COMMONWEALTH OF KENTUCKY

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PUBLIC SERVICE COMMISSION

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF THE GAS AND ELECTRIC RATES, TERMS AND CONDITIONS	)	CASE NO. 2003-00433

In the Matter of:

APPLICATION OF KENTUCKY UTILITIES COMPANY FOR AN ADJUSTMENT OF THE ELECTRIC RATES, TERMS AND CONDITIONS	)	CASE NO. 2003-00434

REBUTTAL TESTIMONY

OF

EARL M. ROBINSON

PRESIDENT AND CHIEF EXECUTIVE OFFICER
AUS CONSULTANTS -
WEBER FICK & WILSON DIVISION

Filed: April 26, 2004

Q1. PLEASE STATE YOUR NAME AND POSITION.

A1. My name is Earl M. Robinson. I am President & CEO of the Weber Fick & Wilson Division (WFW) of AUS Consultants - Utility Services.

Q2. ARE YOU THE SAME EARL M. ROBINSON THAT PROVIDED DIRECT TESTIMONY IN THIS PROCEEDING?

A2. Yes.

Q3. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A3. The purpose of my testimony is to rebut statements made and exhibits presented by Michael Majoros who is testifying on behalf of the Attorney General for the Commonwealth of Kentucky and Lane Kollen testifying on behalf of Kentucky Industrial Utility Customers, Inc.

Q4. WOULD YOU PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY?

A4. I will first provide rebuttal testimony related to Mr. Majoros' direct testimony on the following subjects: (1) Depreciation Overview; (2) Net Salvage; (3) Service Life Methods; (4) Average Service Life Recommendations; (5) NOx Expenditures; and (6) Life Spans of the plant in service of Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (collectively, "the Companies").

The central tenet of Mr. Majoros' overall approach is to defer costs to a future generation of customers rather than have them be borne by the present customers who are the cause of the costs. Under this approach, Mr. Majoros invites the Commission to defer costs caused by current customers to a future generation of customers. Once deferred, the cost shifting and resulting inequities Mr. Majors recommends cannot be undone without compounding the problem. No amount of deferring the recovery of these costs in the future will change the cause of the costs today or mitigate the intergenerational inequities between current and future customers created by his recommendations. Mr. Majoros' ultimate objective is to severely reduce and significantly defer the recovery of costs in order to reduce the Companies' revenues today. It will only serve to defer these costs to another generation of customers and will not produce fair, just and reasonable rates now or in the future.

Mr. Majoros' principal arguments are summarized as follows:

- Net salvage should not be a component of depreciation rates.
- The Commission should implement a net salvage allowance based on a five-year average of actual experience.
- The Companies' production life spans should be accepted.
- Depreciation rates on certain transmission and distribution plant accounts should be revised to reflect his findings based on longer service lives.
- Interim additions related to NOx projects mandated by the Clean Air Act should be excluded for years 2005 and 2006.

My rebuttal to those points is summarized as follows:

- Contrary to Mr. Majoros' first argument, net salvage should not be removed from depreciation rates. The inclusion of net salvage in depreciation rates allows costs to be allocated to the customers and periods from which the cost arises. To do otherwise would simply defer costs to future periods and customers that received no benefits from these costs.
- Similar to his first point, Mr. Majoros' proposal to implement a net salvage allowance based on a five-year average of actual costs only defers costs to future periods and

customers who receive no benefit from those costs. Mr. Majoros' net salvage amortization approach totally fails the basic matching principle that underlies the fairness doctrine inherent in rate making.

- I agree with Mr. Majoros' proposal that the Companies' life span proposals for production plant be accepted, but for very different reasons. Mr. Majoros believes they should be accepted based only on the agreement in a prior stipulation. However, the life spans proposed in my study are based on the projections of Companies' engineers and on the data from the Companies' actual retirement history. The Companies' life span proposals should also be accepted because they are reasonable and supported by this empirical evidence.
- Mr. Majoros' arguments regarding various transmission and distribution depreciation rates, in general, are results-oriented and consist of rates based on service lives generally at the extreme long range of industry statistics. His proposed depreciation rates are refuted point by point and in detail in my rebuttal testimony.
- I disagree with Mr. Majoros' argument that interim additions related to NOx compliance standards should be excluded from my calculations. Although Mr. Majoros disagrees with the inclusion of NOx expenditures for the years 2005 and 2006, he accepts the use of NOx expenditures for 2004. Additionally, the Commission has previously approved depreciation rates that include a provision for NOx compliance and there is no reason to follow a different course here.

My proposed depreciation rates were developed based upon a detailed analysis of all the factors affecting the plant in service of the Companies, using the widely-accepted and well-established straight line method, broad group procedure, and average remaining life technique. The use of this three-part approach is consistent with the current depreciation rates. Furthermore, in the development of the proposed depreciation rates, I incorporated all the factors, *e.g.*, first and end of life costs, which should be included in each property group's depreciation rate. That process is consistent with the American Institute of Certified Public Accounting ("AICPA") and National Association of Regulatory Utility Commissioners ("NARUC") depreciation definitions, and is also supported by the treatise known as *Public Utility Depreciation Practices*, August, 1996, NARUC (the "NARUC Manual"). While Mr. Majoros relied on the NARUC Manual to support his analysis, as my rebuttal testimony will demonstrate, he only did so selectively and ignored key passages which contradicted his arguments to reach the intended results of lower deprecation rates.

Following the rebuttal to Mr. Majoros' testimony I address Mr. Kollen's direct testimony. My testimony shows that Mr. Kollen has misinterpreted the data and violated established deprecation principles in reaching his conclusions.

Depreciation Overview

Q5. DO YOU HAVE ANY COMMENTS REGARDING MR. MAJOROS' STATEMENT ON PAGE 5 OF HIS DIRECT TESTIMONY CONCERNING THE COMPANIES' CURRENT DEPRECIATION RATES?

A5. Yes. The objective of my depreciation study was not to "virtually wipe out" any prior depreciation expense decreases, as Mr. Majoros assertion suggests. Instead, the purpose of my study, taking a fresh start, was to produce properly-determined depreciation rates and expenses.

Q6. ON PAGE 6 AND 7 OF HIS DIRECT TESTIMONY, MR. MAJOROS STATES THAT HE ACCEPTS THE LIFE SPANS FOR THE GENERATION PLANT ACCOUNT "BECAUSE WE ALREADY AGREED TO THEM." HE THEN GOES ON TO ARGUE THAT THE LIVES ARE TOO SHORT. DO YOU HAVE COMMENTS REGARDING HIS STATEMENTS?

A6. Yes. It is not clear why Mr. Majoros included Exhibits MJM-1 and MJM-2, and the discussion in his testimony related to those exhibits, since he indicated that he accepted the life spans in the previous settlement agreement and similarly is accepting them in the present case. Nonetheless, the life span estimates used for recovery of the Companies' investment in production plant are consistent with those developed by the Companies' engineers and with the Companies' retirement history. In fact, LG&E has retired nine steam-generating units since 1979 with life spans ranging between 29 and 37 years. Six of those plants experienced life spans of 34 years or less. KU has retired five steam-generating units since 1964. Two of those units experienced a life span of 23 years. The remaining three units achieved life spans between 51 and 53 years. Thus, the Companies' historical experience suggests a much shorter life span than that suggested by Mr. Majoros' analysis.

Q7. ON PAGE 8 OF HIS DIRECT TESTIMONY, MR. MAJOROS DISCUSSES THE FACT THAT DEPRECIATION IS A NON-CASH EXPENSE. DO YOU AGREE?

A7. Depreciation is a non-cash expense only in the sense that it reflects a recovery of the cash outlays made in prior years to construct or purchase a capital asset, rather than a current cash outlay. As stated in the NARUC Manual, the cost allocation concept "recognizes the original cost of the asset is a prepaid expense. As such, it must be allocated to specific accounting periods and realized on income statements during the time the asset is providing service." (NARUC Manual, page 12.) Depreciation is very important to the financial viability of the Companies because it allows the timely recovery of the Companies' total property-related costs, *e.g.*, the original cost of its plant investment as well as the properly apportioned recovery of the end of life cost or benefits (net salvage).

Q8. MR. MAJOROS ALSO DISCUSSES CERTAIN DEPRECIATION FUNDAMENTALS. IS MR. MAJOROS' DISCUSSION OF THE "OBJECT OF DEPRECIATION EXPENSE" COMPLETE?

A8. No. On page 9, lines 11 to 13, Mr. Majoros states only that depreciation expense is the recovery of capital investments in plant. Noticeably absent in that portion of his testimony is any comment related to the necessity of recovering net salvage (either positive or negative). While Mr. Majoros does note that net salvage is a component of depreciation at other locations in his testimony, the NARUC Manual discusses in detail the need to recover both a property's original cost as well as net salvage. See Rebuttal Exhibit EMR-1.

The true objective of depreciation is the recovery and distribution of the company's investment (original cost and net salvage) in capital assets over the life of the assets. The NARUC Manual recognizes that objective when it cites the AICPA definition of annual depreciation: "Depreciation accounting is a system of accounting which aims to distribute cost or other basic value of tangible capital assets, **less salvage (if any)**, over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner." (NARUC Manual, page 14.) (Emphasis added.)

It is thus essential that the depreciation rates developed for each of the applicable plant accounts incorporate the recovery of all cost components (*i.e.*, including first or Original Cost together with end of life cost, including gross salvage and cost of removal) attributable to the facilities providing service to the Companies' customers. To do otherwise would deprive the Companies of the opportunity to recover their total capital cost ratably over the useful life of the asset being consumed in providing service.

Q9. WHAT COMMENTS DO YOU HAVE REGARDING MR. MAJOROS' DISCUSSION OF THE COMPANIES' BOOK DEPRECIATION RESERVE?

A9. On page 9 of his testimony, Mr. Majoros says that the accumulated depreciation account represents the accumulated amount of the original cost of assets that have been recovered to date. It is true that the accumulated depreciation (or depreciation reserve as it is commonly called) does include an accumulation of past depreciation expense accruals and net salvage recovered to date. However, Mr. Majoros' discussion is an over-simplification which ignores other components of the reserve required by FERC regulation. FERC requires that, in addition, the account be charged with the book cost of property retired and credited with other amounts recovered, such as insurance. In addition, when capital assets are retired before reaching their average service life, the unrecovered capital investment related to those assets will reside in the Companies' book depreciation reserve for a number of years into the future. The level of unrecovered asset investments contained in the book depreciation reserve can be significant depending upon the age of the property retirement and the corresponding average service life of the property.

Q10. ON PAGES 10 THROUGH 12 OF HIS DIRECT TESTIMONY, MR. MAJOROS DISCUSSES SEVERAL DEPRECIATION FORMULAS. WHAT COMMENT DO YOU HAVE REGARDING THE AVERAGE REMAINING LIFE FORMULA SET FORTH ON PAGE 11 OF MR. MAJOROS' DIRECT TESTIMONY?

