total fuel portfolio, to an index composed solely of spot-market fuel purchases. The

⁴³ Joint Brief of LG&E and KU at 42..

⁴⁴ Willhite Rebuttal Testimony, filed August 15, 1999, at 6.

⁴⁵ Id. at 4.

volatility of changes in spot-market fuel prices compared to changes in LG&E's prices, which consist of a mix of long- and medium-term contracts, as well as spot-market purchases, renders such an index unreasonable for measuring changes in fuel costs. LG&E offered no persuasive argument for using an index made up of utilities that, historically, have been less efficient in their fuel procurement practices than LG&E.⁴⁶ Based upon a review of the Christensen Report, the efficient fuel procurement practices already in place at LG&E make a prime case for the argument favoring use of a utility's own historical performance instead of utilizing a peer group.⁴⁷ As compared to the FCR, a more appropriate incentive would be created for LG&E if its future fuel costs are judged against either its own historical costs or those of a select group of utilities with low fuel costs, rather than an aggregate of regional utilities. In addition, the proposed FCR focuses only on fuel costs and lacks any provision to encourage more efficient fuel use.

Finally, despite general references to possible changes in LG&E's fuel procurement activities under the FCR, i.e. - employing strategies that encompass risks greater than what it is comfortable taking under its FAC, LG&E has provided no evidence of any specific changes it would make to its existing fuel procurement processes to achieve the greater savings it claims are achievable under the FCR. Without more specific descriptions and explanations of how fuel costs would be lower under the FCR than the FAC, LG&E has not demonstrated that it will, in fact, achieve any savings under the FCR. Thus, the Commission is not convinced that ratepayers

⁴⁶ Reference Staff Cross-Examination Exhibits 1 and 2.

⁴⁷ Christensen Report at 43.

will actually benefit from the proposed FCR or that it is appropriate for LG&E to automatically recover fuel costs without the administrative review and scrutiny provided for under the FAC. For all these reasons, the Commission finds that the proposed FCR is not reasonable and should be rejected.

Generation Performance

LG&E's PBR includes a generation performance ("GP") component designed to measure changes in the utilization and availability of its generating units. Since the generating assets of LG&E and KU are operated as one system, however, this measurement of performance is for the combined system.⁴⁸ The GP component is expressed as a credit in the quarterly PBR and is based on two measures, the Equivalent Availability Factor ("EAF") and the Capacity Factor ("CF"), both computed on a 12-month rolling quarter-ended basis using the combined LG&E and KU generation system. The quarterly EAF and CF values, which are expressed as percentages, are averaged together to determine the composite performance for the quarter.⁴⁹ For purposes of the PBR, the EAF and CF include all generating units except for hydro-based generation.

The EAF is the percentage of time the generating units are available to serve load, adjusted for de-ratings,⁵⁰ and is calculated by dividing the number of hours the units are available to serve load by the total number of hours in the period. In simple

⁴⁸ Willhite Direct Testimony, filed October 12, 1998, at 14.

⁴⁹ Id., Exhibit RLW-1.

⁵⁰ De-rating occurs when a generating plant's capacity rating is adjusted for subsequent additions or changes to the plant.

terms, the EAF measure reflects the percentage of time the units are available to serve load. The EAF reflects a 12-month rolling quarter-ended period, which is the weighted average of the 12 monthly system EAF values weighted by the number of hours per month. The CF is a measure of the utilization of the generating units and is calculated by dividing the actual KWH output by the product of the number of hours in the period and the rated capacity of the generating assets. In simple terms, the CF measures the actual KWH output compared to the maximum potential KWH output for the period. The CF also reflects a 12-month rolling quarter-ended period, which is the weighted average of the 12 monthly system CF values weighted by the number of hours per month.⁵¹

LG&E proposes to compare the composite quarterly GP against the highest composite performance for LG&E and KU from 1991 through 1997. The highest composite performance of LG&E and KU during this period, which was 71.8 percent for the quarter ended in December 1996, is called the threshold level.⁵² Each percentage point above the threshold is worth \$625,000 per quarter to LG&E and would be shared equally between ratepayers and shareholders. LG&E's maximum GP dollar value for any quarter is limited to \$1,250,000.⁵³ There are no penalties to LG&E if the threshold level is not achieved in any quarter.

⁵¹ Willhite Direct Testimony, filed October 12, 1998, at 13 and Exhibit RLW-1.

⁵² Id., at 14 and Exhibit RLW-3. However, in the response to the Commission's January 8, 1999 Order, Item 14, LG&E and KU showed that composite quarterly GP values of 72.5 percent and 73.5 percent had been achieved in the period ended June 1998 and September 1998 respectively.

⁵³ Identical dollar values and limits are proposed for KU, since this performance measure is based upon the combined generation system.

LG&E states that the GP will benefit ratepayers because they will immediately receive benefits from improvements in the GP, while under traditional regulation those benefits would not be received until there was a base rate case. LG&E asserts that the GP creates several incentives to improve the EAF and CF. First, improved EAF will lower the cost of generation, which will improve LG&E's ability to compete in the off-system market and to attract new businesses to its service territory. Second, higher CF will allow generating units to operate at a more efficient point on the heat input curve, lowering generation costs, reducing fuel costs, and increasing sales potential.⁵⁴ Concerning the absence of any penalty in the GP for failing to achieve the threshold, LG&E contends that it will already be penalized because it would be incurring higher costs of generation, experiencing no load or revenue growth in its service territory, and experiencing no growth in wholesale sales.⁵⁵

The intervenors object to the GP component on numerous grounds. As with the FCR, KIUC states that LG&E already has an incentive to lower its generation costs in order to increase the margins earned on off-system sales. KIUC claims that the GP, in conjunction with the FCR, will allow LG&E to retain a portion of the savings that are now passed through entirely to ratepayers through the FAC.⁵⁶ KIUC contends that the EAF is a function of LG&E's maintenance activities, which are mostly fixed costs already in base rates. In addition, KIUC argues that since the CF is influenced by factors beyond

⁵⁴ Bellar Rebuttal Testimony, filed August 5, 1999, at 1-2.

⁵⁵ Response to the Commission's January 8, 1999 Order, Item 1, Presentation Handouts from the December 17, 1998 informal conference.

⁵⁶ Kollen Direct Testimony, filed March 18, 1999, at 40.

LG&E's control, including economic activity, weather, and relative pricing in competitive power markets, it does not properly measure increased performance.⁵⁷

KRC argues that with an incentive to increase plant availability, LG&E could defer general maintenance, or pollution control equipment replacement or maintenance, at the expense of the environment. KRC argues that the GP should incorporate a requirement that a unit be considered available only when it is in full compliance with environmental requirements.⁵⁸ KRC also criticizes the GP for creating an incentive to increase sales, which it believes is contrary to the Commission's policy of not rewarding utilities' marketing activities by excluding such costs from rates.

LG&E asserts that creating incentives to improve generation performance was necessitated by the directive in the Merger Order that any PBR proposal provide incentives to the utility and share benefits with ratepayers. LG&E dismisses KIUC's assertion that sharing savings under the FCR and GP would be less beneficial to ratepayers compared to retaining the FAC, arguing that increased performance incentives would create greater savings that, in turn, would be shared with ratepayers.⁵⁹ On KIUC's contention that improvement in the EAF is a function of maintenance activities already included in base rates, LG&E states that any increase in maintenance activities will be at shareholders' expense due to the existing price cap.⁶⁰ LG&E disagrees with the contention that the CF is dependent on variables beyond its control

⁵⁷ Id. at 43.

⁵⁸ Reply Brief of KRC, filed October 22, 1999, at 4.

⁵⁹ Bellar Rebuttal Testimony, filed August 5, 1999, at 2.

⁶⁰ Id.

and is not a good measure of performance. LG&E states that such criticism is inaccurate, that any failure to improve the EAF or the CF would be due to factors within its control, and that LG&E, not its ratepayers, would be penalized.⁶¹

LG&E disagrees with KRC's contention that a power plant should only be considered available if it is in full compliance with environmental standards.⁶² LG&E asserts that it has historically complied with all environmental requirements, and the Commission is not the proper forum for KRC's claim that existing environmental regulations or their enforcement are inadequate.⁶³ LG&E rejects KRC's claim that the GP will harm ratepayers through increased marketing costs, noting that the price cap will shield ratepayers from these costs.⁶⁴

The Commission is not persuaded that the proposed GP is either reasonable or necessary. The Commission finds that under the GP, improvements to LG&E's generation performance will produce lower fuel costs and increased margins on off-system sales, but these benefits will be retained entirely by LG&E between rate cases whenever the threshold level is not achieved. This outcome provides an extremely strong incentive to improve generation.

Contrary to LG&E's assertion, the Merger Order did not require LG&E to propose a specific generation performance incentive. Rather, the Merger Order merely established the parameters which any PBR proposal should meet. LG&E's claim that

⁶¹ Id.

⁶² Willhite Rebuttal Testimony, filed August 5, 1999, at 4.

⁶³ Id.

⁶⁴ Id.

absent the GP, ratepayers would receive no benefit from improved generation performance until there is a base rate case, is incorrect. Improving generation performance will result in lower fuel costs per kilowatt-hour and this directly benefits ratepayers through the FAC.

The merits of the GP threshold proposed by LG&E are questionable. Although it was exceeded twice during 1998, the threshold of 71.8 percent was achieved only once over a period of seven years (1991-1997). As LG&E Exhibit RLW-3 demonstrates, within the range of 67 to 72 percent shown therein, the GP has been in the lower half of that range for the majority of the seven-year time period reflected in that exhibit. Thus, the proposed GP measure is unlikely to produce greater benefits for ratepayers, except in those rare instances when LG&E is able to exceed the established threshold. However, LG&E's shareholders would significantly benefit from improvements in generation performance which do not exceed the threshold.

Furthermore, the analysis in the Christensen Report does not support LG&E's proposed GP. In its review of benchmarking alternatives, the only utility using generation performance in alternative regulation appears to be MPC, which is a subsidiary of a multi-utility holding company.⁶⁵ MPC's plan measures the utility's EAF but not CF. Finally, contrary to LG&E's proposal, MPC's plan includes penalties for failing to meet established performance objectives.

While providing incentives to increase generation performance, the proposed GP fails to provide for a proper sharing of the benefits with ratepayers until the extraordinarily high threshold is exceeded. Incentives based upon generation

⁶⁵ Christensen Report at 47.

performance generally help the utility achieve greater profits through increased off-system sales and reduced peak-period power purchases, but do not provide corresponding benefits to ratepayers. As previously stated, if LG&E fails to meet the threshold but does lower its per-unit fuel costs and increase its margins from off-system sales, its shareholders may accrue benefits under the proposed GP component while LG&E incurs no penalty for not meeting the GP threshold. A method of sharing these benefits with ratepayers is one way to adequately create an incentive for generation performance that might merit possible future consideration.

The Commission finds that EAF is largely a function of LG&E's maintenance costs and those costs are already reflected in base rates. We also find that the factors impacting CF are, to a significant degree, outside the control of LG&E, making CF an inappropriate measure of performance. While Commission regulation 807 KAR 5:016 prohibits utilities from recovering through rates any costs to promote electric sales, KRS 278.285 specifically authorizes the recovery of costs related to changing customers' consumption patterns. Although LG&E's GP component suffers from numerous infirmities, the evidence of record does not convince us that it would constitute an impermissible promotion of electric sales. LG&E's determination of unit availability, which does not specify environmental compliance criteria, is not inadequate since the Commission has no jurisdiction to interpret or enforce environmental requirements.

The Commission concludes that the proposed GP is an unnecessary and inappropriate performance measure. Due to its construction and the unrealistic threshold selected, it is likely to produce little, if any, benefits to ratepayers from

improved generation performance beyond those already available under the FAC.⁶⁶ However, it would result in benefits to shareholders, if and when the threshold was attained, that are not available under the FAC. Obviously, an incentive that benefits only shareholders is untenable. For all these reasons, we find that the proposed GP should be denied.

Service Quality

The service quality ("SQ") component of LG&E's PBR is comprised of three categories: system reliability, customer satisfaction, and employee safety. Each category is composed of specific measures with separate penalties and rewards to LG&E. The maximum penalty assessed or reward earned in a quarter is \$1,250,000. If the preliminary sum of the quarterly SQ measures results in rewards greater than GP for any quarter, the difference, identified as net service quality rewards, will be carried forward for up to four quarters after which time any unrecovered amount will be forfeited. SQ rewards for the current quarter will be set equal to GP rewards for the current quarter. However, if the preliminary sum of the quarterly SQ measures results in a penalty to LG&E, the penalty is offset by any banked net service quality rewards. Current quarter SQ penalties are not restricted by the GP.⁶⁷

⁶⁶ The GP, combined with the FCR, eliminates all immediate ratepayer benefits from improved generation performance, except for when the threshold is exceeded.

⁶⁷ Willhite Direct Testimony, filed October 12, 1998, Exhibit RLW-1 and RLW-4.

The system reliability category of SQ measures are the System Average Interruption Duration Index (“SAIDI”) and the System Average Interruption Frequency Index (“SAIFI”).⁶⁸ SAIDI and SAIFI include all interruptions in excess of one minute, but exclude severe storms where power has not been restored within 24 hours because such storms result from severe weather that is beyond LG&E’s control, and because their exclusion will result in a more accurate measure of LG&E’s true performance in minimizing the frequency and duration of outages. SAIDI reflects the minutes of average duration of interruption per customer, on a 12-month rolling quarter-ended basis. SAIFI reflects the average frequency of interruption per customer, also on a 12-month rolling quarter-ended basis. The quarterly values for SAIDI and SAIFI are compared to benchmark values based on LG&E’s average SAIDI and SAIFI values from 1991 through 1997. There are no deadbands placed on the SAIDI and SAIFI benchmark values because the impact of severe storms on outage frequency and duration has already been excluded.⁶⁹ The differences between the current SAIDI and SAIFI values are multiplied by specific dollar amounts to determine LG&E’s reward or penalty.⁷⁰

⁶⁸ Kaufmann Direct Testimony, filed October 12, 1998, at 10-15. A third measure, the Momentary Average Interruption Frequency Index (“MAIFI”), which is for large industrial customers, currently is not measured by LG&E. LG&E’s intent is to begin collecting this information four months after approval of the PBR and incorporate the MAIFI measure in the PBR 16 months after the PBR approval.

⁶⁹ Kaufmann Direct Testimony, filed October 12, 1998, at 10-11.

⁷⁰ For SAIDI, the quarterly difference in values is multiplied by \$30,000 per minute. For SAIFI, the quarterly difference in values is multiplied by \$425,000 per outage. For both calculations, positive differences result in rewards while negative differences result in penalties.

The customer satisfaction category measures are based on the results of two surveys. The Customer Satisfaction Survey uses the results from a broad-scope survey to measure residential customers' overall satisfaction, based on the percentage of customers rating their satisfaction with LG&E service as "excellent."⁷¹ LG&E has been collecting the survey data monthly since January 1998. The benchmark for this measure will be the percentage of customers served by a peer group of utilities who rate their overall satisfaction as excellent, using the same definition as LG&E. LG&E's quarterly score must exceed the benchmark by 10 percentage points to earn a reward under this measure. If LG&E does not achieve the benchmark, penalties will be assessed. No penalty or reward will be given if the results fall between the benchmark and the 10-percentage point upper band. Each percentage point below the benchmark or above the upper band will be worth \$72,500 per quarter.⁷²

The Customer Callback Survey is measured by the percentage of residential customers who rate a telephone service representative's overall handling of phone calls as "excellent."⁷³ LG&E has been collecting this survey data monthly since March 1998. The benchmark for this measure will be developed over the course of the plan based on LG&E's performance, with its score for 1998 used in the first year of the plan. A deadband will be established which equals the sample margin of error for the survey. LG&E's quarterly score will be evaluated against the deadband with each percentage point outside the deadband being worth \$18,000 quarterly. Quality performance above

⁷¹ "Excellent" is defined as a score of 9 or 10 on a 10-point scale.

⁷² Kaufmann Direct Testimony, filed October 12, 1998, at 15-17.

⁷³ "Excellent" is defined as a score of 9 or 10 on a 10-point scale.

the deadband will result in rewards while performance below the deadband will result in penalties.⁷⁴

Employee safety will be measured using the federal Occupational Safety and Health Administration's ("OSHA") Recordable Incidence Rate, which reflects the total number of employee accidents and illnesses per 200,000 hours worked. The benchmark will be the average OSHA Recordable Incidence Rate over the period 1991 through 1997. A deadband will be established equal to the standard deviation of LG&E's OSHA Recordable Incidence Rate over the same period. During the quarterly evaluation, each 0.1 percentage change outside the deadband will be worth \$32,500. Quarterly performance below the deadband will result in rewards while performance above the deadband will result in penalties.⁷⁵

LG&E contends that the service quality component in the PBR ensures that customers will continue receiving the high quality of service currently enjoyed, as well as providing an incentive for LG&E to achieve even higher levels of service quality during the operation of the PBR. Since SQ rewards will only be included in the PBR formula to the extent that the GP amounts are available as an offset to the SQ rewards, any SQ rewards will not directly cause an increase in customers' bills.⁷⁶ In addition, LG&E states that this counter-balances the other PBR components to ensure that cost

⁷⁴ Kaufmann Direct Testimony, filed October 12, 1998, at 18-21.

⁷⁵ Id. at 22-23.

⁷⁶ Willhite Direct Testimony, filed October 12, 1998, at 16-17.

cutting is not achieved at the expense of service quality, thereby simulating a competitive market.⁷⁷

The intervenors presented several arguments against implementating the SQ component of the PBR. MHNA and POWER contend that LG&E has an existing legal obligation to serve and it should not be rewarded for doing so by payment above the fair rates set by the Commission.⁷⁸ MHNA and POWER state that major storms should be an important component of the service quality measurements and that the Customer Satisfaction Survey was intended for market research, not designed for PBR or ratesetting purposes. Finally, MHNA and POWER argue that out of 70 questions on the Customer Satisfaction Survey, which takes 15 minutes to answer, only one vague question relating to service quality impacts the PBR, while there was no evidence of that question or any part of the survey having been tested for criterion validity.⁷⁹

KRC states that to be comprehensive, the service quality component should measure the response time to major storms and momentary service outages for residential and commercial customers.⁸⁰ Further, KRC contends that the SQ aggregates performance in various categories, allowing less than stellar performance in one category to be offset by improving or maintaining high performance in another, and that no reward should be allowed when any part of service is lacking.⁸¹ KIUC contends

⁷⁷ Joint Brief of LG&E and KU at 54.