A10. Mr. Majoros improperly mixes and matches depreciation principles in his discussion of those formulas. Mr. Majoros also fails to recognize that the Average Remaining Life ("ARL") formula requires the use of a future net salvage estimate, unlike Whole Life Depreciation, where the historical or average net salvage estimate is utilized. In other words, the net salvage estimate included with the development of an Average Remaining Life based depreciation rate requires that the net salvage be forward-looking. This is so in order to give consideration to the level of net salvage anticipated to occur between the effective date of the depreciation study and the end of the property's useful life. Future net salvage typically is different from the overall historical experience due to the fact that circumstances have changed from those of prior periods. Accordingly, it is improper to mix these principles by applying an ARL technique with an historic estimate of net salvage. The NARUC Manual, page 164, provides:

> Total or average net salvage must be used when the whole life techniques is employed. When strictly forward looking procedures or techniques are used, i.e., the ELG procedure and the Remaining Life technique, only future net salvage should be used.

Q11. DO YOU AGREE WITH MR. MAJOROS' DISCUSSION OF AVERAGE REMAINING LIFE DEPRECIATION ON PAGES 11 AND 12 OF HIS DIRECT TESTIMONY?

A11. Mr. Majoros is correct in his general discussion about the book depreciation reserve's impact on ARL-based depreciation. However, it is only a sheer accident of coincidence if the book depreciation reserve is in exact balance with the applicable theoretical depreciation at any given time. ARL-based depreciation rates include a self-correcting mechanism which will produce higher or lower depreciation rates over time to bring the actual depreciation reserve closer to being in balance with the theoretical reserve.

Q12. DO YOU AGREE THAT YOUR DEPRECIATION RATES ARE "EXCESSIVE" AS MR. MAJOROS CONTENDS ON PAGES 14 THROUGH 17 OF HIS DIRECT TESTIMONY?

A12. No. Mr. Majoros' criticism is based on the assertion that the Companies' proposed net salvage factors will collect too much cost of removal. The example he provides at page 15 of his testimony is only hypothetical and not an actual demonstration. It is well-established in case law and by regulatory policy that net salvage factors should be included in the development of depreciation rates.

Net Salvage

Q13. DID YOU INCLUDE NET SALVAGE RATIOS IN YOUR PROPOSED DEPRECIATION RATES?

A13. Yes, I did. To do otherwise would be inappropriate and would violate basic depreciation principles. Mr. Majoros contends that inclusion of cost of removal factors in my proposed depreciation rates was not appropriate. However, there is absolutely nothing inappropriate about the inclusion of cost removal within the net salvage ratios. These proposals are reflective of the level of net salvage anticipated to occur at the end of the life of the assets currently providing service to the Companies' customers. Consistent with his objective of inequitably deferring costs to future customers, Mr. Majoros has set forth various proposals to defer the recovery of appropriate costs from the cost-causing customers. Mr. Majoros' five-year average net salvage amortization proposal, which is discussed in greater detail later, is an excellent example of that effort to defer appropriate levels of cost recovery.

Q14. ON PAGE 18 OF HIS DIRECT TESTIMONY, MR. MAJOROS STATES THAT HE DISAGREES WITH YOUR TREATMENT OF DECOMMISSIONING COSTS. WHAT COMMENTS DO YOU HAVE WITH REGARD TO MR. MAJOROS' STATEMENT AND POSITION?

A14. My inclusion of negative net salvage in production plant depreciation rates is both appropriate and reasonable. SFAS No.143 is an accounting, not regulatory, standard for legal asset retirement obligations. The decommissioning or terminal net salvage included in the proposed production plant depreciation rates are for the non-legal retirement obligation costs. These are routinely incurred at the end of life for a location type property.

In analyzing service life and net salvage factors for location type property groups (such as production plants), the assets are viewed differently than mass assets such as poles. For the mass asset property groups, each of the individual property units will have an opportunity to live (independent of one another) the full estimated average of the property group. Conversely, the life of the assets (property units) within a location-type property group is interrelated with the remaining assets within the property group.

I do not seek to treat the development of net salvage for location property the same as for mass property as Mr. Majoros suggests at page 18, lines 19-21, of his testimony. For example, while the assets that comprise a production plant may be placed into service over a range of years, generally when the property is taken out of service, all vintages of property will be subject to retirement irrespective of when the property was first placed into service. Certain components of the plant will be retired during intervening years between original installation and the estimated final retirement date. Those piecemeal retirements of components of the facility are referred to as Interim Retirements. Accordingly, in the development of a proposed depreciation rate, depreciation professionals must consider the life of the Interim Retirements ("Interim Retirement Survivor Curve") as well as the overall life span and related probable retirement date. I utilized this process of estimating both the applicable service life and net salvage factors for the Companies' production plant property accounts.

Contrary to Mr. Majoros' assertion, the estimated net salvage factors incorporated into the production plant depreciation rates contain the net salvage applicable to the anticipated future interim retirements plus the end of life net salvage. The development of the production plant net salvage estimates are clearly not the same as the net salvage for the Companies' mass property accounts.

Q15. AT THE BOTTOM OF PAGE 19 AND ON PAGE 20 OF HIS DIRECT TESTIMONY, MR. MAJOROS DISCUSSES THE NET SALVAGE ANALYSIS THAT YOU PERFORMED. IS HIS REPRESENTATION CORRECT?

A15. No. Mr. Majoros fails to include the gross salvage and net salvage calculations that are included in my analysis. In addition, my net salvage analysis incorporates trend analysis on the various net salvage components.

Q16. ON PAGES 21 AND 22 OF HIS DIRECT TESTIMONY, MR. MAJOROS STATES THAT YOUR APPROACH IS PROBLEMIC BECAUSE OF THE MISMATCH BETWEEN THE VINTAGE OF THE ORIGINAL COST RETIREMENT AND THE VINTAGE OF THE OCCURENCE OF THE NET SALVAGE EXPENDITURE. IS MR. MAJOROS CORRECT IN HIS STATEMENT?

A16. No. Mr. Majoros is incorrect. Essentially all depreciation professionals support the standard approach to analyzing retirement history as a benchmark for identifying the initial relationship between beginning of life costs and end of life costs. This process of relating net salvage as a percent of the original cost retirement amount is supported within various depreciation textbooks. The NARUC Manual, page 159, confirms the established use of this process in the following passage:

> **Once the source of information is established, the analysis of data can commence to determine the past relationship of net salvage to retirements, i.e., net salvage as a percent of plant retired for each of the depreciation categories being studied.** Net salvage can be directly analyzed as a percent of retirements. However, in order to obtain a clear understanding of the composition of net salvage and the forces that cause

> it to change from year to year, generally it is best to analyze gross salvage and cost of removal separately as a percent of retirements.

(Emphasis added.) Retirements have and always will occur at the end of a life of an asset. Likewise, net salvage has and always will occur at end of a property life. Accordingly, the relationship between beginning-of-life cost and end-of-life cost will remain a continual occurrence.

Another factor is that the historical retirements and related net salvage that have occurred to date have occurred at various ages. In aggregate, through the analysis of the historical retirements, the average age of each property group's retirements can be identified. I performed this analysis for each of the Companies' property groups. My analysis demonstrates that retirements routinely occur at ages far less than the average service life of the property groups. Given that the cost of removal component of net salvage is largely applicable to labor costs, they will continue to increase over time. Since the average age of the historical retirements has been far less than average service life, additional years must pass for the remaining plant in service to experience the estimated average service life. Accordingly, the cost of removal component of net salvage must be adjusted for the passage of time in order to identify the appropriate relationship between the original cost and average end of life costs.

Q17. ON PAGE 22, LINES 15 AND 16, MR. MAJOROS STATES THAT "MR. ROBINSON FURTHER INFLATED HIS ESTIMATES TO ACCOUNT FOR FUTURE INFLATION." WHAT COMMENTS DO YOU HAVE REGARDING HIS STATEMENT?

A17. First and foremost, my calculations in the net salvage analysis are used to define the ratio of anticipated net salvage to the original cost of the property retired. They are not estimates of absolute quantities of future net salvage amounts. The "further inflation" referenced in Mr. Majoros' comments is the level of net salvage cost (cost of removal) between the age of the retirements that have been experienced to date and the estimated average service life of the property group. Said another way, the historical retirements to date have occurred at average ages far less than the estimated average service life of the property group. With the passage of time between the average age of the historical retirements and the property group's average service life, labor costs (which are the primary component of cost of removal) will increase to higher levels. The sum of the original cost plus the additional year's increased cost of removal is the cost relationship for the total plant life which needs to be estimated for each of the property groups. The sum of the two periods (experienced and anticipated) is the total end of life net negative relationship to the original cost of the plant being retired. With the passage of time, additional cost of removal will result in a greater (higher) negative net salvage percentage relationship to the original cost retirement.

Q18. ON PAGE 23, LINES 5 AND 6, MR. MAJOROS FURTHER STATES "MR. ROBINSON'S FUTURE NET SALVAGE RATIOS ARE <u>INFLATED</u>, BUT NOT REDUCED TO THEIR PRESENT VALUE". WHAT IS YOUR RESPONSE?

A18. Mr. Majoros' contention that future net salvage ratios must be reduced to net present value is not valid. The issue with regard to net salvage relationships is the end of life cost relationship to the original cost of the property being retired. Those end of life costs are comprised of two components, namely gross salvage (which is a future benefit) and cost of removal (which is a future cost). When one speaks of negative net salvage, it is understood that cost of removal exceeds any level of gross salvage that is anticipated at the end of the property's life. Very few accounts within the utility industry experience net positive salvage. With regard to any positive gross salvage portion of the anticipated net salvage, such items could justifiably be discounted to present value based upon standard discounting techniques as suggested by Mr. Majoros.

Conversely, with regard to the "cost of removal" component of future net salvage there is a dramatically different set of factors that must be considered. "Negative cash flows" are fundamentally different from "positive cash flows". Accordingly, the discount rate used for "negative cash flows" is not the same as the rate used to discount the "positive cash flows". This is so because of the desire for risk aversion when the potential for negative cash flows exist; hence the basis of insurance or hedging type activity. If anything, the standard net salvage approach I used may understate the future net negative salvage percents.

Q19. ON PAGE 22, LINES 17 TO 22 AND PAGE 23 LINES 1 TO 3, MR. MAJOROS STATES THAT YOUR NET SALVAGE ESTIMATES INCREASE DEPRECIATION RATES. IS HE CORRECT?

A19. Yes. Of course, negative net salvage increases annual depreciation rates. Clearly, the Companies will incur negative net salvage at the end of the various property groups lives. To deny this circumstance and propose to eliminate its inclusion in the appropriate recovery of such cost is akin to approaching the tollbooth and not having any money to pay the toll. No amount of deferring the recovery of those costs will change the circumstance. Mr. Majoros' ultimate proposal to severely reduce and significantly defer the net salvage recovery is clearly designed to reduce the Companies' revenues and will only serve to defer these costs to another generation of customers.

Q20. IS MR. MAJOROS' STATEMENT OF THE FIVE-YEAR NET SALVAGE EXPERIENCED BY LG&E AND KU ON PAGE 24 OF HIS TESTIMONY CORRECT?

A20. Although Mr. Majoros' statement of the amount of experienced net salvage for LG&E is correct, his calculation relative to KU is incorrect. According to Mr. Majoros, the sum of all the net salvage recorded on KU books and records totals a positive $2.2 million amount for the period 1998-2002. However, this amount includes a significant amount ($9.983 million) of inter-company transactions relative to the transfer of ownership of various "Other Production" properties between KU and LG&E. These transactions are not really net salvage, but are inter-company transfers of property. After eliminating the inter-company transactions, the resulting experienced net salvage for KU during 1998-2002 is a negative $7.883 million.

Furthermore, Mr. Majoros' statements and arguments present an apples to oranges comparison. His ultimate proposal to use the current expenditure amounts as a direct net salvage level, does not reflect the annual apportionment of the anticipated end of life level of net salvage. As previously noted, the proposed ARL based rate must include the applicable apportionment of such cost ratably over the useful remaining life of the property group.

The present level of annual retirements is currently only a small portion of what will occur in future years. Accordingly, due to the smaller level of present retirements there is an equally small level of net salvage occurring at the present time. As each of the property groups continue to age, significantly higher levels of retirements will occur in future years, and the corresponding higher levels of net salvage will occur along with those increased future retirements.

Q21. ON PAGES 24 AND 25 OF HIS DIRECT TESTIMONY MR. MAJOROS INCLUDES QUOTES FROM THE NARUC MANUAL TO SUPPORT HIS POSITION, AND INDICATES THAT "SOME" COMMISIONS HAVE ADOPTED CURRENT EXPENSING OF NET SALVAGE. WHAT COMMENTS DO YOU HAVE REGARDING THIS MATTER?

A21. Incredibly, Mr. Majoros begins his answer with the following acknowledgement about my approach: "In the past, many utilities have used this approach. Furthermore, it seems to be the recommended approach in the NARUC's 1996 Public Utilities Depreciation Practices Manual." Majoros Direct Testimony at page 24. He then sets forth a quote from the NARUC Manual that indicates that "some commissions have abandoned" such approach. In fact, only one jurisdiction (Pennsylvania) has utilized Mr. Majoros' approach on a relatively consistent basis for some period of time. A few other jurisdictions have used the treatment in limited situations. The reason virtually all jurisdictions follow my proposed approach is that such end of life costs should be charged proportionately, over the useful life of the asset providing service, to the Companies' cost-causing customers during the period when they are receiving the applicable service. The Pennsylvania approach should not be followed here.

Q22. ON PAGE 25, LINES 23 TO 29, AND PAGE 26, LINES 1 TO 3, MR. MAJOROS DISCUSSES THE POTENTIAL OF THE DEPRECIATION RESERVE POSSIBLY EXCEEDING THE GROSS PLANT OF THE ACCOUNT. ON PAGE 26, LINES 2 AND 3, MR. MAJOROS GOES ON TO STATE THAT THE

"DEPRECIATION EXPENSE SHOULD BE DESIGNED TO RECOVER THE ORIGINAL COST, NOT SOMETHING MORE". WHAT ARE YOUR COMMENTS?

A22. Mr. Majoros' statement that the "depreciation expense should be designed to recover the original costs, not something more" is in conflict with general depreciation principles, the AICPA definition of depreciation, the NARUC Manual, and his own direct testimony on pages 9 through 12 where he discusses depreciation principles and formulas. Although, under certain conditions, the depreciation reserve could exceed the gross plant of the account (*e.g.*, when the Companies experience a static or dying account that is anticipated to experience negative net salvage at end of life), such an occurrence would be necessary to enable the Companies to fully recover its applicable plant cost (first and end of life costs) over the useful life of the property group. Consider the following simple illustration:

1. The customer should pay all the company's plant related cost incurred in providing service to the customer.
2. The plant used to provide the service to one (1) customer has an initial original cost of $1,000.
3. The useful service life is 10 years after which the customer will no longer exist.
4. The end of life retirement cost is $500.

If no net salvage was included within the Companies' depreciation rates, as proposed by Mr. Majoros, the customer would pay annual depreciation expense of $100 per year for 10 years to recover the $1,000 initial original cost investment. After 10 years the customer leaves and no longer exists. The company retires the plant and has been made whole for the initial investment. However, in the process of retiring the plant the company must expend $500 to retire the plant that has previously served the customer. Given that the customer no longer exists, there is no one to pay for the retirement cost. The true annual cost of providing the customer service was actually $1,000 plus $500 (cost to retire) = $1,500 divided by 10 years = $150 per year. The customer only paid $100 per year or 1/3 less than he should have paid. Furthermore, the company has expended $500 for the asset retirement and has no available source of recovery. If new customers are assumed to be added, this illustration demonstrates the intergenerational inequities -- these new customers would pay the $500 negative net salvage incurred to retire the facility that the prior customers used, in addition to the plant cost that is providing service to them.

By using my proposed depreciation rate approach, the annual depreciation relative to the above illustration would be $150 per year during the 10 years which the company was providing service. After 10 years the company would retire the plant and expend the $500 for retirement cost with the result that the company would have been made whole and the cost-causing customer would have paid the appropriate level for annual depreciation expense. Within a dying account, such as under this scenario, the book depreciation reserve would be in excess of the original cost balance starting midway through the seventh year (7 x $150 annual expense = $1,050). This situation is necessary to enable the company to have attained sufficient recovery by year ten (10) to pay for all the costs associated with the plant used to provide service to the customer.

Q23. ON PAGE 26, LINES 6 THROUGH 9 MR. MAJOROS STATES THAT FERC ORDER NO. 631 REQUIRES THAT THE COST OF REMOVAL "MUST BE ACCOUNTED FOR AS SPECIFICALLY IDENTIFIED ALLOWANCES." FURTHERMORE, ON PAGE 28, LINE 19 AND PAGE 28, LINES 1 AND 2, MR. MAJOROS STATES THAT HIS "CURRENT EXPENSING" RECOMMENDATION IS CONSISTENT WITH FERC ORDER NO. 631. IS MR. MAJOROS CORRECT?

A23. No. FERC Order No. 631 states:

> Instead, we will require jurisdictional entities to maintain separate subsidiary records for cost of removal for non-legal retirement obligations that are included as specific identifiable allowances recorded in accumulated depreciation in order to separately identify such information to facilitate external reporting and for regulatory analysis, and rate setting purposes....

Order No. 631 does not state that "cost of removal" should be removed from depreciation rates, nor does it make any reference to the current expensing of historical 5-year average net salvage. It merely states that the cost of removal component should be identifiable. In fact, FERC instructions for Account 108, "Accumulated Provision for Depreciation of Electric Utility Plant," state that utilities may not transfer any portion of this account without authorization by the Commission. The impact of the Order No. 631 statement is simply to develop segmented depreciation rates between plant and gross salvage recovery and cost of removal recovery. Such separation of the depreciation rate will readily afford the opportunity to track the recovery as set forth in Order No. 631. Such separation is, for example, simply a matter of applying two separate depreciation rates (one for plant and gross salvage) and a second depreciation rate (for cost of removal) recovery to the applicable plant account investments and recording the information into two separate sub-accounts within Account 108. See Rebuttal Exhibit EMR-2.

Q24. ON PAGES 26 TO 28 OF HIS DIRECT TESTIMONY, MR. MAJOROS DISCUSSES FURTHER WHY NET SALVAGE SHOULD BE CURRENTLY EXPENSED. DO YOU AGREE WITH HIS APPROACH?

A24. No. Pennsylvania is the principal state which utilized the five-year average net salvage amortization approach proposed by Mr. Majoros. That approach is not generally accepted by depreciation professionals or regulatory agencies. The error of the Pennsylvania approach is that it inappropriately defers the recovery of the true capital cost of serving the Companies' customer. The recovery of only the original cost of the asset (and not considering net salvage) is contrary to the standard depreciation formula as well as the principle of matching the recovery of the asset's cost to the consumption of property. The Pennsylvania methodology is not an accrual accounting process or procedure. Instead, it simply charges historical experienced salvage relative to property previously taken out of service to customers who do not benefit from the use of the asset. The Pennsylvania approach thus results in both the dramatic under-recovery of appropriate plant life cost as well as inter-generational inequities with regard to appropriately distributing costs to customers.

Q25. WHAT COMMENTS DO YOU HAVE REGARDING MR. MAJOROS' STATEMENTS OF NET SALVAGE AMOUNTS ON PAGE 29, LINE 4 THROUGH 20?

A25. First, the KU "Actual Recent Experience" amount of negative $2.2 million shown on line 14 of Mr. Majoros' testimony is incorrect and needs to be adjusted to positive $7.7 million of cost of removal as discussed in my answer to Question 20.

Mr. Majoros' statement that the negative net salvage included in the proposed depreciation rates is excessive is incorrect. The $456.4 million amount included in depreciation reserve for net salvage for KU and LG&E represents the appropriate amount recovered from past customers for property consumed in providing service on their behalf. Mr. Majoros would have the Companies defer any such appropriate recovery until the property is taken out of service and then seek to obtain recovery of the cost for out of service plant from customers who likely did not receive any benefit from the property. The $49 million of net salvage bundled in my proposed rates represents the appropriate amount of net salvage receivable from present and future customers for property to be consumed to provide service on their behalf. Mr. Majoros' "Actual Recent Experience" figures are not comparable to the net salvage determinations in line 13.

Q26. ON PAGE 30, LINES 1 TO 6 OF HIS DIRECT TESTIMONY, MR. MAJOROS DISCUSSES ACCRUAL ACCOUNTING AND RELATED ISSUES WITHIN SFAS NO. 143 AND FERC ORDER NO. 631. WHAT COMMENTS DO YOU HAVE REGARDING HIS STATEMENTS?

A26. Mr. Majoros' recommended amortization of historic net salvage clearly is not accrual accounting as required by FERC regulation, and instead is essentially a cash accounting mechanism. If anything, it is worse than a pure cash approach because it looks backwards over a five year period of actual cash expenditures (totally out of period) as the basis for defining the level of future net salvage. The use of ARL-based depreciation rates, which incorporate the ratable allocation of total life cost over the useful life of the asset, is pure accrual accounting in that it recognizes the costs when they occur (at the time when the property is consumed in providing customer service). The development of average remaining life depreciation rates requires the use of future net salvage estimates to develop the applicable depreciation rates.

While Mr. Majoros disputes the inclusion of future net salvage (or any net salvage) in the proposed depreciation rates, he does acknowledge that the Companies have been and will continue to incur net salvage with the retirement of plant from service. Mr. Majoros has acknowledged that during a short time span of five years LG&E has experienced negative $2.3 million of net salvage and KU has experienced positive net salvage of $2.2 million (which must be adjusted to negative $7.7 million to properly reflect actual net salvage activity). Importantly, this activity during the recent five year period is to the result of more limited levels of retirements. Significant increases will occur in future retirements as the property continues to age, which will generate similar increased levels of negative net salvage.