⁷⁸ Post Hearing Brief of MHNA and POWER at 5.

⁷⁹ Id. at 9.

⁸⁰ Post-Hearing Brief of KRC at 9.

⁸¹ Id.

that the survey measures are subjective and lack objectivity,⁸² and that LG&E's safety record is not appropriate for fashioning a quality of service component in a PBR.⁸³

LG&E responded to MHNA's and POWER's arguments by stating that PBR plans that provide rewards go beyond merely assuring that service quality does not decline by creating an important incentive to constantly improve service quality.⁸⁴ LG&E also argues that other states do not include major storms in SAIDI and SAIFI calculations because it is difficult to set reasonable benchmarks due to variations in storm severity. Also, LG&E contends, the Customer Satisfaction Surveys provide an incentive to quickly reconnect service.⁸⁵ LG&E also argues that its proposed SQ measures are comprehensive and that its Customer Satisfaction Survey is reasonable and statistically reliable.⁸⁶ Responding to KRC's argument that the SQ allows an offset for less than stellar performance, LG&E notes that even MHNA/Power acknowledged that there are currently no PBR plans broken down by the utility's geographic and market segments.⁸⁷

The Commission finds the proposed SQ measure to be deficient. While LG&E argues that linking GP with SQ rewards prevents it from reaping rewards from ever-improving service quality, the linking of the two is also a potential means of avoiding sharing GP success with ratepayers. In addition, there is a notable and glaring

⁸² Kollen Direct Testimony, filed March 18, 1999, at 47.

⁸³ Id.

⁸⁴ Joint Brief of LG&E and KU at 57.

⁸⁵ Reply Brief of LG&E and KU at 4.

⁸⁶ Id.

⁸⁷ Id. at 5.

inconsistency between the GP and SQ in that the GP threshold is the highest level achieved in recent history, while the SQ's SAIDI and SAIFI benchmarks are based on average performance over recent history. The Commission finds that, in calculating a SQ component, a performance level that exceeds the utility's historic average should be the basis for establishing a benchmark.

The Commission questions the reasonableness of excluding severe storms from the SAIDI and SAIFI calculations. Though LG&E is correct that no two storms are alike, the length of time required to restore service after any outage lasting 24 or more hours is a critical component of service and of vital importance to affected customers. Utilizing unadjusted SAIDI and SAIFI calculations with a deadband created to exclude severe storms could possibly be considered as an alternative measure of service quality.

The Commission is not persuaded that customer satisfaction is properly calculated from the results of the Customer Satisfaction Survey and Customer Callback Survey. The intervenors' challenges to the development of the customer surveys and the manner in which they will be used to measure customer satisfaction have merit. Absent any compelling arguments to the contrary we find that using only one question out of 70 in the Customer Satisfaction Survey as a factor in the SQ renders the use of the survey highly suspect. Further, the surveys are subjective in nature and, as such, the results may or may not be accurate. The analysis in the Christensen Report clearly provides that service quality measures should be objective and have measurable benchmarks.

Finally, LG&E has little actual experience with these surveys, having initiated them as recently as 1998. Particularly for the Customer Callback Survey, which is

based solely on LG&E's historic responsiveness, this lack of experience is a major drawback to relying on it as a measure of customer satisfaction.

The Commission agrees that employee safety and health are important considerations. This importance is reflected in the numerous state and federal statutes, regulations, and rules governing employee health and safety in the workplace. However, it is the existence of these very statutes, regulations, and rules that cause us to question whether it is appropriate to include employee safety as a service quality measure. Whether LG&E operates in a regulated or a competitive environment, there has been no evidence presented to indicate that existing health and safety standards will be relaxed or otherwise modified. While LG&E may face pressure from cost cutting efforts, the health and safety obligations to its employees will remain. LG&E is already subject to sizable penalties if the health and safety conditions for its employees deteriorate. Conversely, LG&E should not be financially rewarded for its compliance with the law. For all these reasons, the Commission finds that the service quality measurement proposed by LG&E should be denied.

Five Year Cap on Gas Base Rates

LG&E's Amended Application includes a commitment to forego increasing its base gas rates for a period of 5 years or through June 30, 2004. LG&E estimates that this commitment would be a benefit to its gas ratepayers and be worth between \$20,000,000 and \$30,000,000 per year. LG&E states that this provision was contingent upon the non-occurrence of extraordinary circumstances and would not include any changes resulting from the operation of any lawful surcharge or automatic adjustment clause. However, LG&E notes that it could not agree to or be bound by this

commitment if electric rates are reduced further than provided in the Amended Application or if its proposed PBR plan is modified materially.⁸⁸

KIUC opposes this provision, stating that it was “grossly inappropriate” regulatory policy to use electric rates to subsidize gas rates.⁸⁹ KIUC argues that it was inappropriate to combine the revenue requirements of LG&E’s electric and gas businesses for the purposes of determining just and reasonable electric rates for LG&E. KIUC contends that LG&E’s electric and gas operations are separate, regulated businesses and, as such, it was unduly discriminatory to utilize excess profits in one regulated operation to subsidize revenue requirement deficiencies in the other. KIUC further argues that under a competitive environment or if these operations were owned by separate entities, the subsidization of the gas operations by the earnings from the electric operations would not be possible.⁹⁰

LG&E responded to KIUC’s arguments by stating that the contention its electric operations were subsidizing its gas operations was inaccurate. LG&E argues that KIUC was incorrectly focusing on one component of the total Amended Application, rather than looking at all of the components of the proposal in its entirety. LG&E contends that its earnings from electric operations are reasonable and that there is no subsidy from the electric operations to the gas operations.⁹¹

⁸⁸ Joint Brief of LG&E and KU at 66-67.

⁸⁹ Baron Response Testimony, filed May 24, 1999, at 5.

⁹⁰ Id. at 6-11.

⁹¹ Willhite Rebuttal Testimony, filed August 5, 1999, at 14.

LG&E has provided calculations showing that for the test period, its rate of return on gas capitalization was 3.69 percent, with a rate of return on gas common equity of 1.78 percent.⁹² LG&E also determined that, after reflecting a number of typical rate-making adjustments, its rates of return on gas capitalization and gas common equity would drop further, to 3.33 percent and 1.03 percent, respectively.⁹³ LG&E acknowledged early on in this proceeding that if its electric rates were decreased through a cost-of-service analysis, gas rates would have to be increased in order to maintain the balance recognized in the Commission's September 12, 1997 Order in Case No. 97-300.⁹⁴ LG&E states that its Amended Application created a balance between investors and customers that requires investors to accept a very low rate of return on gas operations and a reasonable rate of return on electric operations.⁹⁵

The Commission has determined that the evidence in this proceeding clearly shows that LG&E's electric operations have been subsidizing its gas operations. This conclusion could not have been made, absent the evidence of record, because LG&E has traditionally filed all of its financial reports on a combined electric and gas basis. The excessive rates of return earned on electric operations have helped offset the low rates of return earned on gas operations. The Commission finds it extraordinary that LG&E would deny the existence of a subsidy and contend that it is reasonable for its investors to accept what appears to be inadequate rates of return on its gas operations.

⁹² Response to Public Hearing Information Requests, Item 9, page 3 of 5.

⁹³ Id.

⁹⁴ Response to the Commission's December 2, 1998 Order, Item 11, page 3 of 4.

⁹⁵ Response to the Commission's April 30, 1999 Order, Item 1.

LG&E is comprised of two regulated businesses, electric service and gas service. The rates charged for each service must be fair, just, and reasonable, based on each business's operations, not on a combined basis. Since this case involves only LG&E's electric operations, the record is insufficient to support a solution to the low earned rates of return on gas operations. It is the responsibility of LG&E to take the appropriate steps to address that problem by some means other than relying on a subsidy from its electric operations. However, proposing to cap base gas rates for 5 years is not a valid solution to the problem. Therefore, the Commission finds that the proposal in the Amended Application to cap base gas rates for a period of 5 years or through June 30, 2004 is inappropriate and unreasonable. By this finding the Commission does not mean that every utility providing more than one type of service must at all times have its rates equal to the cost of that service. Imbalances between rates and costs are commonplace and typically, over time, correct themselves. When they do not self correct, rate adjustments may be necessary. Proposing to subsidize one service with another is unacceptable, particularly here where tens of thousands of electric customers are not gas customers.⁹⁶

Five Year Electric Bill Reductions

LG&E's Amended Application proposed a five year schedule of reductions in customers' bills. In year one, the bill reduction would be \$9.4 million annually, while in years two through five the bill reductions would be \$3.76 million annually. While these proposed bill reductions would be substantial for a utility that is earning a reasonable

⁹⁶ As of December 31, 1998, LG&E had 87,706 electric only customers and 29,745 gas only customers. See Response to the Commission's April 30, 1999 Order, Item 2.

return on equity, the reductions are clearly inadequate in light of LG&E's test year level of earnings. Thus, as discussed in the "Revenue Requirements" section, the Commission has determined that LG&E's electric base rates should be reduced, and this reduction obviates any further consideration of LG&E's electric bill reductions.

One Year Extension to Credit Half of Merger Savings

LG&E's Amended Application proposed to extend by one year the existing five year merger surcredit approved in Case No. 97-300. At the time that surcredit was approved, LG&E was directed to file, midway through the fifth year of the merger, plans to reflect sharing subsequent years' merger savings with ratepayers.⁹⁷ LG&E's proposal in the Amended Application extends the merger surcredit to include a sixth year, reflecting that year's estimated net savings.⁹⁸ The sharing of all subsequent years' merger savings would be subject to determination by the Commission after year six.⁹⁹

The Commission finds that this proposal provides little additional benefit to ratepayers beyond that already in existence. In the merger proceeding, LG&E filed a ten year estimate of savings and was directed to subsequently file a plan to reflect the sharing of savings in years six through ten. There is no evidence to indicate that the savings estimate now proposed for year six would be materially different from the

⁹⁷ Case No. 97-300, September 12, 1997 Order, at 15, 38, and 40.

⁹⁸ The sixth year net savings were estimated to be \$83,078,000, with LG&E's ratepayers receiving \$19,523,330. See Case No. 97-300, Application Exhibit AJV-1, and Amended Application Exhibit B, Willhite Supplemental Testimony, filed April 5, 1999, at 10.

⁹⁹ Response to the Commission's April 30, 1999 Order, Item 8.

savings ratepayers would have otherwise received pursuant to Case No. 97-300. Therefore, the only material effect of this proposal is to delay by one year LG&E's plan to reflect future years merger savings.

One Year Extension to Electric Rate Cap

LG&E proposes to extend by one year its existing five year cap on electric base rates. LG&E's original commitment to a five-year electric rate cap was an integral part of its application in Case No. 97-300 for the merger. Thus, following completion of the merger of LG&E Energy Corp. and KU Energy Corp., the rate cap became effective on July 1, 1998 as a result of the merger. This rate cap, however, included a number of exceptions including unforeseen changes in federal tax laws and environmental requirements. To the extent that the rate cap provides an incentive to LG&E to maintain and reduce costs, that incentive already exists because of the merger. Furthermore, the rate cap itself does not provide for any sharing with ratepayers of earnings in excess of a reasonable level. Considering that in recent years LG&E's earnings have not been less than reasonable, its commitment to extend the rate cap for an additional year has not been shown to be a substantial benefit to ratepayers.

Low-Income Customer Assistance

LG&E has proposed in its Amended Application that if its PBR plan is approved without material change, it will contribute funds to qualified charitable organizations to assist low-income residential customers pay their electric bills. The funding proposal is for a total of \$2,820,000 over five years, with \$940,000 contributed in year one and \$470,000 contributed in each of the following four years. Only shareholder funds would

be used to make these contributions, so the amounts would not be included as rate-making expenses and no new tariff provisions would be needed.

The Commission commends LG&E for its charitable efforts to assist residential customers who have financial difficulties paying their electric bills. Since this proposal involves the use of only shareholder funds, the Commission has no explicit jurisdiction over the contributions and, as LG&E correctly notes, the proposal need not be embodied in a tariff.

KIUC EARNINGS SHARING PROPOSAL

As an alternative to LG&E's PBR, KIUC proposes an ESM.¹⁰⁰ In general, KIUC's ESM provides for a sharing with ratepayers of earnings in excess of a threshold level. Earnings are computed on a rate-making basis after incorporating pro forma adjustments.¹⁰¹ The earnings threshold would be LG&E's authorized rate of return with earnings in excess shared 60 percent to ratepayers and 40 percent to shareholders.¹⁰² The existing environmental surcharge would be rolled into base revenues.¹⁰³

Through the ESM formula, any excess earnings would be shared with ratepayers and reflected on their bills on a timely basis through a surcredit mechanism which would be revised quarterly and trued-up annually.¹⁰⁴ Once established, there would be an annual Commission proceeding to evaluate the ESM and to consider new rate-making

¹⁰⁰ Kollen Direct Testimony, filed March 18, 1999, at 20.

¹⁰¹ Id.

¹⁰² Id.

¹⁰³ Id.

¹⁰⁴ Id. at 21.

and rate-of-return adjustments.¹⁰⁵ The ESM would be implemented pursuant to a tariff, with the sharing implemented through a surcredit computed as a uniform percentage of revenues for all customer classes and ratepayers.¹⁰⁶

The ESM would require an initial filing on or before the end of 14 months after the Commission establishes fair, just, and reasonable rates in this case.¹⁰⁷ The initial surcredit would go into effect with the first billing cycle in the month following the ESM filing.¹⁰⁸ Thereafter, quarterly filings would be made with the change in the surcredit effective with the first billing cycle in the month following each filing.¹⁰⁹

In each subsequent filing, LG&E would determine its earnings on common equity on a rate-making basis for the twelve months ending no more than two months earlier. For example, LG&E would make its initial filing on or before March 1, 2001 for the twelve months ending December 31, 2000, assuming an effective date of the Commission's Order in this case during December 1999.¹¹⁰

All earnings over the threshold would be converted to a revenue requirement surplus, with 60 percent credited to ratepayers through a surcredit over the next twelve months.¹¹¹ The surcredit would be adjusted for cumulative underrecoveries or

¹⁰⁵ Id.

¹⁰⁶ Id.

¹⁰⁷ Id. at 31.

¹⁰⁸ Id.

¹⁰⁹ Id.

¹¹⁰ Id. at 32.

¹¹¹ Id.

overrecoveries at the end of the proceeding quarter amortized over a twelve-month period. The filing would be on a rate-making basis, consistent with prior Commission precedent. New pro forma adjustments would be separately identified but not included in the quarterly computations of the surcredit until the Commission has approved the adjustments in the annual review proceedings.¹¹²

The Commission would establish an annual case to consider, on an expedited basis and similar to the biennial reviews of the environmental surcharge and fuel clause recovery, whether the four previous quarterly filings were correctly computed and in compliance with prior Commission precedent.¹¹³ Also to be considered during the annual reviews are new pro forma rate-making adjustments for incorporation in prospective quarterly filings.¹¹⁴

KIUC claims that its ESM is superior to LG&E's proposed PBR because its ESM is comprehensive and provides a fair and timely sharing of cost containment and revenue growth between ratepayers and stockholders.¹¹⁵ Also, KIUC asserts that ESM is a good transitional mechanism that remains grounded in historic rate-of-return regulation, but provides significant incentives to increase profitability through reduced costs and increased revenues, incentives normally provided to deregulated companies

¹¹² Id.

¹¹³ Id. at 33.

¹¹⁴ Id.

¹¹⁵ Id. at 21.

through the market.¹¹⁶ Two intervenors commented on KIUC's ESM. KACA generally supports alternative regulation,¹¹⁷ while Mr. Madison supports KIUC's ESM.¹¹⁸

LG&E specifically objects to KIUC's proposed ESM and to ESM generally. LG&E labels KIUC's proposal unbalanced and punitive, since it would require LG&E to absorb all earnings shortfalls below the threshold but share 60 percent of earnings above the threshold with ratepayers.¹¹⁹ LG&E also objects to what it characterizes as an annual "rate case," where new pro forma adjustments and cost of capital changes would be considered.¹²⁰

The Commission finds KIUC's ESM proposal to be deficient in a number of respects. If an ESM is to produce incentives for greater efficiencies, it must be symmetrical so that the risks of underearning as well as the rewards of overearning are shared between ratepayers and shareholders. KIUC's ESM fails to provide this symmetry. KIUC's plan also omits a rate-of-return deadband. The Commission finds that such a deadband is necessary to recognize the range of reasonable returns, to provide for rate stabilization, to eliminate the need for constant rate changes, and to provide for extraordinary or unusual changes in revenues and expenses.

Further, KIUC's plan provides for annual reviews that would be tantamount to full blown rate cases by allowing consideration of rate-making adjustments and changes in

¹¹⁶ Id. at 22.

¹¹⁷ Brief of KACA at 1.

¹¹⁸ Post Hearing Brief of Robert L. Madison at 8.

¹¹⁹ Joint Brief of LG&E and KU at 71.

¹²⁰ Id. at 73.

rate of return. The Commission finds that such rate proceedings would be administratively burdensome and unnecessary. Based on all these findings, the Commission ultimately finds that KIUC's ESM proposal is unreasonable and should be rejected.

EARNINGS SHARING MECHANISMS

As discussed earlier, ESM regulatory plans are typically and appropriately used when an industry is beginning the transition from a monopolistic industrial structure to a more competitive structure. ESMs can provide utilities with incentives to operate more efficiently, as in a competitive market, without the negative consequences of losing customers to a competitor. ESMs also provide the utility incentives to alter its behavior and to take on additional risks by providing a limited safety net in case new efforts result in failure. The Christensen Report to LG&E discusses the attributes of ESMs. ESMs are relatively easy to understand. They can reduce business and regulatory risk and serve as an automatic means of keeping earnings within acceptable bounds. Sharing revenues allows captive ratepayers, as well as shareholders, to directly benefit from successful company initiatives.

Generally, within an ESM, the initial rates and earnings levels are typically set by traditional rate of return methods. The constraints surrounding how quickly the company may subsequently adjust its rates varies and usually depends upon the amount of retail competition in the market.¹²¹

¹²¹ As retail competition begins to actually develop and the company's need for rate flexibility grows, then a price cap type of regulatory plan becomes more appropriate. However, even with an ESM, some rate flexibility can be afforded to utilities through the ability to enter into special contracts with specific customers.

In a typical ESM, companies whose earnings fall between the high and low threshold earnings band or deadband retain 100 percent of those earnings. When earnings exceed the established band, some portion of the excess earnings are shared with ratepayers. Similarly, when earnings fall below the deadband, the utility is only allowed to recover a portion of the shortfall from ratepayers. In this way, ESMs help monopolistic utilities prepare both behaviorally and operationally to participate in a competitive market. ESMs provide incentives to increase efficiency and cut costs by allowing utilities to retain a portion of any increase in earnings.¹²² ESMs also provide an incentive for the utility to take greater risks in deepening and extending its markets, by being more creative with its service offerings and by offering new types of services. When earnings fall below the deadband, the ability to automatically recover a portion of the shortfall partially offsets the consequences of taking on additional risk in the marketplace.

The Commission has experience in the use of ESMs in the telecommunications industry. In Case No. 10105,¹²³ the Commission approved a two year experimental incentive regulation plan for BellSouth Telecommunications, Inc. (“BellSouth”) which was an ESM plan. A revised ESM plan was subsequently approved for BellSouth in Case No. 90-256.¹²⁴ The original ESM plan was initiated, in part, to obviate the need

¹²² Through an ESM, utilities are also able to forego the added expense and effort of being subjected to a traditional rate proceeding.

¹²³ Case No. 10105, Investigation of the Kentucky Intrastate Rates of South Central Bell Telephone Company, Inc., Order issued September 30, 1988.

¹²⁴ Case No. 90-256, A Review of The Rates and Charges and Incentive Regulation Plan of South Central Bell Telephone Company, final Order – Phase I issued April 30, 1991 and final Order – Phase II issued January 23, 1992.

for frequent rate reviews and to provide incentives for BellSouth to become more efficient by cutting its costs from monopolistic levels to levels more compatible with a competitive market. At the time the original ESM plan was approved, BellSouth was facing negligible competition in its markets. However, technological advances had been taking place in the telecommunications industry, which made the threat of network by-pass ever more possible and economically feasible. By the time BellSouth filed its price cap plan in 1994, it was exercising some limited pricing flexibility by entering into special contract arrangements with its larger retail customers.

In Case No. 94-121,¹²⁵ the Commission approved a Price Cap Plan for BellSouth. This represented another step in an ongoing transition toward full market competition. At the time the Price Cap Plan was approved, BellSouth was beginning to experience competitive threats to some of its tariffed services. This plan was designed, in part, to address the potential for BellSouth to use its least competitive services to cross-subsidize its more competitive services. The plan also addressed BellSouth's need for greater pricing flexibility for those services for which there was a competitive threat.¹²⁶

The Price Cap Plan gave BellSouth increased pricing flexibility by categorizing its tariffed services into different market baskets, each with its own unique pricing

¹²⁵ Case No. 94-121, Application of BellSouth Telecommunications Inc., d/b/a South Central Bell Telephone Company To Modify Its Method of Regulation.

¹²⁶ In this respect, the Price Cap Plan's primary focus was on service pricing, as opposed to the ESM plan's primary focus of increasing efficiency and reducing costs. Even though the Price Cap Plan freed BellSouth from earnings constraints, it, like the ESM, retained a mechanism to share a portion of BellSouth's efficiency gains with its ratepayers.

constraints. A price cap was placed on those services for which there was little or no competitive threat. For those services facing a viable competitive threat, BellSouth was able to price its services according to market constraints, but could not lower prices below incremental cost, except to meet a demonstrated competitive threat, and then only for a short period. By segregating tariffed services according to degrees of competition and by placing different pricing constraints upon each market basket, the Commission reduced the possibility of cross-subsidization between services. This served to protect BellSouth's captive ratepayers, as well as those new companies seeking to enter BellSouth's markets.

On January 25, 1999, the Commission approved a modified version of Cincinnati Bell Telephone's ("CBT") proposed price cap plan.¹²⁷ One modification was to add an ESM component to the plan. However, the Commission subsequently reconsidered its decision and eliminated the ESM component after finding that its inclusion with CBT's alternative regulation plan "mixes regulatory formats in a manner that distorts the intended incentives to the utility and its customers." That Order also states that a price cap regulatory format is a precursor to full market competition and "is designed to give CBT a degree of pricing freedom, depending upon the amount of competition experienced from other carriers."¹²⁸

LG&E objects to ESMs generally, arguing that they are not an appropriate rate-making tool given the pending changes in the industry. LG&E states that ESM had

¹²⁷ Case No 98-292, The Application of Cincinnati Bell Telephone Company For Authority to Adjust Its Rates and Charges and to Change Regulations and Practices Affecting Same.

¹²⁸ Case No. 98-292, Order issued July 26, 1999 at 2-3.

received consideration and been discarded for three reasons. LG&E argues that ESMs perpetuate a focus on cost rather than price.¹²⁹ LG&E also states that in conjunction with its commitment to cap base rates, it was able to incorporate greater incentives in its PBR proposals than would have been provided by an ESM.¹³⁰ Finally, ESM was rejected because this Commission and other regulatory bodies have rejected ESMs in the past.¹³¹ LG&E also asserts that a majority of the ESMs that exist for electric utilities were established before the recent trend to allow electric competition.¹³²

In general, the Commission agrees with the reasons cited by KIUC to support ESMs. LG&E's objections to ESMs are not persuasive. LG&E has recognized that state and federal telecommunications regulatory authorities have been shifting away from the use of ESMs in favor of price cap plans.¹³³ Contrary to LG&E's characterizations, these actions should not be construed as the rejection of one form of alternative rate-making mechanism in favor of another.¹³⁴ ESMs, price cap plans, and the other forms of alternative regulation discussed above are valid types of alternative rate-making mechanisms. Regulatory authorities' use of one over the other represents an acknowledgment of and a response to the changing nature of the

¹²⁹ Id. at 71.

¹³⁰ Id.

¹³¹ Id.

¹³² Id.

¹³³ Lowry Rebuttal Testimony, filed August 5, 1999, at 9-10 and 14-16 and Joint Brief of LG&E & KU at 71.

¹³⁴ Joint Brief of LG&E and KU at 71.

telecommunications industry. In the cases of BellSouth and CBT, each form of alternative rate-making mechanism was appropriate considering the time it was approved and the circumstances under which each company was operating. Finally, this Commission and other regulatory bodies have replaced ESMs with price cap plans for many telecommunications utilities. These utilities are already facing competitive threats for retail services and they require retail pricing flexibility. LG&E is not currently facing any retail competition for electric service.

The Commission does, however, believe that a more balanced ESM plan would be extremely beneficial to both LG&E's shareholders and its ratepayers. Based on this firm belief, the Commission will now offer LG&E an alternative to traditional regulation in the form of an optional ESM plan. The Commission encourages LG&E to take advantage of this optional ESM, since it provides LG&E with sufficient incentives to improve its performance while reducing the business risks inherent in over- and under-earnings. The Commission recognizes that mandating an alternative regulation plan is not appropriate at this time since our Order in Case No. 97-300 specified that LG&E could choose traditional or alternative rate-making and the joinder of KIUC's rate complaint has resulted in a traditional rate review. In addition, the ESM incentives will only work if they are fully supported by LG&E. Therefore, we now propose an optional ESM for LG&E, recognizing that LG&E's full support and commitment is essential to make this incentive plan work.

COMMISSION'S OPTIONAL ESM PLAN

- All revenues and expenses associated with the FAC and the environmental surcharge will be excluded in determining the return on equity.

- The threshold of the plan is an 11.50 percent return on equity with a symmetrical deadband of 100 basis points above and below the threshold.
- The rate cap will be lifted.
- To provide a strong incentive for LG&E to operate more efficiently, the effects of which will benefit ratepayers as well as LG&E, the sharing mechanism will be 60 percent LG&E and 40 percent ratepayers.
- To ensure that the ESM plan does not become cumbersome and the annual reviews do not result in lengthy and costly rate cases, only limited rate-making adjustments will be required. The scope of these adjustments to LG&E's earnings is discussed in detail under "ESM Reporting Requirements."
- When LG&E's earnings fall outside the deadband range, the amount of over- or under-earnings will be shared with or charged to ratepayers via a credit, or charge, on their bills. This credit, or charge, will be based on a percentage-of-revenue calculation as utilized in LG&E's monthly environmental surcharge factors, with a provision for an annual true-up. The calculated percentage will be reflected on customers' bills after the FAC and merger surcredit, but before the environmental surcharge and taxes.
- The optional ESM plan will have a three year term with the earnings sharing reflected on bills rendered from 2001 through 2003. At the beginning of the third year, the Commission will conduct a focused management audit pursuant to KRS 278.255 to review the plan and reassess its reasonableness.
- LG&E will be expected to continue and maintain its superior level of service quality which will be monitored through existing reporting requirements.

- LG&E should signify its acceptance of this optional ESM plan by filing within 30 days of the date of this Order, a tariff incorporating the ESM plan.

The Commission finds that this optional ESM plan will produce fair, just, and reasonable rates.

Although LG&E's PBR has not been accepted, the Commission reaffirms its support of alternative rate-making mechanisms, and notes that in addition to its use of alternative rate-making in telecommunications three of Kentucky's gas utilities, including LG&E, currently operate under some form of incentive regulation. LG&E is encouraged to continue pursuing an alternative regulation plan with components that are clearly defined and easily measured, and submit it to the Commission for review. The Commission will make its offices available if LG&E wishes to pursue a collaborative process with interested parties.

ESM Reporting Requirements

The optional ESM plan will require LG&E to make an annual filing by March 1 of each year from 2001 through 2003. Any refund or collection of earnings outside the established deadband is to be reflected on bills rendered after April 1 of that year. The annual filings must contain, at a minimum:

- 1) The calculation of the adjusted jurisdictional revenues, expenses, and net operating income. Revenues will be adjusted to include revenues from all off-system sales. Expenses will be adjusted to remove advertising costs, in accordance with the Commission's regulations.

2) The calculation of adjusted jurisdictional capitalization, capital structure, and the cost rates for debt and preferred stock. All such calculations shall be presented in a manner consistent with that adopted by the Commission in this Order.

3) The calculation of the rate of return on common equity. This calculation must reflect the adjusted jurisdictional net operating income, the adjusted jurisdictional capitalization, adjusted capital structure, and the calendar year end cost rates for debt and preferred stock.

4) The calculation of the revenue requirement for the reporting period based on the upper or lower point of the ESM deadband, and reflecting the adjusted financial information as calculated in conformity with Item Nos. 1-3, above.

5) A comparison of the adjusted net operating income to the upper or lower point revenue requirement, a calculation of the amount of sharing with or collection from ratepayers, and a determination of the surcredit or surcharge factor to be applied to ratepayers' bills, if applicable.

TARIFF FLEXIBILITY

LG&E also proposes to adopt a new tariff that would establish rules for special contracts and optional class tariffs that would provide greater flexibility to respond more quickly to customers' energy service needs. The only provision contained in the rules proposed by LG&E that really differs from the procedure the Commission currently has established for filing tariffs or special contracts is the requirement that all such filings must be approved within 30 days. Given the complex nature of many of the tariffs and special contracts that are filed with the Commission on a regular basis, the requirement that Commission approval be forthcoming within 30 days has not been shown to be

reasonable. While LG&E is one of the largest electric utilities subject to the Commission's jurisdiction, there are many other utilities and many other issues that the Commission must deal with on an ongoing basis. LG&E has presented no justification for the special treatment it seeks via the proposed provision for "tariff flexibility." All tariffs and all special contracts are important to the filing utility and affected customers. The Commission uses its best efforts to review and approve these filings as quickly as possible. Furthermore, the Commission has always expedited its review of such filings when good cause has been shown.

REVENUE AND RATE ISSUES

KIUC's rate complaint, as revised at the beginning of the hearing, recommended an annual revenue reduction of \$59,488,000 for LG&E.¹³⁵ LG&E opposed KIUC's recommended decrease and in response presented its own revenue requirements determination which showed that it was entitled to a \$7,862,370¹³⁶ increase in annual revenues. The Commission's analysis of the various rate-making issues presented by KIUC and LG&E are discussed in the following sections of this Order.

TEST PERIOD

In evaluating the reasonableness of its regulated return from electric operations, LG&E contends that the 12-month period ending December 31, 1998 was representative of its ongoing operations since the period was closely aligned with its planning, budgeting, and operating processes. In addition, LG&E proposes several

¹³⁵ By the conclusion of the hearing, the amount of the reduction proposed by KIUC had increased to \$70,730,000.

¹³⁶ LG&E Response to Hearing Data Requests, Item 9, page 4 of 5.

adjustments that it believes are necessary to reflect ongoing levels of revenues and expenses for its electric operations.¹³⁷ KIUC agrees that the 12-month period ending December 31, 1998 is appropriate. KIUC has proposed the test-year adjustments it believes necessary and has evaluated the adjustments proposed by LG&E.¹³⁸ The Commission finds it reasonable to utilize the 12-month period ending December 31, 1998 as the test period in this proceeding. In utilizing a historic test period, the Commission has given full consideration to appropriate known and measurable changes.

NET ORIGINAL COST RATE BASE

LG&E proposes an adjusted electric operations net original cost rate base (“rate base”) of \$1,289,922,000.¹³⁹ KIUC has proposed an adjusted electric operations rate base of \$1,201,583,000.¹⁴⁰ The Commission has reviewed both proposed rate bases and has made the following modifications:

¹³⁷ See Response to the Commission’s February 2, 1999 Order, which required information as originally requested in the Commission’s December 2, 1998 Order, Item 11; Response to the Commission’s April 30, 1999 Order, Item 11; and the Responsive Testimony of Michael D. Robinson, Martyn Gallus, Lonnie E. Bellar, and Ronald L. Willhite, filed July 2, 1999.

¹³⁸ KIUC originally proposed that the 12-month period ending September 30, 1998 be used for the evaluation of LG&E’s regulated return. See Kollen Direct Testimony, filed March 18, 1999, at 6. KIUC updated its test period to the 12-months ending December 31, 1998 due to the availability of information in response to discovery. See Kollen Additional Direct Testimony, filed May 24, 1999, at 2. KIUC later agreed with LG&E on the use of the 12 months ending December 31, 1998. See Kollen Rebuttal Testimony, filed August 16, 1999, at 3.

¹³⁹ Response to the Commission’s July 16, 1999 Order, Item 1(f), page 3 of 4.

¹⁴⁰ Kollen Rebuttal Testimony, filed August 16, 1999, Exhibit LK-1, page 4 of 4.

Utility Plant

LG&E has determined that its total electric utility plant in service at the end of the test period was \$2,481,567,000.¹⁴¹ KIUC has determined that the total electric utility plant in service was \$2,481,408,000.¹⁴² The difference in the amounts appears to be that KIUC only included 75 percent of LG&E's plant held for future use based on the assumption that the remaining 25 percent was not related to electric operations. However, LG&E reported in its 1998 Federal Energy Regulatory Commission ("FERC") Form 1 that the entire balance of plant held for future use was related to electric operations.¹⁴³ Therefore, the Commission will accept the total electric plant in service determined by LG&E as the appropriate test-period balance prior to the adjustment for the environmental surcharge, which is discussed later in this Order.

Materials and Supplies and Prepayments

In determining the electric operations rate base, LG&E and KIUC used the 13-month average balances for materials and supplies and prepayments. However, since 25 percent of the Trimble County Unit No. 1 ("Trimble County") is not owned by LG&E, they reduced these electric balances to reflect the removal of 25 percent of materials

¹⁴¹ Response to the Commission's July 16, 1999 Order, Item 1(f), page 3 of 4. Total electric utility plant in service reflects electric plant in service, electric construction work in progress ("CWIP"), plant held for future use, 75 percent of common utility plant in service, and 75 percent of common CWIP.

¹⁴² Kollen Rebuttal Testimony, filed August 16, 1999, Exhibit LK-1, page 4 of 4. The total reflects \$2,367,154,000 of plant in service and \$114,254,000 of CWIP.

¹⁴³ LG&E's 1998 FERC Form 1 at 200.

and supplies inventory related to Trimble County. This adjustment is consistent with the Commission's decision in LG&E's last general rate case.¹⁴⁴

While LG&E presented its materials and supplies and prepayment balances on an electric only basis, it did not provide the allocation ratios that were applied to the total company balances. The category of materials and supplies includes the accounts of Materials and Supplies, Fuel Stock, and Stores Expense. The Commission used the allocation percentages for these accounts, as well as the prepayments account, as reflected on LG&E's test-period balance sheet.¹⁴⁵ Therefore, the electric balances used in the Commission's determination of rate base differ slightly from those presented by LG&E and KIUC due to differing allocation ratios.

KIUC further proposes that the prepayments not be recognized in the calculation of the electric rate base. KIUC claims this proposal is justified because LG&E's actual cash working capital is, or should be, sufficiently negative to exceed the level of prepayments LG&E had included in rate base.¹⁴⁶ The Commission finds no merit in this reasoning. The Commission traditionally includes a reasonable level of prepayments in the determination of the rate base, and KIUC has offered no evidence to convince us to do otherwise in this proceeding.

¹⁴⁴ Case No. 90-158, Adjustment of Gas and Electric Rates of Louisville Gas and Electric Company, final Order dated December 21, 1990, at 8-9.

¹⁴⁵ The fuel stock account was allocated 100 percent to electric operations. The materials and supplies and the stores expense accounts were allocated 95 percent to electric operations. Prepayments were allocated 83.9 percent to electric operations. These percentages are based on the account balances shown on LG&E's test period balance sheet. See Response to the Commission's July 16, 1999 Order, Item 1(e), page 1 of 3.

¹⁴⁶ Kollen Additional Direct Testimony, filed May 24, 1999, at 11.