The Companies have been experiencing significant levels of negative net salvage in conjunction with the historic retirement levels. There is a sound foundation for significantly greater levels of negative net salvage in the future as the much larger current plant in service reaches end of life.

Mr. Majoros' proposal to collect an annual net salvage amount through a "retroactive" cash (deferral) mechanism is in violation of basic accounting and rate making principles.

Q27. ON PAGES 30 AND 31 OF HIS DIRECT TESTIMONY, MR. MAJOROS REFERENCES TWO PROCEEDINGS IN WHICH THE KENTUCKY PUBLIC SERVICE COMMISSION ACCEPTED MR. MAJOROS'S NET SALVAGE RECOMMENDATIONS ON A TRIAL BASIS. WHAT ARE YOUR COMMENTS?

A27. Mr. Majoros' statement that the Kentucky Public Service Commission accepted his recommendations on a trial basis is a misinterpretation of the Commission orders cited in Mr. Majoros' direct testimony. In each case, while Mr. Majoros' approach was accepted, the Commission language limits the adoption of the approach in that it should be "utilized until [the subject utilities, Jackson Energy and Fleming-Mason] undertak[e] a new depreciation study".

Q28. ON PAGE 31 OF HIS TESTIMONY, MR. MAJOROS REFERENCES SEVERAL CASES IN WHICH CURRENT EXPENSING OF NET SALVAGE HAS BEEN PREVIOUSLY ORDERED. WHAT COMMENTS DO YOU HAVE?

A28. These cases clearly represent the minority view embracing a radical new policy that would separate the calculation of net salvage from the calculation of depreciation. The majority view is a well-established policy of matching the costs of assets to the ratepayers who benefit from those assets. See the dissenting opinion of Commissioner Connie Murray, <u>In the Matter of Laclede Gas Company's Tariff to Revise Natural Gas Rate Schedules</u>, Missouri Public Service Commission, Case No. GR-99-315, Order dated June 28, 2001.

Q29. WHAT ADDITIONAL COMMENTS DO YOU HAVE REGARDING MR. MAJOROS' PROPOSAL FOR CURRENT EXPENSING OF EXPERIENCED NET SALVAGE?

A29. Mr. Majoros' position to amortize historic levels of net salvage is inappropriate and unwarranted. The shortfall of Mr. Majoros' proposal is that the amortization of the five (5) year average net salvage is a back end loaded recovery mechanism. There is a dramatic mismatch between the provision of service and the payment for the service provided. Mr. Majoros' net salvage amortization approach totally fails the basic matching principle that underlies the fairness doctrine inherent in rate making. It will result in the Companies' facing dramatic under-recovery of their total life asset costs.

SERVICE LIFE METHODS

Q30. ON PAGE 39, LINES 11 TO 15, PAGE 40, AND PAGE 41, LINES 1 TO 28 OF HIS DIRECT TESTIMONY, MR. MAJOROS DISCUSSES THE APPROACH AND STATISTICAL METHODS THAT HE USED IN HIS DEPRECIATION ANALYSIS. DO YOU HAVE ANY COMMENTS?

A30. Yes. Mr. Majoros indicated that he used the Actuarial Method (also known as the Retirement Rate Method), the Simulated Plant Record (SPR) method, and the Geometric Mean Turnover (GMT) method of analysis. Also, he indicated that he reviewed and used industry life data in his analysis. While Mr. Majoros stated that he used industry life data as upper and lower fitting parameters, he apparently gave little additional consideration to the information in gauging the overall reasonableness of his average service life recommendations. That is, in reviewing the average of industry service lives as compared to Mr. Majoros' recommended alternative average service life parameters for selected electric and gas accounts (as summarized per my Rebuttal Exhibit EMR-3), it is apparent that Mr. Majoros gave little consideration to the industry data in judging the appropriateness of his life estimates. This statement is based upon the fact that, in many circumstances, the useful service lives recommended by Mr. Majoros are at the upper end of the ranges of average service life used by the industry.

Q31. WAS IT APPROPRIATE FOR MR. MAJOROS TO GIVE WEIGHT TO THE GMT ANALYSIS RESULTS?

A31. No. Mr. Majoros states that in addition to the use of the actuarial (Retirement Rate Method) and the SPR method, he also relied on the GMT analysis results. Clearly, the use of the actuarial study analysis method is the most desirable study method given that specific vintage information relative to the additions and subsequent retirements are incorporated into the analysis. Secondly, the SPR analysis method is the next best available study method when specific actuarial data is unavailable. Conversely, the life analysis results generated from the Retirement Rate and SPR Methods are far superior to any results produced by the GMT or any other turnover method. Both the Retirement Rate and SPR databases reflect information about the dollars of capital retirements by account and by activity and/or vintage year depending on the method used.

The GMT method does not give any consideration to the survival characteristics of the property being studied, (the method assumes a straight line property retirement pattern) with the result that the GMT method routinely overstates the useful life indication of the studied property. The GMT method referenced and utilized by Mr. Majoros is essentially an antiquated approach little used within the depreciation profession today.

Q32. WHAT SUPPORT DO YOU HAVE FOR YOUR STATEMENT THAT THE GMT METHOD IS ANTIQUATED?

A32. On page 42 of his testimony, Mr. Majoros cites page 81 of the NARUC Manual for the proposition that turnover methods are popular. However, when the cited reference in the NARUC Manual is quoted in its entirety, it can be seen that turnover methods are outdated and have been superseded by the SPR method. NARUC observes:

> The simplicity of the turnover methods and ease with which they may be applied explain their popularity. Their use is restricted by the assumptions of uniformity and their failure to provide an indication of retirement dispersion. These problems led to their replacement by the *Simulated Plant Record (SPR)* model.

On page 92, NARUC continues:

> ... the methods may produce considerable variation in life indications. This is especially true for the Geometric mean method.
>
> and
>
> The use of turnover methods has decreased considerably with the increased experience in applying and interpreting the results of improved life analysis methods. These improved methods used with unaged data are discussed in the following sections.

The improved method described in the following section is the SPR method.

Q33. CAN YOU CITE OTHER AUTHORITY INDICATING THE GMT METHOD HAS BEEN SUPERSEDED BY THE SPR METHOD?

A33. Yes. Another well-recognized authority on depreciation is *Depreciation Systems* by Frank K. Wolf and W. Chester Fitch (Iowa State University Press 1994). The authors are nationally recognized depreciation experts. On page 218, the authors describe the GMT Method as so obsolete as to have little more than historical interest, observing:

> Before the 1950s, turnover methods were the predominant means of analysis used to provide indications of service life when only unaged data were available. These methods have been replaced by the SPR method and are now of primarily historical interest, so we will discuss them only briefly.

Q34. DO WOLF AND FITCH ADDRESS THE SPR METHOD?

A34. Yes. On page 221 of *Depreciation Systems*, they state:

> The turnover methods have two weaknesses. First, they provide an indication of average life but not curve type. Second, they require either a constant balance or a balance that increases at a constant rate each year. The SPR method, discussed next, does everything the turnover methods do and more.
>
> Though Bauhan conducted his developmental work using hand calculations, the SPR method is computer-oriented because it requires time-consuming trial-and-error calculations. As computers became more available after the early 1950s, the SPR method gained popularity and quickly replaced the turnover methods. Continued application of and research on the SPR method has extended knowledge, understanding, and acceptance of the technique.

Q35. PLEASE EXPLAIN WHY THE FAILURE OF THE GMT METHOD TO REFLECT DISPERSION IS A SERIOUS PROBLEM IN DETERMINING THE AVERAGE SERVICE LIFE OF UTILITY PROPERTY?

A35. Utility property groups are simply not retired on a straight line basis. Instead, the frequency of retirements of utility property occurs in patterns depicted by standard survivor curves, commonly referred to as Iowa curves because they are based on work performed at Iowa State University. Because the GMT method assumes a straight line retirement pattern, as opposed to a utility property's more typical Iowa "R" mode retirement frequency characteristic, it produces false conclusions most of the time with respect to the average service life of long-lived electric utility property. Under the Iowa "R" mode curve, the greater frequency of retirements occurs after the average service life. Further, given that the average age of the Companies' property is relatively young and less than the average service life, the level of retirements that have occurred to date are modest as compared to what will occur after the average service life. Accordingly, the assumption of straight-line retirement inherent in the GMT method significantly overstates the estimated life indication of each of the studied property groups. That is, with the low level of "early in life" retirements and the straight line retirement assumption, the GMT method incorrectly suggests that it will require many additional years to retire the remaining non-retired property units than is reflected by retirement dispersions appropriate for that property.

This critical shortcoming of the GMT method is just one of the reasons why this approach, as well as other turnover methods, are rarely used any longer for life analysis for unaged historical plant investments. The SPR method is the most widely used approach to analyze unaged historical investment data. Specifically, the SPR method gives consideration to the varying retirement dispersions in estimating average service lives of the property being studied.

Q36. DOES IT APPEAR THAT MR. MAJOROS GAVE MUCH WEIGHT TO THE GMT METHOD IN DEVELOPING HIS AVERAGE SERVICE LIFE RECOMMENDATIONS?

A36. While Mr. Majoros routinely extols the benefits of using the GMT method of analysis, it would appear that he gave little, if any, weight to his GMT study results. I reached this conclusion because the GMT study results (indicated average service lives) are, in general, extremely far removed (longer) than even the unrealistically long average service lives proposed by Mr. Majoros for the selected electric and gas plant accounts for which he has recommended alternative average service lives. See Rebuttal Exhibit EMR-3.

Q37. WITH REGARD TO HIS SERVICE LIFE ANALYSIS, MR MAJOROS' DETERMINATION OF HIS PROPOSED AVERAGE SERVICE LIVES IS PRINCIPALLY BASED ON HIS COMPLETED "BEST FIT" ANALYSIS. DO YOU HAVE ANY COMMENTS?

A37. Yes. An appropriate depreciation recommendation requires the exercise of experienced judgment and not merely a mechanical and mathematical exercise. The problem with a purely mechanized approach is that a small change in the timing of several retirements could have a major effect on the indicated curve and average service life. Judgment should be exercised to insure that the mathematically identified curve and life make sense.

AVERAGE SERVICE LIFE RECOMMENDATIONS

Q38. MR. MAJOROS HAS PROPOSED DIFFERENT AVERAGE SERVICE LIVES AND IOWA SURVIVOR CURVES FOR SEVERAL PLANT ACCOUNTS WITH THE KENTUCKY UTILITIES AND LG&E – ELECTRIC AND GAS PLANT IN SERVICE. DO YOU HAVE RESPONSES TO HIS CRITIQUE AND RECOMMENDATIONS?