Cash Working Capital Allowance

LG&E determined its cash working capital allowance using the 45 day or 1/8th formula methodology. KIUC did not include a cash working capital allowance in its determination of the electric rate base. KIUC argues that the 1/8th formula ensures a positive cash working capital regardless of the timing of the utility's actual cash flows, assumes that investors supply capital for cash working capital purposes, and no longer provides a reasonable quantification of cash working capital requirements. KIUC also contends that, had a cash lead/lag study been properly performed, it would be unlikely that an electric utility would have a positive cash working capital requirement.¹⁴⁷ LG&E has rejected KIUC's proposal, contending that the proposal was not consistent with previous Commission decisions in its rate cases.¹⁴⁸

KIUC has offered no lead/lag study or any other evidence to support its contention that LG&E would have a negative cash working capital requirement if a lead/lag study were performed. KIUC has acknowledged that the FERC has not adopted the position that cash working capital should be set at zero unless the utility can justify a different result.¹⁴⁹ As noted by LG&E, this Commission has traditionally used the 1/8th formula approach in rate cases. The Commission finds that approach is reasonable and should be used here. However, the cash working capital allowance has been adjusted to reflect the accepted pro forma adjustments to operation and maintenance expenses, as discussed later in this Order.

¹⁴⁷ Id. at 10-11.

¹⁴⁸ Robinson Responsive Testimony, filed July 2, 1999, at 21.

¹⁴⁹ Response to the Commission's June 7, 1999 Order, Item 6(c).

Accumulated Depreciation

KIUC proposes no adjustment to LG&E's test-year electric accumulated depreciation.

LG&E proposes to increase the test-period balance for electric accumulated depreciation of \$1,001,300,599 by \$1,420,000 in conjunction with its proposed adjustment to depreciation expense. KIUC opposes the proposed adjustment to depreciation expense¹⁵⁰ and maintains that there was no need to adjust accumulated depreciation.

The proposal by LG&E is consistent with past Commission practice. However, as discussed later in this Order, the Commission does not accept LG&E's proposed depreciation expense adjustment. Therefore, the Commission will use the test-period level of accumulated depreciation, adjusted for the environmental surcharge discussed later in this Order, in the determination of LG&E's electric rate base.

Accumulated Deferred Income Taxes and Investment Tax Credits

In the determination of its electric rate base, LG&E has deducted accumulated deferred income taxes of \$284,088,000 and investment tax credits (prior law) of \$137,000.¹⁵¹ KIUC has included a similar deduction, but has combined the amounts for a deduction of \$283,955,000.¹⁵² The reason for the \$270,000 difference cannot be readily identified. The Commission has determined that it will utilize the amounts recognized by LG&E, since the financial statements included in this record support

¹⁵⁰ Kollen Rebuttal Testimony, filed August 16, 1999, at 36-37.

¹⁵¹ Response to the Commission's July 16, 1999 Order, Item 1(f), page 3 of 4.

¹⁵² Kollen Rebuttal Testimony, filed August 16, 1999, Exhibit LK-1, page 4 of 4.

these amounts.¹⁵³ However, the accumulated deferred income taxes have been adjusted for the environmental surcharge, as discussed later in this Order.

Net Regulatory Assets and Liabilities

KIUC proposes a reduction of \$40,288,000 to LG&E's electric rate base for net regulatory assets and liabilities.¹⁵⁴ KIUC contends that regulatory assets and liabilities that have a carrying cost should be included in the rate base calculations.¹⁵⁵ LG&E has rejected KIUC's proposal, contending that the proposal was not consistent with previous Commission decisions in its rate cases.¹⁵⁶

In its reply brief, KIUC has identified the accounts included in the proposed reduction of \$40,288,000.¹⁵⁷ An examination of those accounts reveals that KIUC included amounts in this adjustment that were already recognized in the accumulated deferred income tax portion of the rate base.¹⁵⁸ In addition, KIUC has not provided

¹⁵³ See Response to KIUC's 3rd Data Request, dated April 30, 1999, Item 35.

¹⁵⁴ Kollen Additional Direct Testimony, filed May 24, 1999, Exhibit LK-1, page 4 of 4. This was a change from KIUC's original position. In the Kollen Direct Testimony, filed March 18, 1999, Exhibit LK-2, page 4 of 4, KIUC's witness proposed to remove all Miscellaneous Deferred Debits and Credits. No reason was stated as to why KIUC made this change in its electric rate base calculations.

¹⁵⁵ Response to the Commission's June 7, 1999 Order, Item 12.

¹⁵⁶ Robinson Responsive Testimony, filed July 2, 1999, at 21.

¹⁵⁷ KIUC Reply Brief at 9.

¹⁵⁸ The amount included in KIUC's Reply Brief, page 9, for Other Regulatory Assets is composed of merger expenses and the deferred taxes associated with Statement of Financial Accounting Standards ("SFAS") No. 109. The amount included for Other Regulatory Liabilities was entirely composed of deferred taxes associated with SFAS No. 109. See Response to KIUC's 3rd Data Request dated April 30, 1999, Item 35, LG&E's December 31, 1998 Financial Reports, at 8 and 10.

sufficient justification for this proposed adjustment to the rate base calculation. Finally, as correctly noted by LG&E, the Commission has not traditionally made this type of adjustment to the rate base for LG&E. Based on these factors, the Commission finds that KIUC's proposal is not reasonable.

Customer Deposits

KIUC proposes reducing LG&E's electric rate base by \$5,462,000, the amount of electric customer deposits held by LG&E.¹⁵⁹ KIUC contends that most public utility commissions and utilities consider customer deposits to be customer supplied capital. However, KIUC acknowledges that it does not know how customer deposits were handled in LG&E's last rate case.¹⁶⁰ LG&E has opposed this adjustment, again contending that it is not consistent with the Commission's practice in previous rate cases.

KIUC has offered no support for its contention that most commissions and utilities consider customer deposits to be customer supplied capital. Generally when customer deposits are deducted from rate base, a corresponding adjustment is made to increase expenses for the amount of interest paid to customers on these deposits. It does not appear that KIUC included such an adjustment for the interest expense. Further, the Commission has traditionally not reduced rate base by the level of customer deposits. Therefore, the Commission will not implement KIUC's proposed adjustment to the rate base.

¹⁵⁹ Kollen Additional Direct Testimony, filed May 24, 1999, Exhibit LK-1, page 4 of 4.

¹⁶⁰ Response to the Commission's June 7, 1999 Order, Item 8.

Environmental Surcharge

As part of its determination of a base revenue reduction for LG&E, KIUC has assumed that the environmental surcharge would be incorporated into the base revenue requirement and then reset to zero in conjunction with the effective date of the Commission's Order in this proceeding. Any net incremental environmental costs incurred after that date would be recovered through the environmental surcharge.¹⁶¹ KIUC argues that the integration of the base and environmental surcharge revenue requirements provides LG&E with full recovery of its environmental costs.¹⁶²

LG&E agrees with KIUC that any analysis of its revenue requirement should include the environmental surcharge, but does not agree that the surcharge could or should be incorporated into base rates in this case. LG&E has stated that the incorporation of the environmental surcharge into base rates must be accomplished in accordance with KRS 278.183.¹⁶³

The environmental surcharge provides eligible electric utilities with the opportunity to recover certain environmental costs and to earn a return on qualifying environmental control-related investments that are not reflected in existing base rates. The mechanism approved for LG&E results in the monthly determination of an environmental revenue requirement that is collected from ratepayers in the form of a

¹⁶¹ Kollen Additional Direct Testimony, filed May 24, 1999, at 3.

¹⁶² Id. at 13.

¹⁶³ Response to the Commission's July 16, 1999 Order, Item 7(c). KRS 278.183(3) states, in pertinent part, "Every two years the commission shall review and evaluate past operation of the surcharge, and after hearing, as ordered, shall disallow improper expenses, and to the extent appropriate, incorporate surcharge amounts found just and reasonable into the existing base rates of each utility."

surcharge. Because of the focus on plant and expenses not already included in existing rates, the environmental surcharge is a stand-alone cost recovery mechanism.

Before the environmental surcharge can be incorporated into the base rates, the reasonableness of the surcharge amounts must be examined in accordance with KRS 278.183(3). No party conducted such an examination in this proceeding and there is no evidence of record to determine whether the surcharge amounts are just and reasonable. Therefore, the Commission finds that KIUC's proposal to incorporate LG&E's existing environmental surcharge into base rates as part of this proceeding is inappropriate.

LG&E argues that it would now be unfair and unreasonable to exclude the environmental surcharge-related assets, expenses, and revenues from the determination of its earnings, since the exclusion would overstate earnings. LG&E contends that including these environmental surcharge-related items in the determination of its earnings appropriately recognizes its right to earn a fair return on the environmental capital investment. LG&E notes that because it proposed a limited return on capital in its surcharge mechanism, which the Commission accepted, the suggested exclusion would prevent it from receiving a full rate of return on its environmental investments.¹⁶⁴

The Commission finds that LG&E's approach to handling the environmental surcharge in this proceeding is also inappropriate. If the environmental surcharge-related assets are not excluded, LG&E will recover the environmental costs through base rates as well as through the environmental surcharge mechanism. LG&E would

¹⁶⁴ Id., Item 7(a).

be earning the rate of return authorized in this proceeding and the rate of return authorized for the surcharge mechanism on the same environmental investment. If the environmental surcharge-related expenses are not excluded, LG&E would recover these costs twice: through base rates and the monthly environmental surcharge rate.¹⁶⁵ If the environmental surcharge-related revenues are not excluded, the determination of base rate earnings will be overstated.

Therefore, the Commission will exclude LG&E's environmental surcharge-related assets, expenses, and revenues from the determination of the base revenue requirements in this proceeding. This exclusion will require adjustments to LG&E's electric rate base and capitalization. Appendix A to this Order details the amounts to be excluded. It should be noted that the amounts excluded from rate base, capitalization, revenues, and expenses have been adjusted to reflect the adoption of the Settlement Agreement in Case No. 94-332.¹⁶⁶ The adjustment of these amounts is consistent with the philosophy that those specific environmental investments and expenses are eligible for inclusion in LG&E's base rates.

¹⁶⁵ The environmental expenses are comprised of depreciation expense, property tax expense, and insurance expense associated with specific environmental assets.

¹⁶⁶ Case No. 94-332, The Application of Louisville Gas and Electric Company for Approval of a Compliance Plan and to Assess a Surcharge Pursuant to KRS 278.183 to Recover Costs of Compliance with Environmental Requirements for Coal Combustion Wastes and By-Products. On August 17, 1999, the Commission approved a unanimous Settlement Agreement which resolved all outstanding issues and pending litigation relating to LG&E's environmental surcharge. The Settlement Agreement was in response to the December 17, 1998 Opinion of the Supreme Court of Kentucky in Kentucky Industrial Utility Customers, Inc. v. Kentucky Utilities Co., Ky., 983 S.W.2d 493 (1998). As a result of the Settlement Agreement, certain expenses and investments are no longer recovered through the surcharge mechanism.

Based upon the previous findings, we have determined the electric rate base for LG&E at December 31, 1998 to be as follows:

Total Utility Plant in Service	\$2,427,766,308
Add:	
Materials and Supplies	51,733,335
Prepayments	1,571,101
Cash Working Capital Allowance	<u>41,280,800</u>
Subtotal	\$ 94,585,236
Deduct:	
Accumulated Depreciation	994,854,103
Customer Advances	720,269
Accumulated Deferred Taxes	281,083,427
Investment Tax Credit (prior law)	<u>137,346</u>
Subtotal	<u>\$1,276,795,145</u>
 NET ORIGINAL COST RATE BASE – ELECTRIC	 <u>\$1,245,556,399</u>

CAPITALIZATION

KIUC proposes an electric capitalization of \$1,210,969,000.¹⁶⁷ KIUC also recognizes adjustments for Job Development Investment Tax Credit (“JDIC”) and the removal of the Trimble County inventories. These items were allocated to capitalization on a pro rata basis. KIUC does not include an adjustment to common equity for shareholder merger-related costs and savings. KIUC opposes this adjustment, arguing that LG&E’s capital structure has not been shown to be unreasonable. LG&E’s position was limited only to circumstances in which the result was an increase in common equity from actual levels and the adjustment would have the effect of negating LG&E’s commitment to charge ratepayers only 50 percent of the costs to achieve merger savings.¹⁶⁸

¹⁶⁷ Kollen Additional Direct Testimony, filed May 24, 1999, Exhibit LK-1, page 1 of 4.

¹⁶⁸ KIUC Main Brief at 55.

LG&E proposes an adjusted electric operations capitalization of \$1,253,085,973.¹⁶⁹ Included in the electric capitalization were adjustments for the JDIC, the removal of 25 percent of inventories related to Trimble County,¹⁷⁰ and the recognition of the shareholders' merger-related costs and savings. The JDIC and Trimble County adjustments were allocated by LG&E on a pro rata basis to all components of capitalization. The shareholder merger-related items were allocated only to the common equity.

During the test period, LG&E wrote-off the shareholder portion of costs associated with the merger between LG&E Energy Corp. and KU Energy Corp. LG&E's retained earnings were correspondingly reduced as a result of the write-off, which lowered the common equity component of capitalization. LG&E argues that this adjustment is necessary in order to remove the effects of a significant non-recurring item, to maintain the regulatory balance for the sharing of the merger costs and merger savings as ordered in Case No. 97-300, to prevent shareholders from being penalized, and to prevent customers from receiving a windfall inconsistent with the regulatory balance established in Case No. 97-300.¹⁷¹

LG&E's proposed adjustment reflects the reversal of the test-period write-off of the shareholders' cost to achieve the merger, net of the after tax shareholder portion of the merger savings. As discussed later in this Order, the Commission accepts LG&E's

¹⁶⁹ Response to the Commission's July 16, 1999 Order, Item 1(h), page 3 of 6.

¹⁷⁰ The 25 percent adjustment for Trimble County inventories is consistent with the Commission's decision in Case No. 90-158.

¹⁷¹ Response to the Commission's July 16, 1999 Order, Item 6.

proposed adjustment to its operating income statement for the shareholder portion of the merger savings. However, after analyzing the proposed adjustment to LG&E's common equity, the Commission finds that the proposed adjustment is inappropriate and should be rejected. The Commission cannot simply ignore the fact that the write-off has occurred and will continue to affect LG&E's capitalization in the future. Contrary to arguments made by LG&E, if this were a reasonable adjustment, it would have to be made in all future rate proceedings, regardless of when the shareholder portion of the merger savings exceeds the merger costs.¹⁷² In making this adjustment, LG&E in effect has attempted to shift some of the shareholders' portion of the merger costs to ratepayers, in that the increase in common equity lowers the achieved rates of return on both equity and capitalization. The lowering of these rates of return would falsely skew an investigation of whether LG&E has experienced excessive earnings. If this proposed adjustment is allowed, the recipients of a windfall would be LG&E's shareholders, not its customers. Consequently, the proposed adjustment upsets, rather than maintains, any regulatory balance established in Case No. 97-300.

Based on the findings herein, the Commission has determined that LG&E's total test-period-end electric capitalization should be \$1,177,151,390. The Commission has accepted KIUC's and LG&E's proposed adjustments for JDIC and the Trimble County inventories.¹⁷³ As discussed previously in this Order, LG&E's investment in environmental assets has been excluded. The Commission has normally made adjustments to capitalization by allocating the adjustment on a pro rata basis to all

¹⁷² Joint Brief of LG&E and KU at 100.

¹⁷³ See Appendix B.

capital components, unless good cause exists to allocate to a specific component. Concerning the environmental adjustment, we believe such cause exists and have removed LG&E's environmental asset investment from the long-term debt component of the capitalization. The rate of return on the environmental surcharge rate base was based on the interest rate associated with LG&E's pollution control debt.¹⁷⁴ The removal of the environmental investment on a pro rata basis treats these investments as if the rate of return used in the environmental surcharge mechanism reflects both a debt and equity component. However, the rate of return on rate base utilized in the environmental surcharge reflects only a debt component. It is therefore appropriate to adjust only the debt component of LG&E's capitalization. The Commission has also reduced LG&E's electric capitalization to reflect the exclusion of its investment in the Ohio Valley Electric Corporation and the African American Venture Capital Fund, investments that are not associated with LG&E's Kentucky jurisdictional operations. The exclusion of these other investments is consistent with prior Commission decisions.¹⁷⁵ The calculation of the electric capitalization is shown on Appendix B.

REVENUES AND EXPENSES

For the test period, LG&E has reported actual net operating income from electric operations of \$126,757,863.¹⁷⁶ Starting with this net operating income, KIUC has proposed a series of adjustments to revenues and expenses in support of its

¹⁷⁴ Case No. 94-332, Order dated April 6, 1995, at 24.

¹⁷⁵ See Case No. 8177, General Adjustment of Electric Rates of Kentucky Utilities Company, final Order dated September 11, 1981. A similar adjustment was proposed for KU in the companion case to this proceeding, Case No. 98-474.

¹⁷⁶ Response to the Commission's July 16, 1999 Order, Item 1(a), page 1 of 4.

determinations that LG&E was over-earning and that a base rate revenue reduction was required. KIUC's resulting adjusted net operating income from LG&E's electric operations was \$133,083,000.¹⁷⁷ LG&E has provided its own series of adjustments to revenues and expenses to reflect known and measurable changes and to establish a more representative level of on-going operations. LG&E's adjusted net operating income from electric operations was \$106,493,863.¹⁷⁸ The Commission finds that four of the adjustments proposed by LG&E and agreed to by KIUC are reasonable and will be accepted without change: the adjustments to revenues removing the provision for environmental surcharge refunds; the discontinuation of the demand-side management decoupling revenues; the adjustments to expenses to eliminate the one-time write-off of Trimble County limestone inventories; and the elimination of advertising expenses. The Commission makes the following modifications to the remaining proposed adjustments:

FAC Adjustment For Off-System Sales Losses

LG&E proposes to decrease revenues by \$1,890,792 to reflect the application of a 3 percent loss factor for intersystem sales as required by the Commission's February 9, 1999 Order in FAC Case No. 96-524-C.¹⁷⁹ In that Order, the Commission found that LG&E had applied an improper line loss percentage to intersystem sales and that 3

¹⁷⁷ KIUC Main Brief, Appendix A. KIUC had previously determined the adjusted net operating income from electric operations was \$126,961,000 (Kollen Additional Direct Testimony, Exhibit LK-1, page 2 of 4), later revised to \$126,380,000 (Kollen Rebuttal Testimony, Exhibit LK-1, page 2 of 4). KIUC's final calculation reflected additional information received during the public hearing.