A38. Yes. I will address each of the recommendations that Mr. Majoros has set forth in his direct testimony. My initial comments are in general and related to all of Mr. Majoros' life analysis and service life recommendations for each of the operating entities for which Mr. Majoros has proposed alternative service life parameters. Mr. Majoros' approach to the service life parameter recommendations was generally one of essentially completing an arithmetic analysis of the overall retirement analysis band and simply selecting a statistical data fit without consideration of other factors, such as the content of the property account, property retirement levels, more recent data experience or general experience within the industry. These items and potential other factors impact the useful remaining life of each of the property groups. Mr. Majoros' analysis and resulting proposed service life parameters demonstrate that his efforts are more results oriented as opposed to a balanced view and interpretation of all the relevant factors.

While the Companies' historical experience to date is a reasonable benchmark from which to initiate a future life estimate, it is not an automatic basis for estimating the future life of the property under study. Rebuttal Exhibit EMR-3 summarizes the current underlying service life parameters for each of the property groups discussed along with Mr. Majoros' proposals and his curve fit criteria, general industry service life ranges and averages, as well as the service life parameters recommendations set forth in my filed depreciation reports.

Q39. WHAT ARE YOUR RESPONSES TO MR. MAJOROS' RECOMMENDED SERVICE LIFE PARAMETERS FOR KENTUCKY UTILITIES PLANT ACCOUNTS AS OPPOSED TO THOSE SET FORTH IN YOU PREPARED DEPRECIATION STUDY?

A39. My Responses for Kentucky Utilities are as follows:

Account 353.1-Transmission Station Equipment – Non System Control/Com

Certainly the Company's experience and expectations with regard to its property should be a primary factor in estimating the applicable average service life for this and all other property groups. In studying the Company's historical data, the achieved average service life for this property over a period of years has varied depending upon the level of activity that has occurred within the applicable timeframe. Given that the level of retirement activity relative to transmission plant has been suppressed for various recent years the overall general life indications have been directly impacted by that occurrence. More recently, in light of the 2003 northeastern blackout, greater emphasis has been placed upon the reliability of transmission assets. Accordingly all operating companies will be focusing greater effort on maintaining and upgrading their transmission networks to ensure that additional outage events will be minimized in the future. As noted in my depreciation study report on page 4-19: "The aggregate level of retirements to date is relatively modest in comparison to the overall plant investment. It is anticipated that increased future activity will serve to reduce the achieved average service life to a more typical level." Consistent with this statement is the fact that the current average age of the property group is only 18.5 years. Accordingly, given the general characteristic of this property class, which tends to be more right-moded, one would not anticipate higher levels of retirements earlier in life. As previously noted, it can be anticipated that additional levels of increased activity can be anticipated to occur in future years.

In reviewing the overall actuarial analysis, retirement activity for property over forty years of age has generally been relatively modest in comparison to younger added property. Accordingly, in the analysis and curve fitting process these data points should be given lesser and/or minimal weight. In arriving at my proposed service life parameters of an Iowa 50-R2.5 for this property I have incorporated that consideration. Furthermore as a general check I have considered the general range of lives used and resulting industry average life for this property group. The range of industry lives for this property group has been between 5 and 57 years and averaged 37 years. Considering all the factors anticipated to impact this property group, an Iowa 50-R2.5 life and curve is deemed to be the maximum service life parameters that should be used for this property class.

Account 353.2-Transmission Station Equipment-Non System Control/Com-Microwave

It is obvious that Mr. Majoros did not give consideration to the content of this property account in estimating his proposed average service life of 38 years. Microwave Equipment is communication equipment that enables the Company to control its facilities from a central control center. Communication Equipment has routinely advanced over the years with the result that the ongoing upgrades have been made to the Company's communication network. While the Company has minor quantities of investments within this property group dating back to the 1950s the overwhelming majority of the surviving investment within the property group has been placed into service during the past twenty (20) year period with the result that the average age of the property group is only eleven (11) plus years of age. The minor amounts of surviving investments dating back to the earlier years have influenced the analysis results and Mr. Majoros' service life recommendations. Based upon the content of the property group and typical life of this class of property within the communication and other industries my recommended service life parameters of an Iowa 15-R3 life and curve are most appropriate.

Account 355-Transmission Poles & Fixtures

In light of the 2003 northeastern blackout, greater emphasis is being placed upon the reliability of transmission assets. All operating companies will be focusing greater effort on maintaining and upgrading their transmission network to ensure that additional outage events will be minimized in the future. Transmission plant is the type of property which is cyclical in nature. That is, a larger quantity of activity routinely occurs within a period of years followed by levels of inactivity. There is absolutely no doubt that additional levels of increased activity can be anticipated to occur in future years.

Mr. Majoros' stated at page 47 in his direct testimony that "Mr. Robinson did not consider a significant portion of the OLT in making his selection". Mr. Majoros is correct in this regard, but incorrect in his own life analysis process and service life estimation. It appears that Mr. Majoros' approach to life analysis is to routinely run his computer fit of the overall historical data and then pick the arithmetic best fit as a basis for his future average service life. Conversely, in completing the comprehensive analysis of the actuarial analysis results I noted that retirement activity for property past approximately forty (40) years of age have generally been modest in comparison to younger added property. Likewise the level of property exposed to retirement in those older age intervals (past 40 years) are generally much more modest than younger aged property. Therefore, the occurrence of a modest level of increased retirements from that older vintage property will significantly change the observed life table and resulting life indications within the overall as well as the various other data analysis bands.

Accordingly, in the analysis and curve fitting process these data points should be given lesser and/or minimal weight. In arriving at my proposed service life parameters of an Iowa 43-R2.5 for this property I have given consideration to those factors as well as the anticipation that the future life of the older age property is limited. That is, I essentially truncated the curve and fit the data points through age forty. Furthermore, as a general check I have reviewed the general range of lives used and resulting industry average life for this property group. The range of industry lives for this property group has been between 26-65 years and averaged 42 years. Considering all the factors that are anticipated to impact this property group, an Iowa 43-R2.5 life and curve is estimated as the applicable service life parameters that should be used for this property class.

Account 356-Transmission Overhead Conductors & Devices

This transmission plant account has experienced somewhat reduced retirement data during several of the more recent years. Similar to the other transmission accounts this category of property is generally cyclical in nature and additional levels of increased activity can be anticipated to occur in future years. As noted in my depreciation study report on page 4-22, "There has been somewhat of a temporary moderation of the replacement of assets within this property group which resulted in an increase in the overall average service life indication in (the) most recent analysis band. By comparison, earlier retirement band analysis produced service life indications more consistent with the industry lives for this property class." It is further anticipated that with the increased focus on Transmission Plant throughout the industry that future replacement/upgrade activity will return to more typical levels. Accordingly, my proposed increase in the average service life parameters to an Iowa 50-R3 life and curve from the Iowa 45-R3 life and curve underlying the current depreciation rate is rational and appropriate. Conversely, Mr. Majoros' recommended Iowa 62-R3 life and curve is overly long and unrealistic.

Furthermore, a comparison to general industry data, identifies that within the industry, the life for this property group ranges from 20 to 62 years and averages 42 years. As with various other average service life recommendations, Mr. Majoros' proposal is at the extreme long end of the industry range of average service lives.

Account 365–Distribution Overhead Conductors & Devices

Mr. Majoros has proposed an Iowa 61-R0.5 (as compared to an Iowa 49-R0.5 life and curve which he is proposing for the same property account for LG&E – Electric entity) for the account based upon his SPR and GMT analysis. Mr. Majoros' interpretation of his study results do not reflect the more typical service life experienced by this property class, nor the experience of the Company. First, Mr. Majoros estimation of a survival characteristic (an Iowa R0.5 curve is a far more left-moded life characteristic) indicates far greater levels of young-aged retirements than typically occurs for this property class. The direct impact of estimating an R0.5 curve will result in the indication of a much longer average service life than is appropriate for the property group. Next, in reviewing the Company data, in 2002 it experienced far fewer retirements than occurred in all other years in the last three decades. This rather dramatic drop in the level of the 2002 retirements had an impact on the resulting life indication. In addition, in completing the comprehensive analysis of the actuarial results, retirement activity for property past approximately fifty (50) years of age has generally been modest in comparison to younger added property. Likewise, the level of property exposed to retirement in those older age intervals (past 50 years) is generally much more modest than younger aged property. Therefore, a modest level of increased retirements from that older vintage property will significantly change the observed life table and resulting life indications within the overall as well as the various other data analysis bands. Accordingly, in the analysis and curve fitting process these data points should be given lesser and/or minimal weight. In arriving at my proposed service life parameters of an Iowa 41-R2 for this property I have given consideration to those factors as well as the anticipation that the future life of the older age property is limited.

Lastly, the range of lives utilized within the industry for this property account is 3 to 65 years and averages 36 years. Accordingly, my recommendation of an Iowa 41-R2 life and curve for this property group is consistent with the Company's past experience and future expectations as well as the general lives within the industry.

Account 367-Distribution Underground Conductors & Devices

Mr. Majoros states that the best fit to the historical data is an Iowa 38-L3. Rebuttal Exhibit EMR-4 shows that while the statistical arithmetic best fit may be the life and curve as indicated by Mr. Majoros, the service life parameters clearly do not best represent the characteristic historically displayed by the Company's property.

Far more important is the fact that within the electric industry, there have been specific references to the fact, as noted on page 4-29 of my depreciation report, that "various operating companies have routinely experienced increasing failures and replacements of this category of property". Many of such conductor failures have occurred at relatively young ages. Accordingly, it is very likely that the maximum life of this property category will be significantly shorter than the seventy-five (75) plus years inherent within the Iowa 38-L3 proposed by Mr. Majoros, especially in light of the fact that the current average age of the Company's property group is only 6.6 years of age.

By comparison, the Iowa 30-R3 life and curve that I have proposed for the Company's Underground Conductors and Devices better represents the pattern of life being experienced by the Company's property, plus the maximum life of the estimated service life parameters is significantly shorter in keeping with the increased risk of potential earlier replacement of portions of the property.

Account 369-Distribution Services

Mr. Majoros states that he completed an actuarial (retirement rate) analysis utilizing the Company's data and that the best fit curve was an Iowa 61-O1 life and curve for this account. While page 4-31 of my depreciation study stated that an analysis was completed via the retirement rate method it should have stated that an SPR Method analysis was performed. Within the analysis section of the depreciation report (Page 5-90) an SPR analysis graph is the only item shown for Account 369. Given the lack of actuarial data an SPR analysis was utilized as a basis for estimating the applicable average service lives of the property group instead.

While there was an incorrect statement within the narrative (Section 4) of the depreciation study report, Section 5 of the report did contain the appropriate applicable SPR analysis results. Furthermore, in Mr. Majoros' completion of an actuarial analysis it should have become obvious, for a variety of reasons, that something was likely incorrect with the underlying data. With regard to the provided actuarial data, Mr. Majoros requested no clarification and, furthermore, simply recommended an incorrect average service life parameters for this account (based solely upon an arithmetic best fit) that are substantially out of the range of average service lives and curve types more typically experienced for this property group.

My recommended Iowa 30-R3 life and curve for the Company's Service is both representative of the life being experienced by the Company's property and consistent with the industry average of 34 years for this property group.

Q40. WHAT ARE YOUR RESPONSES TO MR. MAJOROS' RECOMMENDED SERVICE LIFE PARAMETERS FOR LG&E-ELECTRIC PLANT ACCOUNTS?

A40. My Responses for LG&E - Electric are as follows:

Account 353.1-Transmission Station Equipment – Non System Control/Com

It is noted, in studying the Company's historical data that the achieved average service life for this property, over a period of years, has varied depending upon the level of activity that has occurred within the applicable timeframe. Given that the level of activity relative to transmission plant has been suppressed for a number of recent years the overall general life indications have been directly impacted by that occurrence. More recently, in light of the 2003 northeastern blackout, greater emphasis has been placed upon the reliability of transmission assets. Accordingly, it can be readily anticipated that all operating companies will be focusing greater effort on maintaining and upgrading their transmission networks to ensure that additional outage events will be minimized in the future. As noted in my depreciation study on page 4-17 "Retirement activity temporarily declined during a number of years in the 1990s, thereby, contributing to some lengthening of the average service life indication for the property group. However, retirements have again accelerated during 2002." As previously noted, it can be anticipated that additional levels of increased activity can be anticipated to occur in future years.

The historical analysis within this account is clearly being influenced by the recent lower levels of activity. In reviewing the overall actuarial analysis it is noted that retirement activity for property past forty years of age has generally been relatively modest in comparison to younger added property. Accordingly, in the analysis and curve fitting process, these data points should be given lesser and/or minimal weight. In arriving at my proposed service life parameters of an Iowa 50-R3 for this property I have done exactly that. Furthermore, as a general check I have reviewed the experience achieved by the KU property (KU has been experiencing an approximate 50 year life for this property group) as well as considered the general range of lives used and resulting industry average life for this property group. The range of industry lives for this property group has been between 5-57 years and averaged 37 years. Considering all the factors anticipated to impact this property group, an Iowa 50-R3 life and curve is deemed to be the maximum service life parameters that should be used for this property class.

<u>Account 354–Transmission Towers & Fixtures</u>

Consistent with Account 353.1, in light of the 2003 northeastern blackout, greater emphasis is being placed upon the reliability of transmission assets. Likewise, it can be readily anticipated that all operating companies will be focusing greater effort on maintaining and upgrading their transmission networks to ensure that additional outage events will be minimized in the future. Transmission plant is the type of property which is cyclical in nature. That is, a larger quantity of activity routinely occurs within a period of years followed by levels of inactivity. As noted in my depreciation study report on page 4-18 ".....activity will need to increase in future years to assure that upgrades and modernization occurs in future years. Such activity will serve to return the life indication to shorter lives than presently indicated." There is absolutely no doubt that additional levels of increased activity can be anticipated to occur in future years.

Mr. Majoros' recommended average service life of 63 years for his property group is clearly being influenced by the recent lower levels of activity. In reviewing the overall actuarial analysis, it is noted that retirement activity for property past forty years of age has generally been quite modest in comparison to younger added property. Likewise, the level of property exposed to retirement in those older age intervals (past 40 years) are generally much more modest than younger aged property. Based upon that knowledge, it is noted that even the occurrence of a modest level of retirements from that older vintage property will radically change the life indications resulting from the overall data analysis. Accordingly, in the analysis and curve fitting process these data points should be given lesser and/or minimal weight. In arriving at my proposed service life parameters of an Iowa 55-R4 for this property I have given consideration to those factors as well as the anticipation that the future life of the older age property is limited. Furthermore, as a general check I have reviewed the general range of lives used and resulting industry average life for this property group. The range of industry lives for this property group has been between 30-86 years and averaged 50 years. Considering all the factors that are anticipated to impact this property group, an Iowa 55-R4 life and curve is estimated as the applicable service life parameters that should be used for this property class.

Account 356–Transmission Overhead Conductors & Devices

This is an additional transmission plant account which has experienced somewhat reduced retirement data during several of the more recent years. Notwithstanding some of the reduced activity, the retirement of plant in service through age forty has been fairly significant with a corresponding significant drop in retirement activity as well as property exposed to retirement in years older than forty years. As with the other transmission accounts, even modest amounts of increased retirement activity resulting from property upgrades will materially impact the historical life analysis results. The 63 year average service life proposed by Mr. Majoros clearly does not give appropriate consideration to that factor, and as such is overly long and unrealistic. Likewise, a comparison to general industry data demonstrates that, within the industry, the life for this property group ranges from 20 to 62 years and averages 42 years. As with various other average service life recommendations, Mr. Majoros' proposal is at the extreme end of the industry range of average service lives. Conversely, my proposed Iowa 47-R1.5 life and curve for this property group is reflective of the Company's experienced life (after considering the factors affecting the property's useful life) and is more representative of the service life experienced within the industry.

Account 365–Distribution Overhead Conductors & Devices

Mr. Majoros has proposed an Iowa 49-R0.5 life and curve for the account based upon his SPR and GMT analysis. Mr. Majoros' interpretation of his study results do not reflect the more typical service life experienced by this property class nor the experience of the Company. First, Mr. Majoros' estimation of a survival characteristic (an Iowa R0.5 curve) is a far more left-moded life characteristic (indicating far greater levels of young aged retirements than typically occurs for this property class). The direct impact of estimating an R0.5 curve will result in the indication of a much longer average service life than is appropriate for the property group. Second, Mr. Majoros indicated he relied on the results of his GMT analysis. This method, as indicated in my earlier testimony, is an antiquated analysis approach that routinely produces unreliable results. Mr. Majoros GMT life indication for this account is 166.26 years. This resulting life indication is totally meaningless. Thus, any consideration that Mr. Majoros gave to that study results is in error.

Next, in reviewing the Company data, there were two years, 1999 and 2000, which experienced far fewer retirements than occurred in all other years in the Company's history over the last four decades. The impact on the life analysis results, from the two years with low retirement activity is a materially longer life indication which Mr. Majoros has proposed to adopt as his recommendation. If Mr. Majoros had reviewed the numerous other interim experience bands, he would have noticed that for the many five-year retirement periods (excluding the most recent five years which contained the two years with reduced retirements) the life indication for this property category were in the range of 25 to 30 years.

Finally, the range of lives utilized within the industry for this property account is 3 to 65 years and averages 36 years. Accordingly, my recommendation of an Iowa 35-R2.5 life and curve for this property group is consistent with the Company's past experience and future expectations as well as the general lives within the industry.

Q41. WHAT ARE YOUR RESPONSES TO MR. MAJOROS' RECOMMENDED SERVICE LIFE PARAMETERS FOR LG&E-GAS PLANT ACCOUNTS?

A41. My Responses for LG&E - Gas are as follows:

Account 353–Lines

Again, Mr. Majoros has simply run a computer actuarial analysis of the total historical retirement analysis band and simply selected the best fit of all the data points without any consideration of the underlying facts. In looking at the analysis results for property older than age 41.5, there is only a minimal amount of retirement data and an equally limited amount of property exposed to retirement. See Rebuttal Exhibit EMR-5. In circumstances where such data amounts are limited or significantly reduced, little or no weight should be given to these data points. Conversely, Mr. Majoros simply used many of the previously referenced data points and hence produced an Iowa 51-L0.5 life and curve estimate for the property group. The impact of his service life parameter (Iowa 51-L0.5) is to significantly understate the Company's actual survivors early in life and overstate the survival pattern later in life, thereby generating the basis for a significantly longer and unrealistic average service life parameter for this property group.

Conversely, my recommended Iowa 40-L2 life and curve estimate for Account 353 appropriately represents the life pattern being achieved by the Company's property and what is anticipated in future years. Also, my recommended average service life is more consistent with industry data. That is, the range of average service lives for this property group is 15 to 58 years and averages 38 years. As with his various other service life recommendations, Mr. Majoros' recommended average service life of 51 years for Account 353 is much closer to the end of the range of years used within the industry.

Account 367–Transmission Mains

Mr. Majoros' actuarial analysis results and resulting service life recommendation is again being unduly influenced by data that should not have been incorporated in the historical analysis. That is, for property exceeding 46.5 years of age within the overall retirement band analysis there is generally a limited quantity of retirements and equally reduced property exposed to retirement. Accordingly, these data points should be excluded from Mr. Majoros data analysis.

Furthermore, it was noted in my depreciation study report, pp. 4-10, that "...during the most recent decade, along with a significant decline in the level of construction activity, no retirements have occurred during numerous years. This circumstance is considered an aberration of normal activity therefore a return to the occurrence of upgrades and replacements are anticipated in future years". Based upon the above referenced circumstance, an additional analysis result (relative to retirement experience band 1952-1993) was included in my depreciation study to provide support relative to the period of years when activity occurred. The result of that analysis was an indicated Iowa 45-R3 life and curve. Notwithstanding the shorter indicated service life, my depreciation recommendation (Iowa 55-R3 life and curve) gave consideration to the appropriate experience data points within the overall as well as various other retirement analysis bands.

This class of gas plant is the type of property that tends to be cyclical in nature. That is, due to the general construction characteristics of Transmission Mains, a larger quantity of activity routinely occurs within a period of years followed by various levels of lower activity or inactivity. Notwithstanding the cyclical nature of the property group, there is absolutely no doubt that additional levels of increased activity can be anticipated to occur in future years. Furthermore, Transmission Mains is also a type of property that tends to be a far more right "Iowa R curve" in that the property group typically does not experience any significant level of retirement at young ages, hence the need to consider an "R3 or R4" survival characteristic when estimating the average service life for the property group.

Lastly, a review of the lives utilized within the industry for this property group range from 10 to 100 years and average 53 years, which is consistent with my service life recommendation for the Company's property.

Account 376–Distribution Mains

Mr. Majoros indicates that based upon his best fit SPR analysis result (adjusted for a maximum life of 80 years) he is proposing an Iowa 71-R1.5 life and curve for Distribution Mains. First, it is noted that in the course of completing numerous actuarial based life analyses of distribution mains, as well as reviewing industry data, that a much more right-moded (Iowa R2.5 to R4) curve has typically been experienced with this property category. Accordingly, completing the SPR analysis and life estimation such range of service life parameters were considered in defining my proposed average service life for Distribution Mains.

In addition, Mr. Majoros' SPR life analysis and service life estimate incorporates historical data from early in the twentieth century (1936-2002). Analysis results reaching back that many years should not be a primary consideration in estimating a future average service life of the present plant in service. In addition to the overall band analysis included with the depreciation study report, Section 5, another analysis relative to a variety of retirement bands ("overall 1935-2002 experience band as various interim retirement periods") was completed. The results of this analysis identified that during more recent periods the range of resulting curve fits were either right-moded or higher subscripted curves (Curve subscripts 2 through 6) and produced average service life indications of 55 years or less. <u>See</u> Rebuttal Exhibit EMR-6. These resulting life indications are the basis of my estimated Iowa 55-R3 life and curve for the Companies' Distribution Mains.