¹⁷⁸ Response to the Commission's July 16, 1999 Order, Item 1(a), page 1 of 4.

¹⁷⁹ Case No. 96-524-C, An Examination by the Public Service Commission of the Application of the Fuel Adjustment Clause of Louisville Gas and Electric Company from November 1, 1997 to April 30, 1998. Final Order dated February 9, 1999. Rehearing Order dated December 2, 1999.

percent was the appropriate factor to use. None of the intervenors opposed this adjustment.

Subsequent to the hearing in this case, the Commission modified the February 9, 1999 Order in Case No. 96-524-C to require the use of a 1 percent loss factor for intersystem sales for the first four months of 1998. For the rest of 1998, the Commission adopted a 1 percent line loss for intersystem sales in Case Nos. 98-565¹⁸⁰ and 98-565-A.¹⁸¹ Utilizing the 1 percent line loss reduces LG&E's FAC adjustment by \$1,375,587, from \$1,890,792 to \$515,205.

Customer Growth

LG&E proposes to increase electric revenues by \$1,759,060 and expenses by \$767,894 to reflect customer growth during the test period. The adjustment is based on the number of customers served at the end of the test period compared to the average number served during the test period. KIUC objects to the adjustment on the basis that some of the expense categories do not vary with the number of customers served.

LG&E states that its methodology in this case is the same as that previously approved by the Commission in Case No. 90-158. The expenses included in the adjustment are variable based on the number of customers served and the expense offset developed by its computation is correct.

¹⁸⁰ Case No. 98-565, An Examination by the Public Service Commission of the Application of the Fuel Adjustment Clause of Louisville Gas and Electric Company from November 1, 1996 to October 31, 1998.

¹⁸¹ Case No. 98-565-A, An Examination of the Public Service Commission of the Application of the Fuel Adjustment Clause of Louisville Gas and Electric Company from November 1, 1998 to April 30, 1999.

The Commission finds that LG&E's year-end customer growth adjustment accurately reflects the increased revenue and expenses associated with the additional customers served as of the end of the test year. In addition, the adjustment has been calculated in the manner approved in LG&E's last rate case. Therefore, the Commission will accept LG&E's customer growth adjustment as proposed.

Net Revenues (Margins) from Off-System Sales

During the test year, LG&E realized margins from off-system sales of \$24,590,555.¹⁸² LG&E's off-system sales consists of three categories: 1) sales to other utilities for resale; 2) sales to KU in accordance with the LG&E/KU agreement to jointly dispatch their generating plants; and 3) brokered sales. KIUC proposes no adjustment to this amount. LG&E proposes an adjustment to reduce these margins by \$2,248,050¹⁸³ for rate-making purposes based on planning studies performed to determine its expected level of off-system sales for calendar year 2000. LG&E asserts that its 1998 test-year levels of off-system sales, and the margins on those sales, are not representative of ongoing, future levels and this justifies adjusting the test-year levels to reflect the results of its 2000 planning studies.¹⁸⁴

LG&E argues that its native load sales are expected to grow, resulting in less capacity being available for off-system sales. It anticipates that it may have a greater number of outages on its system in the future in order to install equipment needed to meet stricter environmental regulations, which would reduce the amount of time that its

¹⁸² Bellar Response Testimony, filed July 2, 1999, Response Exhibit LEB-2.

¹⁸³ Id.

¹⁸⁴ Bellar Response Testimony at 2.

internal generating capacity would be available for off-system sales. LG&E also contends that its future off-system sales will be less than the level experienced during the test year because market prices for peak period sales in the future are anticipated to decline. As prices decline, LG&E forecasts that its ability to make off-system sales on an economic basis will also decline, resulting in fewer opportunities to make such sales.¹⁸⁵

KIUC argues that the proposed adjustment is inappropriate and should be rejected for numerous reasons. First, KIUC claims the adjustment, based on LG&E's year 2000 planning studies, is not known and measurable.¹⁸⁶ Second, KIUC contends that by selectively choosing this adjustment as one that goes out 24 months beyond the end of the test year, LG&E ignores the matching principle, since it has not proposed to carry other revenue and expense adjustments (with the exception of its proposed adjustment for purchased power expense) out a full 24 months beyond the test period.¹⁸⁷ Third, KIUC claims that, even if the proposed adjustment was known and measurable and did not violate the matching principle, the reasons offered by LG&E in support of its proposal are flawed.

KIUC asserts that if increases in LG&E's native load sales cause LG&E's off-system sales to decline, then LG&E's overall margins will increase rather than decrease, since native load sales carry a higher margin than economy off-system sales. KIUC contends that current evidence on off-system sales prices does not reflect any

¹⁸⁵ Id.

¹⁸⁶ Kollen Rebuttal Testimony, filed August 16, 1999, at 17.

¹⁸⁷ T.E., Volume IV, September 3, 1999, at 129-130.

decline in margins from 1998 to 1999 and that LG&E has made no compelling argument for anticipating that there will be a significant decline in market prices for off-system sales beginning in 2000. On the issue of additional outages due to required installation of environmental equipment, KIUC points to the current uncertainty surrounding: (1) new NOx regulations; (2) the equipment that LG&E will be installing in response to those regulations; and (3) identification of the LG&E generating units on which such equipment might be installed.¹⁸⁸ KIUC also points out that LG&E has projected that its plant capacity factors and equivalent availability factors, respectively, will remain constant, or increase, over the 1999-2001 period.¹⁸⁹

The Commission finds that LG&E's proposed adjustment is unreasonable. For the reasons cited by KIUC, the Commission cannot accept such an adjustment. There is abundant evidence to contradict each of the reasons given by LG&E for the adjustment. While planning studies are a necessity as part of a utility's planning process, the results of such studies do not rise to the level of being known and measurable to support a rate-making adjustment to a historical test period. In addition, LG&E makes no attempt to be consistent by supporting all of its adjustments with projections that go 24 months beyond the end of the test year. Thus, this adjustment results in a clear violation of the matching principle.

The Commission will include an adjustment, to reduce test-year margins from off-system sales by \$2,219,543, based on the actual margins LG&E experienced on off-

¹⁸⁸ T.E., Volume I, August 31, 1999, at 142-150.

¹⁸⁹ KIUC Cross Examination Exhibit 18.

system sales for the twelve months ended August 1999.¹⁹⁰ While this adjustment includes data for eight months beyond the end of the test period, it only allows the test year to be updated through the evidentiary hearing. In addition, the adjustment is supported by the evidence of record, does not rely on planning studies or forecasts, and can be judged to be known and measurable.

Electric Weather Normalization

LG&E proposes a net reduction in revenues of \$4,977,000 to reflect the effect of abnormal weather on its sales, revenues, and expenses. LG&E states that the methodology used to calculate this adjustment had been documented in its 1993 Integrated Resource Plan ("IRP"). LG&E notes that the Commission did not question the appropriateness of its methodology to reflect weather effects in the sales forecasts component of its 1993 IRP. LG&E argues that using the models it developed to prepare its 1993 IRP was the appropriate means to quantify the effect of weather on 1998 sales.

LG&E's approach was to weather normalize the monthly electric energy sales for each revenue class on the basis of a weather variable coefficient. This coefficient was taken from the monthly regression model equation for the class and the deviation of actual monthly total heating/cooling degree days from the most recent 20-year average for the month. LG&E assumed that the following revenue classes were insensitive to weather: large industrial; street lighting; outdoor lighting; and water heating. The heating and cooling degree days were calculated using the average of 24 hourly temperatures.¹⁹¹

¹⁹⁰ LG&E Responses to Hearing Data Requests, Item 16.

¹⁹¹ Willhite Responsive Testimony, filed July 2, 1999, at 3-4.

KIUC opposes the adjustment for three reasons: (1) the Commission historically has not adopted weather normalization adjustments for electric utilities; (2) the selection of the data series and development of the regression equations, as well as other aspects of the methodologies, are subject to considerable judgment; and (3) there have been procedural limitations to the development of a comprehensive record on this issue.¹⁹² KIUC further argues that if the test period weather was not normal, a weather normalization adjustment should also have been proposed for off-system sales volumes and revenues, which LG&E did not do.¹⁹³

The Commission has considered an electric weather normalization adjustment in four previous LG&E rate cases.¹⁹⁴ In all four cases, the Commission denied the proposed adjustment, noting the failure of the sponsoring party to adequately support the adjustment. However, the Commission has also stated its general endorsement of the concept of normalization and its willingness to consider such a proposal in future rate proceedings. We reaffirm that willingness in this Order.

However, the Commission finds that LG&E's proposed electric weather normalization adjustment has not been adequately supported and should be denied. Although LG&E did file a summary of the results of its weather normalization, it failed to

¹⁹² Kollen Additional Direct Testimony, filed May 24, 1999, at 13-14.

¹⁹³ Kollen Rebuttal Testimony, filed August 16, 1999, at 28-29.

¹⁹⁴ See Case No. 8284, General Adjustment in Electric and Gas Rates for Louisville Gas and Electric Company, final Order dated January 4, 1982; Case No. 8616, General Adjustment in Electric and Gas Rates of Louisville Gas and Electric Company, final Order dated March 2, 1983; Case No. 8924, General Adjustment in Electric and Gas Rates of Louisville Gas and Electric Company, final Order dated May 16, 1984; and Case No. 10064, Adjustment of Gas and Electric Rates of Louisville Gas and Electric Company, final Order dated July 1, 1988.

file the supporting regression analyses, modeling and forecasting assumptions, and calculation details. As LG&E well knows, the Commission's regulation governing IRP filings, 807 KAR 5:058, Section 11(3), provides only for the issuance of a report by Commission Staff. Thus, while that staff report may not have questioned the accuracy and validity of the weather normalization methodology used in LG&E's 1993 IRP for forecasting purposes, that report does not equate to Commission approval. In addition, LG&E's methodology is now proposed for rate-making, a purpose which is vastly different than forecasting future supply and demand in an IRP.

Further, LG&E has not adequately explained why it is reasonable to use a 20-year average of degree days to define normal weather rather than a 30-year average.¹⁹⁵ LG&E indicated that a portion of its weather normalization calculations follows an approach developed in a project sponsored by the Electric Power Research Institute ("EPRI"), but LG&E has not provided any evidence to indicate that its overall electric weather normalization methodology is consistent with this EPRI research¹⁹⁶ or that the EPRI model has been accepted as a rate-making tool.

PBR Tariff

LG&E proposes two adjustments relating to the July 2, 1999 implementation of its electric PBR tariff subject to future change. The first is a reduction to revenues of \$9,400,000 to reflect the first year bill reduction incorporated in the tariff. The second is a reduction to revenues of \$118,000 to reflect the impact of the performance-based

¹⁹⁵ Previous electric weather normalization adjustments in LG&E rate cases were based on a 30-year average. The 30-year average is typically used in gas weather normalization adjustments.

¹⁹⁶ Response to the Commission's July 16, 1999 Order, Item 17, part 2.

components¹⁹⁷ of the PBR tariff as if the tariff had been in effect during the entire test period. LG&E argues that the PBR tariff will have an ongoing impact on the representative test period and that recognition of the tariff's impact is consistent with the Commission's Order implementing the tariff.¹⁹⁸ LG&E also contends that, even though the Commission's Order implementing the tariff states the tariff is subject to further change, recognition of its impact is consistent with the development of a representative period in a series of traditional rate cases.¹⁹⁹

KIUC opposes both adjustments, arguing that LG&E's revenue requirement and the appropriate base revenue reduction should be determined absent any consideration of the PBR tariff. KIUC contends that the rate reduction should depend, not upon the adoption of the PBR tariff, but upon LG&E's cost of service.²⁰⁰ KIUC further argues that the PBR tariff bill reduction is dependent upon the Commission's final adoption of the tariff; that it is temporary in nature; and that LG&E's bill reduction adjustment reflects only the first year reduction and not the significantly smaller reductions scheduled in subsequent years.²⁰¹

The Commission finds that it is not appropriate to recognize the effects of the PBR tariff when determining LG&E's level of base rate earnings. The PBR tariff

¹⁹⁷ The performance-based components are Fuel Cost Recovery, Generation Performance, and Service Quality.

¹⁹⁸ Willhite Responsive Testimony, filed July 2, 1999, at 6 and 9.

¹⁹⁹ Response to the Commission's July 16, 1999 Order, Item 11(c).

²⁰⁰ Kollen Additional Direct Testimony, filed May 24, 1999, at 18.

²⁰¹ Kollen Rebuttal Testimony, filed August 16, 1999, at 23-24.

represents a stand-alone adjusting factor that operates independently of LG&E's base rates, as do its environmental surcharge and merger surcredit. The PBR results do not restate or revise the base rates of LG&E. Therefore, when determining whether LG&E's base rates produce excessive earnings, it is not appropriate to incorporate the effects of the PBR tariff in the determination of base rates.

LG&E's application of the PBR tariff to the test period leads to a misstatement of the base rate earnings. The acceptance of the \$9,400,000 bill reduction as proposed by LG&E does not accurately reflect the provisions of the PBR tariff. In years two through five, the annual bill reduction is only \$3,760,000. If it were appropriate to recognize the effects of the bill reduction in determining a representative, on-going level of operations, the adjustment for the bill reduction should have reflected that \$24,440,000 was to be returned to LG&E customers over a 5-year period. The Commission also notes that LG&E did not calculate the FCR component of its proposed adjustment in conformity with the PBR tariff, which results in a significant understatement of the adjustment.²⁰²

The Commission finds that these two adjustments are rendered unnecessary by our decision to reject the proposed PBR. Nevertheless, addressing the merits of the adjustments may provide useful guidance in the future. First, a determination should be made of LG&E's base rate earnings level and then a determination should be made of whether that level of earnings is excessive. Only then should the effects of the PBR

²⁰² Response to the Commission's April 30, 1999 Order, Item 11, page 20 of 64. The FCR portion of the PBR tariff states that when the percentage change in the actual fuel cost ("CA") is less than the percentage change in the fuel cost index ("CI"), the two percentages are added together and the result divided by 2. In Item 11, page 20 of 64, LG&E calculated the difference between CA and CI and divided by 2. Correcting this mistake in the calculation results in a FCR of \$5,769,629, not the \$117,606 as shown.

tariff be recognized in conjunction with any determination that earnings are excessive. This approach properly reflects the prospective nature of the application of the PBR tariff to LG&E's base rate earnings. LG&E has produced no evidence to demonstrate that a retroactive application of the PBR tariff to its historic test year is consistent with the treatment of similar adjustments in previous rate cases. Therefore, the proposed adjustment is denied.

Environmental Surcharge Revenues

LG&E proposes to reduce revenues by \$1,000,000 to reflect the ongoing impact on its environmental surcharge of the adoption of the Settlement Agreement in Case No. 94-332. LG&E contends that the adjustment should be made as it was known and measurable as a result of the Settlement Agreement.²⁰³

KIUC opposes the proposed adjustment, contending that its proposal to incorporate the environmental surcharge into the base rates already recognizes the impact of the Settlement Agreement. KIUC argues that accepting LG&E's proposed adjustment would result in double counting the revenue reduction due to the Settlement Agreement.²⁰⁴

The Commission finds that the adjustment proposed by LG&E should be denied. As discussed previously in this Order, the Commission has determined that all environmental surcharge assets, revenues, and expenses should be excluded from the determination of base rate earnings. Thus, the Commission will reduce revenues by \$5,899,198 and expenses by \$2,748,792. Appendix A to this Order details the amounts

²⁰³ Robinson Responsive Testimony, filed July 2, 1999, at 9.

²⁰⁴ Kollen Additional Direct Testimony, filed May 24, 1999, at 13.

to be excluded. These amounts have been adjusted to reflect the adoption of the Settlement Agreement in Case No. 94-332.

Merger Dispatch Savings and Open Access Transmission Tariff Costs

LG&E proposes to normalize revenues associated with its merger dispatch savings and expenses associated with its open access transmission tariff (“OATT”). Merger dispatch savings, identified as internal economy revenues, will decrease by \$1,728,000, while transmission costs associated with LG&E’s OATT will increase by \$1,400,000.²⁰⁵ The merger dispatch savings reflect fuel costs from off-system sales that are provided to retail customers as fuel clause billing reductions. The OATT cost increase reflects the operation of the LG&E/KU Joint OATT filed at FERC.²⁰⁶

KIUC opposes both adjustments arguing that the proposed adjustment to the merger dispatch savings would permit LG&E to retain the savings, rather than return those savings to customers. KIUC further argues that both adjustments are one-sided and do not properly match revenues with associated expenses.²⁰⁷

The Commission finds that LG&E’s proposal to normalize the merger dispatch savings and OATT costs is reasonable and should be accepted. The merger dispatch savings and the OATT costs included in the test period reflect six months of operation. It is reasonable to normalize these items to reflect a full 12 months of operation. KIUC has not provided adequate justification to support the rejection of the proposals.

²⁰⁵ Response to the Commission’s December 2, 1998 Order, Item 11, Supplemental Response filed February 9, 1999, Workpaper-20.

²⁰⁶ Robinson Responsive Testimony, filed July 2, 1999, at 11.

²⁰⁷ KIUC Main Brief at 42.

Purchased Power Expense

LG&E proposes an adjustment to increase its purchased power expense above the actual test year level by \$4,306,000.²⁰⁸ This adjustment reflects test-year demand and energy purchases with the demand purchase volumes re-priced to reflect year 2000 forward prices obtained by LG&E from energy marketing companies and power brokering entities. LG&E contends that because of changes in the electric industry caused by the 1998 summer price spikes for power purchases, its prices for 1998 power purchases, which were determined prior to that summer's price spikes, are not representative of prices on a going-forward basis.

KIUC states that the proposed adjustment is not known and measurable and violates the matching principle. Citing LG&E's reliance on a verbal price quote obtained on a single day, from one energy marketer, KIUC states that the volatile nature of the wholesale power market renders the basis for LG&E's adjustment inherently unreliable.²⁰⁹ KIUC also points to the fact that LG&E hasn't made any commitments for year 2000 purchases but, had it done so, the probability that the price for such purchases would be the same as the verbal price quote LG&E received on one day during the summer of 1999 is virtually nonexistent. KIUC also argues that with 328 megawatts of peaking capacity being added to the combined system during 1999, there may not be the need to purchase the quantities of power in 2000 that were purchased during 1998.