Finally, a review of general industry data relative to this property group indicates that the range of industry average service lives is 26 to 80 years and averages 55 years. Mr. Majoros' life estimate of 72 years again is not consistent with the Company's recent data and is near the extreme end of the range of years use by the industry to depreciate this property class.

<u>Account 382–Meter Installations</u>

Mr. Majoros' opinion and recommendation is that the average service life for this account, based upon his SPR analysis including investments from years 1905 to 2002, is that the current underlying service life parameters of and Iowa 35-R5 life and curve should be retained. First, sizable portions of the range of data (1905-2002) used for Mr. Majoros' life analysis are clearly far removed from any recent experience. Secondly, Mr. Majoros' recommended use of an R5 Iowa curve as the applicable survivor characteristic (within his own analysis band) produces a life indication of twenty-eight (28) years, which is a life shorter than the thirty-one years (Iowa 31-R4 life and curve) that I am recommending for this property group.

Likewise, the completion of a more recent SPR band analysis indicates average service lives much shorter than the fifty-five years that Mr. Majoros referenced. Furthermore, as set forth on pages 4-18 and plotted on page 5-54 of my depreciation study, I stated with regard to a completed additional actuarial analysis result, "This analysis of recent data indicates an achieved service life of only twenty-one years". Accordingly, my estimated Iowa 31-R4 life and curve parameters for this property group is very reasonable and appropriate as a basis for the proposed average remaining life depreciation rate.

NOX Expenditures

Q42. WHAT COMMENTS DO YOU HAVE REGARDING MR. MAJOROS' REJECTION (ON PAGE 34 AND 35 OF HIS DIRECT TESTIMONY) OF THE INCLUSION OF THE COMPANIES' 2005 AND 2006 MANDATED NOX EXPENDITURES IN THE DEVELOPMENT OF THE COMPANIES' PROPOSED DEPRECIATION RATES?

A42. In the Appendix to the Companies' Case Nos. 2001-140 and 2001-141 orders dated December 3, 2001, the Commission specifically approved depreciation rates that included the interim additions applicable to NOx Compliance plans in accordance with the Federal Clear Air Act. The Companies are still obligated to expend the funds to comply with the Federal Clean Air Act. The Commission, having previously approved the inclusion of such costs into the development of the applicable depreciation rates, should continue the practice in this proceeding.

LIFE SPANS

Q43. WHAT COMMENTS DO YOU HAVE REGARDING MR. MAJOROS' STATEMENTS ON PAGE 33 OF HIS DIRECT TESTIMONY CONCERNING THE LIFE SPANS USED FOR THE COMPANIES' PRODUCTION PLANT ACCOUNTS AND HIS STUDY OF EXPERIENCED INDUSTRY LIVES?

A43. The life spans used for the recovery of the Companies' investments in its production plants are consistent with those developed by the Companies engineers and its historical experience as previously noted in this testimony. Conversely, the studies that Mr. Majoros used are generalized industry studies relative to a range of industry generation facilities. That is, the studies are not specifically related to the Companies' generating facilities nor do they contain the mix of generating facilities operated by the Companies. More importantly, the data bases upon which the studies were performed contain information relative to many facilities from significantly earlier periods of time that were not impacted by the same forces of retirement affecting current operating plants, nor were they operated under conditions similar to those affecting the Companies' current facilities. Also, the life span data merely reflects the initial construction dates of the various facilities and the related ultimate retirement dates without consideration of the various upgrades and/or rebuilds which current operating plants may not have the opportunity to experience.

Q44. DOES THAT CONCLUDE YOUR REBUTTAL RELATIVE TO MR. MAJOROS' DIRECT TESTIMONY CONCERNING THE FILED DEPRECIATION STUDIES?

A44. Yes, it does.

Q45. DO YOU HAVE REBUTTAL RELATIVE TO MR. KOLLEN'S DIRECT TESTIMONY?

A45. Yes, Mr. Kollen has made several statements relative to the net salvage factors included in the proposed depreciation rates with are incorrect and inconsistent with standard depreciation practices.

Q46. ON PAGES 22 TO 24 OF HIS DIRECT TESTIMONY, MR KOLLEN DISCUSSES THE PROCEDURE USED WITHIN MY DEPRECIATION STUDIES TO ANALYZE AND ESTIMATE NET SALVAGE FOR THE PROPOSED DEPRECIATION RATES. DO YOU HAVE ANY RELATED COMMENTS?

A46. Yes. The estimation of future net salvage for purposes of developing the proposed depreciation rate is not merely an arithmetic calculation of historical data. The estimation of the net salvage parameters is based upon a review of historical experience and trends along with consideration of the level of net salvage anticipated to be incurred over the average remaining life of the property.

Q47. ON PAGE 24, LINES 11 TO 13 OF HIS DIRECT TESTIMONY, MR. KOLLEN STATES, "FOR SOME FERC PLANT ACCOUNTS, THE GROSS SALVAGE RATE DERIVED BY AUS USING THIS METHODOLOGY ACTUALLY IS NEGATIVE, MEANING THAT GROSS SALVAGE IS REPRESENTED IN THE PROPOSED DEPRECIATION RATES AS AN ADDITIONAL COST OF REMOVAL". WHAT IS YOUR RESPONSE?

A47. While Mr. Kollen has not specifically identified the above reference, I would assume from a review of the net salvage data contained in Section 7 of the Electric Plant depreciation studies that his reference is relative to the Kentucky Utilities depreciation study report pages for Account 315 (which shows a negative gross salvage total). As previously discussed, the historical data is just one component of the information considered in estimating the future net salvage for the development of each property account's depreciation rate. More specifically, however, is the fact that in developing the depreciation rate for Kentucky Utilities Account 315 zero interim net salvage was used to develop the depreciation rate for this account. Therefore, the negative gross salvage amount reference by Mr. Kollen had absolutely no impact on the resulting depreciation rate.

Q48. ON PAGES 24 TO 27 OF HIS DIRECT TESTIMONY, MR. KOLLEN REJECTS THE DEVELOPMENT AND USE OF FUTURE NET SALVAGE ESTIMATES IN THE PROPOSED AVERAGE REMAINING LIFE BASED DEPRECIATION RATES DEVELOPED IN YOUR DEPRECIATION STUDIES. WHAT ARE YOUR COMMENTS?

A48. First, pages 10 through 13 of my direct testimony explains in detail both through discussion and an example, the need to adjust the experienced net salvage to identify the applicable level of future net salvage anticipated to be experienced over the average remaining life of the property. The primary reason for the adjustment is the fact that the historical retirements to date have routinely occurred at younger ages (far less than average service life). Thus, the resulting relationship of beginning of life and end of life retirement cost is not reflective of what will occur with regard to the remaining plant retirements that will occur (on average) at average service life. That is, a far greater period of time will elapse between original installation and retirement. Therefore, the resulting cost of removal will result in a higher cost of removal percentage of original cost than has been historically experienced.

Finally, Mr. Kollen states on page 25, line 7 that "the Commission should utilize the average of historical net salvage" in developing the proposed depreciation rates. Mr. Kollen's proposal to use average net salvage in ARL based depreciation rates is in direct violation of the standard ARL depreciation definition as set forth in depreciation text books and the NARUC Manual which specifically states that in the development of ARL-based depreciation rates, future net salvage shall be used as opposed to average net salvage.

Q49. ON PAGE 27, LINES 1 TO 5 MR KOLLEN REJECTS THE INCLUSION OF THE NOX EXPENDITURES IN THE DEVELOPMENT OF THE PROPOSED DEPRECIATION RATES AND FURTHER STATES THAT THE COMMISSION HAS REJECTED SUCH INCLUSION IN THE PAST. IS MR. KOLLEN CORRECT IN HIS ASSERTION?

A49. No, Mr. Kollen is incorrect. In the Appendix to the Companies' Case Nos. 2001-140 and 2001-141 dated December 3, 2001, the Commission approved depreciation rates that included the interim additions applicable to the NOX Compliance plan in accordance with the Federal Clear Air Act. The Companies are still obligated to expend the funds to comply with the Federal Clean Air Act. The Commission has therefore previously approved the inclusion of such costs into the development of the applicable depreciation rates and should continue the practice in the present proposed depreciation rates.

Q50. DO YOU HAVE ADDITIONAL COMMENTS CONCERNING MR. KOLLEN'S TESTIMONY?

A50. Yes. In reviewing the comments in Mr. Kollen's testimony, I determined that the schedules to the Staff's Second Data Request, Item No. 24b, for both LG&E and KU should be corrected. Rebuttal Exhibit EMR-7 contains the revised schedules and is responsive to the testimony comments of Mr. Kollen. In developing the original schedules, which incorporate the actual historical gross salvage and cost of removal percent, I inadvertently posted the historical percents for the production accounts to each of the Table-Loc summaries. The gross salvage and cost of removal percents should have been included in the "Interim Retirement supporting schedules" with the result that the percents would only have applied to the interim retirements anticipated to occur in future years.

Notwithstanding these corrections, the net salvage factors included and the depreciation rates developed via the schedules are meaningless. To simply and arithmetically include salvage experience from many years ago is neither a comprehensive nor professional depreciation analysis.

Q51. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY RELATIVE TO MR. KOLLEN'S DEPRECIATION DISCUSSIONS?

A51. Yes.

Q52. DOES THAT CONCLUDE YOU REBUTTAL TESTIMONY?

A52. Yes.

VERIFICATION

STATE OF Kansas)
) **SS:**
COUNTY OF Shawnee)

The undersigned, **Earl M. Robinson**, being duly sworn, deposes and says he is President and Chief Executive Officer of AUS Consultants - Weber Fick & Wilson Division, that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

EARL M. ROBINSON

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 23 day of April 2004.

(SEAL)
Notary Public

My Commission Expires:
3-22-05

Aaron Alexander
Notary Public
State of Kansas
My Appt. Expires

> There shall be allowed as a depreciation deduction a reasonable allowance for the exhaustion, wear and tear (including a reasonable allowance for obsolescence)—(1) of property used in the trade or business, or (2) the property held for the production of income.

Some of the definitions refer to depreciation as a loss in service value. "Service value" is used in a special sense, meaning the cost of plant less net salvage (net salvage is gross salvage less the cost of removal). The Uniform System of Accounts for electric utilities recommended by NARUC defines "service value" as follows:

> The difference between the original cost and the net salvage value of the utility plant.

"Loss in service value," therefore, must be understood and construed in light of its specially defined meaning.

The American Institute of Certified Public Accountants in Accounting Research and Terminology Bulletin #1 defines depreciation accounting as follows:

> Depreciation accounting is a system of accounting which aims to distribute cost or other basic value of tangible capital assets, less salvage (if any), over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation, not of valuation. Depreciation for the year is the portion of the total charge under such a system that is allocated to the year. Although the allocation may properly take into account occurrences during the year, it is not intended to be a measurement of the effect of all such occurrences.