²⁰⁸ Bellar Response Testimony, filed July 2, 1999, Response Exhibit LEB-1.

²⁰⁹ T.E., Volume V, September 7, 1999, at 10, 14, and 15.

The adjustment proposed by LG&E cannot be accepted. This is another example of selectively going out 24 months beyond the end of the test year in an attempt to support an adjustment. The likelihood that purchase volumes in 2000 will be at the same level as in 1998 is remote, to say the least. The probability that any LG&E purchases for calendar year 2000 will be at the same price as it was quoted one day this past summer is even more remote. Even if the support for LG&E's adjustment were not so vacuous, the adjustment itself is inconsistent with actual events that have occurred since the test year, such as the installation of two new combustion turbines at the Brown Generating Station. It is also inconsistent with arguments LG&E offered in support of its proposed adjustment to reduce off-system sales margins, including: (1) projecting lower future prices in the wholesale power market; (2) increases in sales to native load customers; and (3) increased outages for LG&E's own generating facilities due to the need to install equipment necessary to meet stricter environmental regulations.

The Commission will, however, include an adjustment based on LG&E's actual purchased power expense for the twelve months ended August 1999.²¹⁰ This adjustment reflects the impact of both price and volume changes since the test year, is based on LG&E's actual purchases for a period of time that pre-dates the hearing, is in evidence in this record, and does not rely on price quotes from a single source on one day of the year. As such, this adjustment is clearly known and measurable, is adequately supported, and comports in principle with the matching concept while, at the same time, recognizes the substantial changes that have occurred in the wholesale

²¹⁰ LG&E Responses to Hearing Date Requests, Item 15.

power market due to the events that led to the price spikes of 1998, and 1999 as well. The impact of this adjustment is to increase purchased power expense by \$6,697,000 above the level incurred during the test year.

Write-off of Shareholder Portion of Costs to Achieve

In conjunction with its proposal to adjust the common equity portion of its electric operations capitalization, LG&E proposes to recognize on its operating statement the reversal of the write-off of the shareholder portion of the costs to achieve the merger. The proposed reversal adjustment is \$23,577,000. This adjustment is one of several proposed by LG&E to eliminate the balances recorded “below the line” on its operating statement for Other Income and Deductions. As noted earlier in this Order, KIUC opposes this adjustment.

The Commission has already determined that this adjustment to LG&E’s electric common equity is inappropriate. This expense adjustment, if accepted, would result in the ratepayers being forced to pay over time the shareholders’ portion of the costs to achieve. Consequently, the Commission rejects this proposed adjustment to LG&E’s electric operating statement.²¹¹

Shareholder Merger Savings

LG&E proposes an increase to operating expenses of \$9,813,000 to reflect the shareholders’ portion of the merger savings. The shareholder portion of merger savings reflects 50 percent of the total savings originally estimated and presented in Case No.

²¹¹ The Commission notes that the determination of LG&E’s earnings level is based on its net operating income, not its net income as presented and argued by LG&E throughout this proceeding. “Below the line” operating statement adjustments are only recognized to the extent that they have an impact on “above the line” items, such as the interest synchronization adjustment.

97-300. Like the ratepayer net merger savings, the shareholder portion escalates over a 10-year period. LG&E argues that in order for the shareholders to retain their portion of the merger savings, this adjustment is necessary to eliminate the shareholders' merger savings from the return calculations. The proposed adjustment reflects the first full year of estimated savings and is stated at the gross level, rather than as a net amount reflecting the shareholders' portion of costs to achieve.²¹²

KIUC agrees with the proposed adjustment in principle, but initially argued that only an amount reflecting the net of gross savings, less costs to achieve, should be recognized as the adjustment. At that time, KIUC argued that using the gross level would alter the sharing arrangement accepted in Case No. 97-300 and that the shareholder portion of costs to achieve would be shifted to ratepayers.²¹³ In its brief, citing information provided by LG&E at the public hearing, KIUC modified its position, recommending that the gross level of savings be used, but that it reflect only an amount equal to eight months of savings. KIUC contends that the use of this amount was reasonable since the merger was in effect approximately eight months of the test period.²¹⁴

The Commission finds that an adjustment should be made to secure the shareholder portion of the merger savings. We also find that it is reasonable to use the gross level of merger savings reflecting the eight months the merger was in effect

²¹² Joint Brief of LG&E and KU at 96.

²¹³ Kollen Rebuttal Testimony, filed August 16, 1999, at 40.

²¹⁴ KIUC Main Brief at 37-38.

during the test period. Therefore, operating expenses have been increased by \$6,542,000.

Year 2000 Compliance Expenses

LG&E proposes to decrease operating expenses by \$630,000 to eliminate incremental costs associated with preparing its automated computer systems for the Year 2000. LG&E proposes to amortize the total test-period expense of \$945,000 over a 3-year period and to recognize the first year amortization in operating expenses. The proposed decrease reflects the difference between the total test-period expense and the first year amortization. LG&E argues that the 3-year period is consistent with generally accepted accounting principles and the procedures it currently follows for the amortization of information technology investments.²¹⁵

KIUC agrees with this adjustment in concept, but argues that the amortization period should be five years. KIUC contends that the 5-year period more closely parallels the merger surcredit period, that computer software and hardware are commonly amortized over 5 to 10 years, and that its proposed 5-year period would provide LG&E with the full recovery of these costs.²¹⁶

The Commission finds that the proposal by LG&E is reasonable and should be accepted. A three year amortization conforms with generally accepted accounting principles and LG&E's procedures for recovery of information technology investments. KIUC has not explained the relevance of the merger surcredit period with regard to the amortization of computer costs. KIUC also has not provided adequate support for its

²¹⁵ Robinson Responsive Testimony, filed July 2, 1999, at 13-14.

²¹⁶ Kollen Additional Direct Testimony, filed May 24, 1999, at 8-9.

contention that these computer costs are normally amortized over 5 to 10 years. Therefore, the operating expenses have been reduced by \$630,000.

Storm Damage Expense

LG&E proposes to decrease operating expenses by \$1,366,000 to normalize storm damage expense to a 10-year average. LG&E states that its approach is consistent with the approach used in Case No. 90-158, which computed the 10-year average of actual storm damage expenses adjusted for inflation using the Consumer Price Index – Urban (“CPI-U”).²¹⁷ KIUC does not oppose this adjustment.²¹⁸

The Commission has reviewed LG&E’s calculation of this adjustment and has determined that it conceptually follows the approach used in Case No. 90-158. However, the Commission has normally included the test-period expense in the calculations with the CPI-U factor set at 1.000. The Commission has recalculated the adjustment, using 10 years of actual expenses including the test period, and finds that operating expenses should be reduced by \$1,104,561.

Labor Costs

LG&E proposes to increase operating expenses by \$1,503,000²¹⁹ to reflect annual labor cost increases that occurred during the test period. LG&E states that the proposed adjustment is based on the employee level at the end of the test period, and it

²¹⁷ Robinson Responsive Testimony, filed July 2, 1999, at 15 and Response Exhibit MDR-LGE-3.

²¹⁸ Response to the Commission’s June 7, 1999 Order, Item 5.

²¹⁹ The adjustment reflected increases for wages, payroll taxes, and fringe benefits. See Robinson Responsive Testimony, filed July 2, 1999, Response Exhibit MDR-LGE-5, page 1 of 4.

has annualized the salaries for those employees for 1998 wage increases.²²⁰ In response to claims made in the KIUC brief, LG&E states that its labor adjustment was calculated differently from that of KU, citing differences in specific labor policies. In addition, LG&E contends that the labor adjustment proposed in KIUC's brief ignores the impact of the Commission's Order in Case No. 97-300 and that the differences cited by KIUC are captured by the merger surcredits and other merger savings adjustments.²²¹

KIUC opposes the proposed labor adjustment, claiming that it violates the matching principle because it recognizes post-test-period events, annualizes a wage increase that should have already been reflected in the first step of LG&E's calculations, intends to capture projected increases in LG&E's fringe benefits by annualizing one month's costs, and fails to reflect any reduction in LG&E's employee levels in the 1999 projections.²²² In its brief, KIUC states that if LG&E's labor adjustment suffered from the same calculation errors as those committed by KU in Case No. 98-474, LG&E's labor costs would be overstated by \$10,342,000.²²³

Usually, the normalization of labor costs is a straightforward calculation. For hourly employees, the hourly wage rates as of test-period end are multiplied by the normal hours worked in a year. Salaried employees are recognized at the salary level as of test-period end. The difference between this amount and the test-period actual

²²⁰ Robinson Responsive Testimony, filed July 2, 1999, at 18.

²²¹ Joint Reply Brief of LG&E and KU; Supplemental Response to Public Hearing Information Requests, Item 11.

²²² Kollen Rebuttal Testimony, filed August 16, 1999, at 30-32.

²²³ KIUC Main Brief at 48-52.

costs is computed and becomes the basis for an adjustment. The associated payroll taxes and fringe benefits are calculated reflecting the end of test-period normalization.

However, such an approach is not appropriate for this proceeding. A significant portion of the merger savings anticipated by LG&E relates to reductions in its workforce. Those expected labor savings have been incorporated into the amounts returned to ratepayers through the merger surcredit. If the Commission follows the usual labor normalization approach, there will be a double recognition of the savings from the workforce reduction. Consequently, the Commission does not accept KIUC's argument that LG&E failed to recognize the impact of any employee reductions in its calculations. In order to avoid such a double recognition, the calculated normalized labor cost for employees as of test-period end would have to be compared to the test-period actual costs for those employees at test-period end. But there is no evidence in this record that this was the approach followed by LG&E in calculating its proposed adjustment.

The Commission finds that LG&E's proposed labor cost adjustment is not reasonable and should be rejected. LG&E has not adequately explained exactly how its adjustment was calculated. After reviewing the calculations submitted by LG&E, the Commission is in agreement with KIUC that steps one and two of the proposed labor adjustment appear to be duplicative.²²⁴ Any payroll tax adjustment based upon these calculations will result in an overstatement of the normalized payroll tax. Finally, LG&E

²²⁴ See Robinson Responsive Exhibit MDR-LGE-5, page 2 of 4. Step one shows the "Annualized Base Labor @ December 31, 1998," while step two shows the "Adjustments to annualize 1998 labor increase." If step one actually shows the "annualized" base labor at test period end, any wage changes granted during the test period have already been recognized, and step two is a duplication which overstates the adjustment.

has failed to provide sufficient documentation to support the cost increases it has identified for employee fringe benefits.²²⁵

The Commission finds that KIUC's proposal to reduce labor costs by \$10,342,000 is also unsupported and should be rejected. KIUC's proposal is speculative and cannot be considered known and measurable since there is no evidence to demonstrate that LG&E committed the same calculation errors as KU. Therefore, the Commission will make no adjustment to the test-period labor costs.

Depreciation Expense

KIUC's rate complaint includes no adjustment to LG&E's test-year depreciation expense.

LG&E proposes to increase operating expenses by \$1,420,000 to reflect a full year's depreciation expense on 1998 net plant additions, in order for the test period to be more representative of on-going operations.²²⁶ LG&E calculates its proposed adjustment using nine "income account" categories, showing the 1998 actual depreciation expense and the corresponding calculated depreciation expense using the test-period end plant balances.²²⁷ LG&E subsequently acknowledged that some of its assets were misclassified in the property records at year end, but were in service.

²²⁵ Of particular concern is the fact that LG&E has provided no justification for the increase in the percentage match used in the calculation of the 401(k) adjustment.

²²⁶ Robinson Responsive Testimony, filed July 2, 1999, at 19.

²²⁷ Response to KIUC's 3rd Data Request, dated April 30, 1999, Item 39, pages 11 and 12 of 23. LG&E calculated the adjustment on all utility plant, and then allocated the total to electric and gas operations.

KIUC agrees conceptually with the proposed adjustment, but contends that LG&E's calculations were inappropriate in that depreciation expense had been included for CWIP not closed to plant in service at December 31, 1998. KIUC also challenges the recognition of a significant, unexplained increase in amortization with the depreciation adjustment. KIUC acknowledges that LG&E claimed the increased amortization related to new software systems placed in service during 1998, but rejected the explanation, citing the lack of cost information on the systems and amortization rates.²²⁸ LG&E argues that KIUC's position was arbitrary and should be rejected.²²⁹

The Commission finds that LG&E's proposed adjustment is not adequately supported by the record and should be rejected. While the Commission is not conceptually opposed to the adjustment, LG&E has failed to provide adequate documentation to support the adjustment. The supporting schedule fails to provide the various plant balances and corresponding depreciation rates, items needed in order to verify the reasonableness of the calculations.²³⁰ Had LG&E provided the appropriate supporting details for its proposed adjustment, the Commission would have been able to determine an appropriate level of depreciation expense to reflect in the pro forma operating statement.

²²⁸ Kollen Rebuttal Testimony, filed August 16, 1999, at 36-37.

²²⁹ Joint Brief of LG&E and KU at 92.

²³⁰ See Response to KIUC's 3rd Data Request, dated April 30, 1999, Item 39, pages 11 through 15 of 23. The Commission notes that the depreciation adjustment proposed by KU was supported by plant and functional account balances and the corresponding depreciation rates.

Long-Term Debt Interest Expense and Interest Synchronization

LG&E proposes to reduce long-term debt interest expense by \$467,000 to reflect the retirement of 6.75 percent first mortgage bonds due June 1, 1998.²³¹ KIUC does not oppose this adjustment.²³² This adjustment does not affect the determination of LG&E's net operating income from electric operations. Consequently, the Commission finds that this expense adjustment is unnecessary because the bond retirement and resulting interest expenses reduction are already reflected in the determination of LG&E's debt component of its capitalization.

The Commission has traditionally recognized the income tax effects of adjustments to long-term debt interest expense through an interest synchronization adjustment. The adjustment is calculated by applying the interest rates applicable to the debt component of the capital structure in order to compute an interest adjustment. The combined state and federal income tax rate is then applied to the interest adjustment to determine the effect on income taxes. LG&E has determined that, as a result of the adjustments to its electric capital structure, its interest expense should increase \$1,648,000, which results in a decrease to income taxes of \$665,000.²³³

The Commission has recalculated the interest synchronization adjustment for LG&E. The debt components utilized in this computation reflect the effects of the JDIC allocation and reductions to capitalization due to the 25 percent Trimble County

²³¹ Robinson Responsive Testimony, filed July 2, 1999, at 17.

²³² KIUC's Response to LG&E's Request for Information, dated June 7, 1999, Item 42.

²³³ See Response to the Commission's February 2, 1999 Order, which required information as originally requested in the Commission's December 2, 1998 Order, Item 11, Workpaper 11.

inventory adjustment, the removal of LG&E's environmental assets, and the exclusion of other investments. Using the adjusted capitalization and the cost rate applicable to LG&E's debt component, interest expense is decreased \$949,550, which results in an increase to income taxes of \$383,262.

Elimination of Other Income and Other Interest Expense

LG&E proposes a "below the line" net reduction of \$2,091,000 to Other Income and Other Interest Expense to eliminate the effect of these accounts from the determination of its net income. As the Commission determines LG&E's earnings level based on net operating income, rather than net income, this adjustment is unnecessary because it has no impact on LG&E's revenue requirement.

Income Taxes

Both LG&E and KIUC have determined the overall effect their respective adjustments would have on LG&E's income tax expense. LG&E has calculated a reduction in income taxes of \$14,509,000.²³⁴ KIUC has calculated an increase in income taxes of \$2,803,000.²³⁵ The Commission has applied the combined state and federal income tax rate of 40.3625 percent to the adjustments accepted herein, resulting in a decrease in income tax expense of \$7,072,557. This adjustment is in addition to the interest synchronization adjustment described previously.

²³⁴ Response to the Commission's July 16, 1999 Order, Item 1(a), page 4 of 4.

²³⁵ KIUC Main Brief, Appendix A, page 2.

Pro Forma Net Operating Income Summary

The adjusted net operating income for LG&E's electric operations is as follows:

Operating Revenues	\$650,352,588
Operating Expenses	<u>534,428,023</u>
ADJUSTED ELECTRIC NET OPERATING INCOME	<u>\$115,924,565</u>

RATE OF RETURN

Capital Structure

LG&E proposes an adjusted end-of-test-period capital structure containing 44.43 percent long-term debt, 6.76 percent preferred stock, and 48.82 percent common equity.²³⁶ LG&E decreased its test-period-end, electric operations' preferred stock and increased its common equity by \$994,238, the amount of the discount and expense associated with the preferred stock issues.²³⁷ As discussed previously in this Order, LG&E has allocated adjustments for JDIC and the Trimble County inventories on a pro rata basis to all components of capitalization, but allocated the shareholder merger-related items only to common equity.

KIUC proposes a capital structure containing 44.96 percent debt, 6.84 percent preferred stock, and 48.20 percent common equity.²³⁸ The difference between the KIUC and LG&E proposals is LG&E's recognition of the adjustment to common equity related to the shareholder merger-related items. As discussed previously in the Order, KIUC opposes the shareholder merger-related items adjustment.

²³⁶ Response to the Commission's July 16, 1999 Order, Item 1(i), page 2 of 4.

²³⁷ Id., Item 1(h), page 3 of 6.

²³⁸ KIUC Main Brief, Appendix A, at 3.

The Commission agrees with KIUC that the shareholder merger-related items adjustment is inappropriate. After recognizing the Commission's adjustments to LG&E's electric capitalization, discussed previously in this Order, the Commission finds LG&E's electric capital structure is as follows:

	<u>Percent</u>
Long-Term Debt	42.75
Preferred Stock	7.11
Common Equity	<u>50.14</u>
Total Electric Capital	100.00

Cost of Debt and Preferred Stock

LG&E proposes a cost of long-term debt of 5.57 percent.²³⁹ To arrive at its cost of long-term debt, LG&E adjusted its interest expense by the amortization of expenses, premiums, and the loss on reacquired debt. KIUC does not oppose the use of the 5.57 percent cost rate.²⁴⁰

The Commission finds that the cost of long-term debt should be based on the total interest expense adjusted only to reflect the amortization of the loss on reacquired debt. Since the cost of debt is the effective rate which already reflects expenses and premiums on debt issuances, no additional adjustments are needed. Consistent with the approach used in Case No. 90-158, the Commission finds the cost of long-term debt to be 5.52 percent.

²³⁹ Response to the Commission's July 16, 1999 Order, Item 1(i), page 4 of 4.

²⁴⁰ KIUC Main Brief, Appendix A, at 3.

LG&E²⁴¹ and KIUC²⁴² both agree that the cost of preferred stock is 4.79 percent and the Commission concurs.

Return on Equity

In its rate complaint, KIUC initially estimated a fair rate of return on common equity for LG&E using a Discounted Cash Flow (“DCF”) analysis and a Capital Asset Pricing Model (“CAPM”) analysis. The DCF analysis was performed based on a comparison group of six electric utilities. A DCF analysis was not performed for LG&E’s parent, LG&E Energy, because of the recent merger with KU Energy Corp. Historical data for LG&E Energy would only reflect LG&E, and not KU.²⁴³

KIUC’s criteria for selecting the comparison group of companies was a Value Line Safety Rank of either 1 or 2, and a Moody’s Bond Rating of Aa. KIUC also eliminated any companies that had less than 75 percent of earnings or dividends generated from electric operations, had cut dividends within the last four years, or were involved in merger activity. The DCF analysis results had a range of 8.97 to 9.89 percent, with a midpoint of 9.43 percent. The CAPM analysis produces returns from 7.14 to 9.28 percent. Based on these analyses, KIUC initially recommended a rate of return on common equity for LG&E of 9.45 percent.²⁴⁴

²⁴¹ Response to the Commission’s July 16, 1999 Order, Item 1(i), page 4 of 4.

²⁴² KIUC Main Brief, Appendix A, at 3.

²⁴³ Baudino Direct Testimony, filed March 18, 1999, at 19.

²⁴⁴ Id. at 33.

KIUC subsequently filed updates to its DCF and CAPM analyses.²⁴⁵ Because of recently announced merger activity, one of the DCF comparison group companies was dropped from the analysis. The effect of this action was to increase the DCF estimated range of returns on common equity. The updated returns were 9.14 to 9.96 percent with a midpoint of 9.55 percent. The updated CAPM analysis produced a common equity range of 7.16 to 9.13 percent.²⁴⁶

KIUC filed further updates to its DCF and CAPM analyses after LG&E filed its rate of return analyses.²⁴⁷ Due to additional merger activity, three more utilities were eliminated from KIUC's DCF comparison group of companies. Because its comparison group now included only two companies, KIUC revised its selection criteria to allow for more companies to be included. The newly expanded company group included companies with a Moody's Bond Rating of Aa2 and a Value Line Safety Rank of 2. KIUC also updated its pricing period and altered its growth methodologies. While noting a perception that analysts are beginning to expect higher returns under deregulation, KIUC argues that higher returns from deregulated investments should not be reflected in the cost of equity of regulated assets. Therefore, it lowered the growth rates for two of the companies in its comparison group.²⁴⁸ Two alternative DCF calculations were performed, using different growth rates. The results produce two alternative midpoints, 9.88 percent and 9.71 percent. Based upon its judgment and accounting for the fact

²⁴⁵ Baudino Additional Direct Testimony, filed May 24, 1999.

²⁴⁶ Id. at 2-3.

²⁴⁷ Baudino Rebuttal Testimony, filed August 16, 1999.

²⁴⁸ Id. at 9-10.

that some of the comparison group companies had lower bond ratings than LG&E, KIUC's final recommended return on common equity was 9.70 percent.²⁴⁹

LG&E argues that the DCF method itself is susceptible to measurement error and that KIUC's constant-growth DCF methodology contained a downward bias by using its own generated growth rates, rather than the projected growth rates published by Value Line. LG&E further argues that even though all the companies in KIUC's final proxy group are not involved in mergers, investors view all utilities as merger candidates because of the recent merger activity in the industry. This investor expectation and the resulting effect on stock prices used in the proxy group also caused measurement error in KIUC's DCF calculations. Finally, LG&E argues that KIUC, by relying on only the DCF results in formulating its recommendation, relied on a method too prone to measurement error.

LG&E utilizes four financial methodologies to estimate its return on common equity: (1) DCF; (2) CAPM; (3) Risk Premium; and (4) Comparable Earnings.²⁵⁰ LG&E used a comparison group of non-electric and non-regulated companies with a Value Line Safety Rank of 2 to develop its results. These methods and criteria produce a range for the return on equity from 11.50 percent to 12.50 percent.²⁵¹ Within this range, LG&E recommends using the upper end of 12.50 percent, citing the increased risk associated with its proposed PBR plan and the limitations on rate increases over the

²⁴⁹ Id. at 11-12.

²⁵⁰ Rosenberg Response Testimony, filed July 2, 1999, at 2-7.

²⁵¹ Id. at 6.

next five years. The 12.50 percent return also reflects premiums to account for both LG&E's relatively small size and its efficient management.²⁵²

LG&E applied a DCF analysis to both KIUC's proxy companies and to its own comparable companies with a Value Line Safety Rank of 2, the Safety Rank of LG&E's parent company, LG&E Energy. The resulting estimate of return on common equity was a range of 10.5 to 10.7 percent using KIUC's proxy companies and a range of 12.0 to 13.2 percent using the non-utility companies with a Safety Rank of 2.²⁵³

LG&E performed two CAPM analyses. One used a revision of KIUC's method, which employed an expected market risk premium based on the S&P 500 group, while the other used published historical data. The resulting estimate of return on common equity was a range of 11.50 to 11.9 percent based on the S&P 500 expected market risk premium and a range of 10.1 to 11.1 percent based on the historical data.²⁵⁴ LG&E suggests adding a premium of 40 basis points to these results to reflect its relatively small capitalization.²⁵⁵

Using the Risk Premium Analysis, LG&E presented two alternative calculations. One uses the historical spread between Moody's electric utility common stock returns and utility bond yields, resulting in an estimated cost of equity of 11.2 percent. The other uses a regression analysis to calculate the risk premium implied by allowed returns since 1980, resulting in an estimated cost of equity 11.6 percent.

²⁵² Id. at 42, 61-62.

²⁵³ Id. at 16-27.

²⁵⁴ Id. at 28-43.

²⁵⁵ Id. at 42.

The last method used by LG&E was Comparable Earnings. Gathering samples of companies of similar risk to LG&E Energy, which has a Safety Rank of 2, and using historical and projected returns, LG&E calculated a return on common equity of 14.0 to 15.0 percent.

KIUC argues that LG&E's applications of the DCF and CAPM methodologies were faulty and that certain methodologies applied by LG&E were inappropriate.²⁵⁶ For example, KIUC argues that: (1) LG&E used incorrect inputs and input values in its two stage DCF analysis; (2) LG&E used incorrect or inflated input values in its CAPM and Risk Premium analyses; and (3) LG&E erred by including unregulated non-electric companies in its analyses. KIUC argues that there are no reasons to suspect that investors expect historical risk premiums to apply in the future and that LG&E's assumption of an unchanging risk premium is tenuous and unjustified. Finally, KIUC argues that LG&E's Comparable Earnings approach should be rejected due to the use of unregulated companies and the use of historical earned returns on book equity. According to KIUC, the use of this type of data is not appropriate for analyses conducted for regulated utilities for rate-making purposes since regulated companies have less risk than unregulated companies.

KIUC argues that LG&E's reasons for being awarded a return in the top portion of its equity range were incorrect. According to KIUC, LG&E's PBR does not add to its level of risk, since the mechanisms inside the PBR provide ample protection for cost recovery. LG&E should not be awarded additional returns for management operating the company efficiently, because past court decisions prohibit the Commission from

²⁵⁶ Baudino Rebuttal Testimony, filed August 16, 1999, at 15-28.

making this type of award.²⁵⁷ Finally, KIUC states that LG&E's rate cap does not affect recovery of environmental, DSM, and fuel related cost recovery. Under the rate cap LG&E also has the ability to petition the Commission for rate relief under certain circumstances.²⁵⁸

The Commission finds KIUC's comparison companies to be an unreliable proxy for LG&E. KIUC has revised the composition of its comparison companies twice, each time removing those involved in mergers, substituting new companies, and revising its recommended return on equity slightly higher each time. In addition, the ultimate comparison companies include utilities with significant nuclear and hydro generation. LG&E has no nuclear generation and only a small amount of hydro generation. Thus, KIUC's comparison companies reflect significant differences in their generation mix, which translates into different levels of risk than that faced by LG&E. Finally, the Commission is concerned that KIUC's final recommended ROE of 9.7 percent would not be sufficient to allow LG&E to maintain its currently strong financial ratings and adequately compete for investment capital on reasonable terms.

The Commission finds LG&E's use of unregulated non-electric companies to be inappropriate for use as comparison companies in its DCF and other analyses for rate-making purposes. Unregulated non-electric companies do not properly represent the environment in which LG&E operates. LG&E correctly states that it must compete with all companies, regulated or otherwise, to attract equity capital, not just with other electric

²⁵⁷ South Central Bell Telephone Co. v Utility Regulatory Commission, Ky., 637 S.W.2d 649 (1982).

²⁵⁸ Baudino Rebuttal Testimony, filed August 16, 1999, at 31-32.

utilities. However, investors do not look at Safety Rankings alone when deciding how to invest their money and are fully aware of risk differentials between regulated and unregulated companies. LG&E operates in an environment where it has an inalienable right to charge a rate that covers all its reasonable and prudent costs and provides its investors an opportunity to earn a reasonable return. Unregulated companies have no such right. A more appropriate set of comparison companies in analyzing investments with similar risk would be other electric utilities.

The Commission agrees with KIUC's arguments against awarding LG&E an ROE at the top of its range, i.e., 12.5 percent. However, taken as a whole, the Commission finds that the lower end of the range produced by LG&E's analysis is more reasonable for setting the cost of common equity for LG&E. The Commission finds KIUC's recommended ROE to be too conservative and insufficient to allow LG&E to adequately compete for investment capital.

The Commission has considered the analyses introduced into the record by both parties, and evaluated the reasonableness of all arguments. The Commission finds that a return on equity in the range of 11 to 12 percent, with 11.50 percent as the mid-point, is fair, just, and reasonable given the current electric utility industry environment. A return on equity in this range will not only allow LG&E to attract capital at reasonable costs to ensure continued service and provide for necessary expansion to meet future requirements, but also will result in the lowest reasonable cost to the ratepayer. A return on common equity of 11.50 percent will allow LG&E to attain the above objectives.

Rate of Return Summary

Applying the rates of 5.52 percent for debt, 4.79 percent for preferred stock, and 11.50 percent for common equity to the capital structure produces an overall cost of capital of 8.47 percent, which we find to be fair, just, and reasonable. This cost of capital produces a rate of return on LG&E's electric rate base of 8.00 percent, which the Commission finds is fair, just, and reasonable.

REVENUE REQUIREMENTS

The Commission has determined, based upon an electric capitalization of \$1,177,151,390 and an overall cost of capital of 8.47 percent, that the net operating income found reasonable for LG&E's electric operations is \$99,704,723. LG&E's pro forma net operating income for the test period is \$115,924,565. Thus, LG&E has excessive annual operating income of \$16,219,842. After the provision for the PSC Assessment, and state and federal taxes, there is an overall revenue sufficiency of \$27,242,803. The net operating income found reasonable for LG&E's electric operations will allow it the opportunity to pay its operating expenses and fixed costs and have a reasonable amount for equity growth. The calculation of the overall revenue sufficiency is as follows:

Net Operating Income Found Reasonable	\$ 99,704,723
Pro Forma Net Operating Income	<u>115,924,565</u>
Net Operating Income Sufficiency	(16,219,842)
Gross Up Revenue Factor ²⁵⁹	<u>.595381</u>
Overall Revenue Sufficiency	<u>\$(27,242,803)</u>

The reduction of LG&E's electric revenues in the amount of \$27,242,803 will provide a rate of return on the electric rate base of 8.00 percent and an overall return on total electric capitalization of 8.47 percent.

OTHER ISSUES

Rate Unbundling

LG&E has traditionally sold electricity through retail rates that, in regulatory parlance, are known as "bundled rates." LG&E's rates are bundled because they reflect the total cost for the three functions provided, i.e. generation, transmission, and distribution. Unbundled electric rates are ones that separately identify the costs for generation, transmission, and distribution.

Although rate unbundling has been referred to during the course of this proceeding, it has not been a real issue. Given the multitude of diverse rate and financial issues that were addressed in this proceeding, and the lack of substantial evidence on this issue, the Commission recognizes that this is clearly not the case to

²⁵⁹ The gross up revenue factor recognizes the impact the overall revenue sufficiency will have on the PSC Assessment, state income taxes, and federal income taxes. In calculating the gross up revenue factor, the effect of the PSC Assessment is recognized first, then the state income tax effect, and finally the federal income tax effect. The following rates were used in the gross up revenue factor: PSC Assessment rate of 1.6670, state income tax rate of 8.25 percent, and federal income tax rate of 35 percent.

require LG&E to unbundle its electric rates. However, the Commission also recognizes the extensive level of competition that now exists in the wholesale market; the numerous states that have implemented, or will be implementing, retail competition; LG&E's membership in the Midwest ISO, which will necessitate determining LG&E's transmission costs; and LG&E's expressed support of retail electric competition. Considering all of these factors, the Commission believes that some comment on the issue of rate unbundling is appropriate.

There is no clear evidence at this time that retail competition will produce material benefits for Kentucky's ratepayers, largely due to the relatively low electric rates already enjoyed throughout the Commonwealth. However, future evidence, not yet developed, might show such benefits, and there is a real potential that federal legislation could mandate retail competition on a nationwide basis. For these reasons, the Commission finds that LG&E's electric ratepayers could greatly benefit by knowing the individual costs for the three functions that are now bundled in their rates. Informational rate unbundling, by separately identifying the generation, transmission and distribution components of electric service, is an important first step in the process of educating customers to make them better informed on this important and timely matter. Therefore, LG&E should consider filing, for informational only purposes, the individual costs of generation, transmission, and distribution which are now bundled in the new rates that will be filed in response to this Order.

Allocation of Revenue Decrease

Due to the nature of this case, the record does not include a fully allocated class cost-of-service study or a billing analysis. In addition, the record is nearly devoid of any

evidence on how a revenue decrease approved by the Commission would be allocated among customer classes or how rates might be modified as a result of such decreases. The record does include LG&E's 1998 actual revenues reported by customer classification and rate schedule.

In its main brief, KIUC notes that in the absence of an acceptable cost-of-service study, the Commission has historically allocated revenue increases and decreases on a percentage-of-revenue, or "total revenue" basis. This allocation methodology produces the same percentage increase, or decrease, in revenues for each customer class. KIUC suggests that such an approach be implemented here due to the absence of a class cost-of-service study.

The Commission agrees that allocating the decrease found reasonable herein will be best accomplished through a percentage-of-revenue approach that will result in all customer classes and all rate schedules receiving the same percentage decrease. We also agree with KIUC that the calculation of base rates to produce the required decrease should be performed by LG&E based on its billing determinants for calendar year 1998, adjusted to reflect the year-end customer adjustment accepted herein. We do not agree, however, with KIUC's proposal that once LG&E files its reduced rates, with the necessary supporting workpapers, calculations and narrative explanations, that the parties should be allowed to comment on the rates submitted by LG&E prior to the Commission issuing a final Order terminating this case.

After reviewing LG&E's tariffs and considering the magnitude of the decrease found reasonable herein, the Commission has determined the manner in which LG&E's rates should be reduced. Once the decrease has been allocated to each customer

class and each rate schedule, LG&E shall adhere to the following guidelines in calculating its reduced rates: 1) customer charges should remain unchanged on all rate schedules – there will be no reductions to any of LG&E’s customer charges; 2) on rate schedules where both demand and energy usage are metered, the decrease should be allocated so that both demand and energy charges are reduced by an equal percentage; 3) on rate schedules where only energy usage is metered the full amount of the decrease should be allocated to the energy charge; and 4) on rate schedules with no metering that include fixed monthly charges, such as lighting schedules, the same percentage decrease shall be applied to each of the fixed charges included in the rate schedule. These guidelines shall also be consistently applied to the rates charged to customers served under the special contracts that LG&E currently has in effect.

In deciding that customer charges should remain at their existing levels, the Commission considered the fact that LG&E’s current customer charges are among the lowest of any of the electric utilities we regulate. Also, LG&E’s current customer charges were established nearly 10 years ago, in Case No. 90-158, based on a calendar year 1989 test period. For these reasons, the Commission has determined that, in the absence of any evidence demonstrating that LG&E’s customer charges are in excess of its “customer costs,” none of the approved revenue decrease should be applied to the existing customer charges.

KRS 278.180(1) authorizes the Commission to require a utility to decrease its rates giving the utility 20 days notice of the changes and finding good cause. Accordingly, the rate decrease approved herein cannot go into effect immediately upon the issuance of this Order. The Commission believes that ratepayers should receive

the benefit of the revenue reduction authorized herein as soon as possible; however, given the complexities of the issues related to implementing that reduction, including reinstating the FAC, the Commission has determined that the resulting rate reductions should be effective for bills rendered on and after March 1, 2000. This billing date is more than 30 days from the date of this Order and bills rendered on and after March 1, 2000 should only apply to service rendered on and after the date of this Order. For these reasons, and as explained further below, the Commission finds this approach and this effective date to be appropriate in this instance.

First, the Commission is requiring LG&E to file new rates reflecting the reduction within 20 days from the date of this Order. Second, we will require a certain amount of time to review the filing in order to ensure both the accuracy of the filing and that LG&E has complied with the guidelines prescribed herein. Third, the FAC is being reinstated and, per KAR 807:056, that reinstatement must be done to coincide with a calendar month filing schedule. Fourth, it would be both impractical and illogical to attempt to adjust base rates to reflect the revenue decrease authorized herein at a different point in time than when rates would be adjusted to reinstate the FAC. Therefore, LG&E is required to file revised tariffs, to be effective for bills rendered on and after March 1, 2000, reflecting the revenue reduction authorized herein, and the reinstatement of the FAC, within 20 days from the date of this Order. Those tariffs are to be accompanied by LG&E's proof of revenue calculations for the test year, as described earlier in this section, with all necessary supporting workpapers and narrative explanations included. After review of the filing, and assuming there are no errors or areas of non-compliance

with the guidelines enumerated herein, the Commission will issue a final Order approving those tariffs.

Reinstating the Fuel Adjustment Clause

By Order issued April 13, 1999, the Commission allowed LG&E to implement its EPBR tariffs, effective July 2, 1999, subject to future change. This resulted in LG&E implementing the FCR mechanism included in its EPBR tariffs and discontinuing its FAC. Our decision to reject implementing the proposed PBR mechanism on a permanent basis necessitates a termination of the FCR mechanism and a reinstatement of the FAC concurrent with the effective date of the revenue reduction approved herein.

As discussed elsewhere in the Order, the reduced rates will be effective for bills rendered on and after March 1, 2000. Accordingly, the termination of the FCR and the reinstatement of LG&E's FAC should be timed to coincide with that effective date. Therefore, the FCR mechanism should remain in effect through February 29, 2000, and the FAC should be reinstated effective March 1, 2000. This will require LG&E to file an FAC report for the expense month of January 2000, with the FAC factor calculated therein to be applied to bills rendered on and after March 1, 2000, in accordance with the provisions of 807 KAR 5:056. Also per the provisions of 807 KAR 5:056, the report is to be filed with the Commission at least 10 days prior to the date the FAC factor determined therein will be applied to customers' bills.

Since implementing the FCR on July 2, 1999, LG&E has not been bound by the FAC regulation, 807 KAR 5:056, which requires filing, as public documents, all fuel and fuel transportation contracts and agreements. Upon the termination of the FCR and the reinstatement of the FAC, LG&E will again be required to comply with this provision of

the FAC regulation. For purposes of providing the Commission with adequate documentation to support its future fuel costs, LG&E should file, within 20 days from the date of this Order, all fuel contracts, purchase orders, transportation contracts, and any other pertinent documents entered into since July 2, 1999, that will affect its fuel costs, prospectively, beginning March 1, 2000.

Low Income Intervenors Funding Proposal

MHNA, POWER, and KACA (“The Low Income Groups” or “LIG”) propose that LG&E implement a “lines charge” which would be billed to every customer to generate \$5 million annually to fund a percentage-of-income energy assistance program for low income customers. LIG claims that both LG&E and the ratepayers who fund the program will benefit from improved bill payments by program participants, savings in collection and cut-off expenses, and reductions in the amounts of uncollectible accounts ultimately charged to all ratepayers.

LIG states that this funding mechanism would be revenue neutral to LG&E since it would be collected as a separate charge on customers’ bills. LIG argues that its proposal is not dependent on the specific results of any other issue in this case and states that it is not being proposed in lieu of rate reductions. LIG argues that KRS 278.030(3), which authorizes the creation of different classes of customers for several specific reasons, and also authorizes the Commission to recognize customer characteristics “on any other reasonable basis,” allows the Commission to recognize a low income class of customers for the purpose of approving its proposed funding mechanism. LIG points to court decisions upholding the Commission’s decision in

National-Southwire Aluminum Co. v. Big Rivers Electric Corp.²⁶⁰ to approve a “special rate” for a limited group of aluminum smelters that was tied to the sales price, and resulting revenue, the smelters received for their product, as support for establishing a customer classification based on low income customers’ income levels. LIG also cites the creation of the segment of the Universal Service Fund (“USF”) in the telephone industry that assists low-income customers and that is funded through a charge on all customers’ bills, as evidence of a prior Commission decision favoring the type of plan it has proposed in this proceeding.

LG&E objects to the proposal, arguing that the Commission is not the proper forum to debate the establishment of a low income funding program and that such an issue must be dealt with through legislation, not regulation.²⁶¹ LG&E points to prior Commission cases in which similar programs were considered and rejected because: (1) programs designed to improve the financial condition of individuals with low incomes require the redistribution of income, an activity that is beyond the scope of the Commission’s authority under its existing statutes; (2) the proponents of such programs failed to adequately support their contention that the programs would benefit both the utility and all its ratepayers through increased revenues, improved collections, and reduced collection costs; or (3) the proposed programs raised a rate issue that does not comport with the filed rate doctrine, KRS 278.160, or the prohibition against undue

²⁶⁰ National-Southwire Aluminum Co. v. Big Rivers Electric Corp., Ky. App., 785 S.W.2d 503 (1990).

²⁶¹ Joint Brief of LG&E and KU at 79.

discrimination, KRS 278.170.²⁶² LG&E also notes that the Commission has only approved low-income electric assistance programs that were agreed to by all parties through negotiated case settlements.²⁶³

The Commission recognizes that some customers have financial problems that make it difficult to pay the full amount of their utility bills on a regular basis. Existing programs such as LIHEAP and Wintercare provide assistance to those customers via assistance measures that are funded through tax dollars or through voluntary contributions by utilities and utility customers. These programs operate by redistributing income in order to assist low-income customers in paying their utility bills. The Commission is not statutorily empowered to create a special rate class to redistribute income.

LIG has not persuaded the Commission to find that its proposed program will benefit either the utility or non-program participants. In the one instance where the Commission authorized a percentage-of-income plan to be implemented on a pilot basis as part of a unanimous settlement in a rate case,²⁶⁴ the results of the pilot tend to confirm the concerns expressed by the Commission in prior cases.²⁶⁵ That utility's percentage-of-income pilot program incurred costs, including administrative costs and

²⁶² Id. at 81-82.

²⁶³ Id. at 81.

²⁶⁴ Case No. 94-179, Notice of Adjustment of the Rates of Columbia Gas of Kentucky, Inc. On and After July 1, 1994.

²⁶⁵ Case No. 99-165, The Tariff Filing Of Columbia Gas Of Kentucky, Inc. To Implement A Small Volume Gas Transportation Service, To Continue Its Gas Cost Incentive Mechanisms, And To Continue Its Customer Assistance Program.

lost revenues, that were 12 times greater than the benefits realized, in the form of reduced collection and cut-off costs and reductions in write-offs of uncollectible accounts.²⁶⁶

The Commission has previously considered and rejected arguments that under KRS 278.030(3), special rate classes can be created to reflect customers' income levels. That statutory provision authorizes the establishment of rate classes based on criteria including the nature of the use, the quality and quantity used, the time and purpose of the use, and other reasonable considerations. The Commission has previously considered and rejected arguments that KRS 278.030(3) authorizes the establishment of rate classes based on income levels. Specifically, in Case No. 91-066, the Commission found that, "If income alone were to be recognized as a reasonable consideration for establishing customer classifications and rates, not only low income, but also middle and high incomes would need to be recognized. If it is appropriate to provide utility service to low income customers at reduced rates, service to high income customers should be at premium rates."²⁶⁷

As to the "special" variable rate approved for the aluminum smelters, the Commission also addressed that argument when it pointed out that, "The variable smelter rate, to be in effect for 10 years, was conceived specifically to recognize the projected changes in the market price of aluminum. Consequently, the variable rate was designed so that it was likely to produce, over time, the same amount of revenue

²⁶⁶ Id., Application filed April 22, 1999, Attachment G at 14.

²⁶⁷ Case No. 91-066, Application for Adjustment of Electric Rates of Kentucky Power Company, Order dated October 31, 1991, at 7.

that would be produced under a conventional, flat rate.”²⁶⁸ The variable rate was not designed to result in a permanent rate reduction for the smelters, or for the smelters to be subsidized through higher rates paid by other customers. This distinguishes the smelter rate from LIG’s low-income customers percentage-of-income plans where the rate reduction is permanent and paid for by non-participants.

Concerning the establishment of a USF for low-income telephone customers, LIG notes that the Commission was not obligated to fund the USF, but that establishment of the USF was prompted by federal action. Those circumstances are precisely those that distinguish LIG’s proposal from the approved USF. The decision to establish a USF was prompted by 47 U.S.C. §254 of the Telecommunications Act of 1996, which applies to all states and all telephone subscribers. Pursuant to federal law, financial incentives have been used to encourage state participation. There has been no comparable federal action affecting the electric industry.

Based on the evidence, the Commission finds that customers’ income levels are not a reasonable consideration for establishing a classification of customers and the rate plan advocated by LIG would create an undue rate preference to low income customers in violation of KRS 278.170. For these reasons, the Commission finds that LIG’s proposal would not result in fair, just, and reasonable rates, and, therefore, should be denied.

²⁶⁸ Id. at 12.

SUMMARY

1. LG&E's proposed PBR plan, for the reasons discussed herein, is not reasonable, will not result in rates that are fair, just, and reasonable, and should be denied.

2. KIUC's proposed ESM, for the reasons discussed herein, lacks the proper incentives, is unnecessarily burdensome, will not result in rates that are fair, just, and reasonable, and should be denied.

3. The Commission's optional ESM plan constitutes a reasonable form of alternative regulation for LG&E and will result in fair, just, and reasonable rates.

4. Within 30 days of the date of this Order, LG&E should file with the Commission either a tariff adopting the Commission's optional ESM plan or a written notice rejecting such plan.

5. LG&E's proposed tariff flexibility provision should be denied.

6. To pay all reasonable operating expenses, service its debt, continue to attract capital at reasonable costs, and provide an opportunity for equity investors to receive the return found reasonable herein, LG&E's revenue requirements from electric operations are \$623,109,785.

7. LG&E's existing rates are not fair, just or reasonable because they produce revenues of \$27,242,803 in excess of the revenue requirements found reasonable herein.

8. LG&E should reduce its rates in the manner discussed herein to produce \$27,242,803 less revenues than its existing rates. The reduced rates should be effective for bills rendered on and after March 1, 2000.

9. Based on the size of the revenue decrease found reasonable herein, the substantial number of customers affected, and the potential impact on customers' bills during the winter hearing season, the Commission finds that, pursuant to KRS 278.180(1), good cause exists to shorten the required notice of rate change from 30 days to 20 days.

10. Within 20 days of the date of this Order, LG&E should file revised tariffs containing new rates that will produce \$27,242,803 less revenues than its existing rates, in conformity to the rate design found reasonable herein, along with its proof of revenue calculations, and all necessary supporting workpapers and narrative explanations.

11. In accordance with the Commission's decision to reject its proposed PBR plan, LG&E should reinstate its FAC which had been withdrawn when its PBR tariffs were permitted to go into effect.

IT IS THEREFORE ORDERED that:

1. LG&E's proposed PBR plan and tariff flexibility provision are denied.
2. Within 30 days of the date of this Order, LG&E shall file either a tariff adopting the Commission's optional ESM or a written notice that the optional ESM is rejected.
3. If LG&E adopts the Commission's optional ESM plan, LG&E shall file within 60 days thereafter draft schedules for annual filings, pursuant to the findings herein
4. Within 20 days of the date of this Order, LG&E shall file revised tariffs containing new rates that will produce \$27,242,803 less revenues than its existing rates.

The new rates, to be effective for bills rendered on and after March 1, 2000, shall conform to the rate design found reasonable herein. LG&E shall also file its proof of revenue calculations and all necessary supporting workpapers and narrative explanations.

4. Within 20 days of the date of this Order, LG&E shall file revised tariffs which reinstate its FAC with an effective date of March 1, 2000.

5. LG&E shall file by May 1, 2000 a detailed report discussing the issue of rate unbundling for informational purposes and a suggested methodology to accurately determine the generation, transmission, and distribution components of its rates.

6. MSD's request to withdraw as an intervenor is granted and its name shall be removed from the official service list for this case.

Done at Frankfort, Kentucky, this 7th day of January, 2000.

By the Commission

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 98-426 DATED January 7, 2000

Exclusion of LG&E's
Environmental Surcharge Components

	<u>Balances at</u> <u>12/31/98</u>	<u>Settlement</u> <u>Adjustments</u>	<u>Adjusted</u> <u>Balances</u>
<u>Rate Base Items -</u>			
Pollution Control ("P.C.")			
Utility Plant	66,248,121	(12,447,542)	53,800,579
Acc. Depreciation			
on P.C. Utility Plant	9,175,344	(2,728,848)	6,446,496
P.C. Deferred			
Income Taxes	3,004,289	0	3,004,289
<u>Operating Statement Items –</u>			
Environmental			
Surcharge Revenues	5,803,013	0	5,803,013
Proceeds from			
Allowance & By-			
Product Sales	96,185	0	96,815
Depreciation Expense	3,160,260	(530,604)	2,629,656
Property Taxes	104,592	0	104,592
Insurance Expense	21,312	(6,768)	14,544

Notes:

"Balances at 12/31/98" are taken from the following monthly environmental surcharge reports –
Rate Base Items are from the December 1998 expense month, filed on January 22, 1999.

Operating Statement Items reflect the sum of the January through December expense month amounts submitted on the appropriate monthly filings.

"Settlement Adjustments" reflect those amounts LG&E determined should be removed from the environmental surcharge in conjunction with the Settlement Agreement filed in Case No. 94-332. All adjustments are taken from Exhibit A of the Settlement Agreement filed on April 23, 1999. The adjustment amounts were determined as follows –

P.C. Utility Plant was taken from Form 2.2.

Accumulated Depreciation was taken from Form 2.2. The November 1998 balance was increased by one month's depreciation expense of \$44,217 to arrive at the December 1998 balance.

Depreciation expense was taken from Form 2.1, and reflects the monthly amount of \$44,217 multiplied by 12.

Property taxes were taken from Form 2.1; there was no Settlement Agreement adjustment for this item.

Insurance expense was taken from Form 2.1, and reflects the monthly amount of \$564 multiplied by 12.

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 98-426 DATED January 7, 2000

Determination of LG&E's
Electric Operations Capitalization

The determination of LG&E's electric capitalization reflects the allocation of the total company capitalization using a factor based on LG&E's unadjusted, actual test period electric rate base compared to the total company rate base.

	<u>Electric Rate Base at 12/31/98</u>	<u>Total Co. Rate Base at 12/31/98</u>
Total Utility Plant in Service	\$2,481,566,887	\$2,896,138,000
Add:		
Materials and Supplies	51,733,335	80,046,000
Prepayments	1,571,101	1,872,000
Cash Working Capital Allowance	<u>41,423,313</u>	<u>46,394,000</u>
Subtotal	\$ 94,727,749	\$ 128,312,000
Deduct:		
Accumulated Depreciation	1,001,300,599	1,144,123,000
Customer Advances	720,269	10,847,000
Accumulated Deferred Taxes	284,087,716	318,118,000
Investment Tax Credit (prior law)	<u>137,346</u>	<u>190,000</u>
Subtotal	\$1,286,245,930	\$1,473,278,000
 NET ORIGINAL COST RATE BASE	 <u>\$1,290,048,706</u>	 <u>\$1,551,172,000</u>
 Percentage of Electric Rate Base to Total Company Rate Base		 83.17%

The allocation of Materials and Supplies and Prepayments for the electric rate base is consistent with the approach described in the Order. As the allocation only impacts the electric and gas rate base calculations, the total company amounts are not effected.

The total company amounts are taken from the Response to the Commission's July 16, 1999 Order, Item 1(f and g), pages 1 through 4 of 4.

APPENDIX B (continued)

Allocation of Total Company Capitalization to Electric Operations

<u>Component Of Capitalization</u>	<u>Restated Test Period Balances</u>	<u>Total Co. Capital Structure</u>	<u>Test Period Electric Capitalization</u>	<u>Net Capitalization Adjustments</u>	<u>Adjusted Electric Capitalization</u>
Long-Term Debt	626,800,000	44.96%	521,309,560	(18,068,436)	503,241,124
Preferred Stock	95,327,847	6.84%	79,284,170	4,455,378	83,739,548
Common Equity	<u>671,846,373</u>	<u>48.20%</u>	<u>558,774,628</u>	<u>31,396,090</u>	<u>590,170,718</u>
Total Debt, Preferred Stock, and Common Equity	1,393,974,220	100.00%	1,159,368,358	17,783,032	1,177,151,390
JDIC	<u>71,352,215</u>		<u>68,494,656</u>	<u>(68,494,656)</u>	<u>0</u>
Total Capitalization	<u>1,465,326,435</u>		<u>1,227,863,014</u>	<u>(50,711,624)</u>	<u>1,177,151,390</u>

The Total Company Restated Test Period Balances reflect LG&E's reclassification of certain stock discount and expense items from Common Equity to Preferred Stock.

Long-Term Debt, Preferred Stock, and Common Equity were allocated to Electric Operations by applying the Electric Rate Base percentage of 83.17% to the Total Company Restated Test Period Balances.

Electric JDIC was not allocated using the 83.17% allocation factor, but rather reflects actual electric JDIC plus 75% of LG&E's common JDIC balance.

With the exception of the environmental surcharge adjustment, all Net Capitalization Adjustments were allocated to the components of capitalization on a pro rata basis. The calculation of the Net Capitalization Adjustments is on the following page of this Appendix.

APPENDIX B (continued)

Calculation of Net Capitalization Adjustments

<u>Component of Capitalization</u>	<u>Other Investments</u>	<u>Trimble Co. Inventories</u>	<u>Environmental Surcharge</u>	<u>JDIC</u>
Long-Term Debt	(307,296)	(1,202,254)	(47,354,083)	30,795,197
Preferred Stock	(46,751)	(182,905)	(0)	4,685,034

Common Equity	<u>(329,441)</u>	<u>(1,288,894)</u>	<u>(0)</u>	<u>33,014,425</u>
Totals	<u>(683,488)</u>	<u>(2,674,053)</u>	<u>(47,354,083)</u>	<u>68,494,656</u>

Notes:

Other Investments is made up of two items –

LG&E's investment in the Ohio Valley Electric Corporation, totaling \$490,000.

LG&E's investment in the African American Venture Capital Fund, which the Commission has treated as a Common investment and allocated 75% of the total \$257,984, or \$193,488, to Electric.

The Trimble County Inventories represent the removal of 25% of LG&E's investment in inventories related to Trimble County Unit 1. This adjustment is consistent with the Commission's treatment of Trimble County investments in Case No. 90-158.

The Environmental Surcharge represents the net of the Pollution Control Utility Plant and the Accumulated Depreciation on Pollution Control Utility Plant. See Appendix A for these amounts. The JDIC treatment is consistent with previous Commission decisions.