This definition of depreciation accounting brings the "allocation of cost" concept into much clearer focus. It de-emphasizes the concept of depreciation expense as a "loss in service value" or an "allowance" and emphasizes the concept of depreciation expense as the cost of an asset which is allocable to a particular accounting period. This definition also clearly illustrates that the goal is recognizing cost, not providing funds for replacement of the asset.

Factors Which Affect the Retirement of Property

The sole reason for concern about depreciation is that all plant devoted to the pursuit of a business enterprise will ultimately reach the end of its useful life. Several factors cause property to be retired. They include:

1. Physical Factors
   a. Wear and tear
   b. Decay or deterioration
   c. Action of the elements and accidents

Total and Future Net Salvage

Total or average net salvage is the weighted average of net salvage actually experienced in connection with past retirements and net salvage expected to be experienced in connection with future retirements. As a percent of retirements, this amount will sometimes be quite different from either past or future net salvage. Total or average net salvage must be used when the whole life technique is employed. When strictly forward looking procedures or techniques are used, i.e., the ELG procedure and the Remaining Life technique, only future net salvage should be used.

Gross salvage and cost of removal associated with past retirements of plant from surviving vintages will seldom be the total realized gross salvage and cost of removal from the company's books, since the accounting records may contain amounts associated with the complete retirement of old vintages. It is necessary, however, to rely on the book amounts and, having determined the amount of past retirements from existing vintages in connection with the service life study, it is customary to sum the annual book retirements, year by year, starting with the most recent year, until the past retirement amount has been reached. For this amount, the associated gross salvage and cost of removal are then summed up and are generally weighted directly with future gross salvage and cost of removal to arrive at average net salvage, as indicated in the following example:

	Retirement $ (a)	Gross Salvage % (b)	Salvage Weight $ (c)=(a*b)	Cost of Removal % (d)	Removal Weight $ (e)=(a*d)
Past	3,920	34.0	133,280	10.5	397,040
Future	28,360[1]	12.6	357,336	14.0	397,040
Total or Average	32,280	15.2[2]	490,616	13.6[3]	438,200

Average Net Salvage = 15.2% - 13.6% = 1.6% or rounded to 2%

[1] When using the generation arrangement as discussed in Chapter IX, the future dollars should equal the amount surviving.

[2] Total Column c/Total Column a

[3] Total Column e/Total Column a

Kentucky Utilities
Electric Division

Summary of Original Cost of Utility Plant in Service as of December 31, 2002
and Related Annual Depreciation Expense Under Present and Proposed Rates

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates Rate % (d)	Present Rates Annual Accrual (e)	Proposed Rates: Proposed Plant Only Rates Rate %	Proposed Plant Only Rates Annual Accrual	Proposed Gross Salv Rates Rate %	Proposed Gross Salv Rates Annual Accrual	Proposed COR Rates Rate % (f)	Proposed COR Rates Annual Accrual (g)	Total Proposed Rates Rate %	Total Proposed Rates Annual Accrual	Net Change Depr. Exp. (h)
	DEPRECIABLE PLANT												
	STEAM PLANT												
311.00	Structures and Improvements	154,711,332.22	2.97%	4,594,926.57	1.31%	2,026,718.45	0.00%	0.00	0.43%	665,258.73	1.74%	2,691,977.18	-1,902,949.39
312.00	Boiler Plant Equipment	1,024,872,088.49	2.79%	28,593,931.27	2.90%	29,721,290.57	0.00%	0.00	0.28%	2,869,641.85	3.18%	32,590,932.41	3,997,001.14
314.00	Turbogenerator Units	191,722,845.06	2.51%	4,812,243.41	1.92%	3,681,078.63	0.00%	0.00	0.25%	479,307.11	2.17%	4,160,385.74	-651,857.67
315.00	Accessory Electric Equipment	81,289,114.47	2.48%	2,015,970.04	1.29%	1,048,629.58	0.00%	0.00	0.34%	276,382.99	1.63%	1,325,012.57	-690,957.47
316.00	Miscellaneous Power Plant Equipment	20,719,081.14	2.93%	607,069.08	2.61%	540,768.02	0.00%	0.00	-0.09%	-18,647.17	2.52%	522,120.84	-84,948.24
	Total Steam Production Plant	1,473,314,461.38	2.76%	40,624,140.37	2.51%	37,018,485.25	0.00%	0.00	0.29%	4,271,943.51	2.80%	41,290,428.74	666,288.37
	HYDRAULIC PLANT												
330.10	Land Rights	879,311.47	1.59%	13,981.05	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	-13,981.05
331.00	Structures and Improvements	497,427.20	1.71%	8,506.01	1.73%	8,605.49	0.00%	0.00	0.31%	1,542.02	2.04%	10,147.51	1,641.50
332.00	Reservoirs, Dams and Waterways	8,142,176.24	1.62%	131,903.26	1.93%	157,144.00	0.00%	0.00	-0.40%	-32,568.70	1.53%	124,575.30	-7,327.96
333.00	Waterwheel, Turbines and Generators	532,629.23	1.78%	9,480.80	-0.74%	-3,941.46	0.00%	0.00	0.73%	3,888.19	-0.01%	-53.26	-9,534.06
334.00	Accessory Electric Equipment	349,869.04	2.25%	7,872.05	10.51%	36,771.24	0.00%	0.00	-4.78%	-16,723.74	5.73%	20,047.50	12,175.45
335.00	Miscellaneous Power Plant Equipment	163,126.48	1.94%	3,164.65	5.45%	8,890.39	0.00%	0.00	-1.32%	-2,153.27	4.13%	6,737.12	3,572.47
336.00	Roads, Railroads and Bridges	48,145.91	1.61%	775.15	1.32%	635.53	0.00%	0.00	-0.52%	-250.36	0.80%	385.17	-389.98
	Total Hydraulic Plant	10,612,685.57	1.66%	175,682.97	1.96%	208,105.19	0.00%	0.00	-0.44%	-46,265.86	1.52%	161,839.34	-13,843.63
	OTHER PRODUCTION PLANT												
340.10	Land Rights	176,409.31	3.39%	5,980.28	1.64%	2,893.11	0.00%	0.00	0.00%	0.00	1.64%	2,893.11	-3,087.17
341.00	Structures and Improvements	21,174,956.60	3.37%	713,596.04	3.92%	830,058.30	0.00%	0.00	0.43%	91,052.31	4.35%	921,110.61	207,514.57
342.00	Fuel Holders, Producers and Accessory	18,325,891.25	3.37%	617,582.54	3.64%	667,062.44	0.00%	0.00	0.87%	159,435.25	4.51%	826,497.70	208,915.16
343.00	Prime Movers	251,279,024.10	3.42%	8,593,742.62	3.99%	10,026,033.06	0.00%	0.00	0.08%	201,023.22	4.07%	10,227,056.28	1,633,313.66
344.00	Generators	47,479,932.03	3.15%	1,495,617.86	3.16%	1,500,365.85	0.00%	0.00	0.41%	194,667.72	3.57%	1,695,033.57	199,415.71
345.00	Accessory Electric Equipment	19,116,795.73	3.32%	634,677.62	3.25%	621,295.86	0.00%	0.00	0.11%	21,028.48	3.36%	642,324.34	7,646.72
346.00	Miscellaneous Power Plant Equipment	4,681,000.69	3.41%	159,622.12	4.12%	192,857.23	0.00%	0.00	0.06%	2,808.60	4.18%	195,665.83	36,043.71
	Total Other Production Plant	362,234,009.71	3.37%	12,220,819.08	3.82%	13,840,565.85	0.00%	0.00	0.18%	670,015.58	4.01%	14,510,581.44	2,289,762.36
	TRANSMISSION PLANT												
350.10	Land Rights	22,991,433.48	1.34%	308,085.21	2.14%	492,016.68	-0.23%	-52,880.30	0.00%	0.00	1.91%	439,136.38	131,051.17
	Structures and Improvements												
352.10	Struct. and Improve. - Non Sys. Control/Com.	6,426,546.76	2.65%	170,303.49	2.34%	150,381.19	-0.42%	-26,991.50	0.70%	44,985.83	2.62%	168,375.53	-1,927.96
352.20	Struct. and Improve. - Sys. Control/Com.	1,166,434.25	2.65%	30,910.51	2.33%	27,177.92	-0.25%	-2,916.09	1.35%	15,746.86	3.43%	40,008.69	9,098.18
	Total Account 352	7,592,981.01	2.65%	201,214.00	2.34%	177,559.11	-0.39%	-29,907.59	0.80%	60,732.69	2.74%	208,384.22	7,170.22
	Station Equipment												
353.10	Station Equipment - Non Sys. Control/Com.	146,527,337.37	2.21%	3,238,254.16	2.04%	2,989,157.68	-0.09%	-131,874.60	0.33%	483,540.21	2.28%	3,340,823.29	102,569.13
353.20	Station Equip - Sys.Control/Com. (Microwave)	14,284,914.20	6.18%	882,807.70	6.89%	984,230.59	0.00%	0.00	0.68%	97,137.42	7.57%	1,081,368.00	198,560.30
	Total Account 353	160,812,251.57	2.56%	4,121,061.86	2.47%	3,973,388.27	-0.08%	-131,874.60	0.36%	580,677.63	2.75%	4,422,191.29	301,129.43
354.00	Towers and Fixtures	60,533,459.11	2.84%	1,719,150.24	1.88%	1,138,029.03	-0.88%	-532,694.44	1.87%	1,131,975.69	2.87%	1,737,310.28	18,160.04
355.00	Poles and Fixtures	74,915,940.37	4.03%	3,019,112.40	2.56%	1,917,848.07	-0.40%	-299,663.76	1.57%	1,176,180.26	3.73%	2,794,364.58	-224,747.82
356.00	Overhead Conductors and Devices	122,030,093.52	3.25%	3,965,978.04	1.79%	2,184,338.67	-0.30%	-366,090.28	1.97%	2,403,992.84	3.46%	4,222,241.24	256,263.20
357.00	Underground Conduit	435,926.80	2.01%	8,762.13	2.07%	9,023.68	0.02%	87.19	-0.05%	-217.96	2.04%	8,892.91	130.78
358.00	Underground Conductors and Devices	1,114,761.90	3.52%	39,239.62	3.08%	34,334.67	0.00%	0.00	1.16%	12,931.24	4.24%	47,265.90	8,026.28
	Total Transmission Plant	450,426,847.74	2.97%	13,382,603.50	2.20%	9,926,538.18	-0.31%	-1,413,023.78	1.19%	5,366,272.39	3.08%	13,879,786.80	497,183.30
	DISTRIBUTION PLANT												
360.10	Land Rights	1,423,182.13	1.14%	16,224.28	1.73%	24,621.05	-0.11%	-1,565.50	0.00%	0.00	1.62%	23,055.55	6,831.27
361.00	Structures and Improvements	3,798,329.41	1.89%	71,788.43	1.85%	70,269.09	-0.26%	-9,875.66	0.53%	20,131.15	2.12%	80,524.58	8,736.15
362.00	Station Equipment	92,514,069.32	2.24%	2,072,315.15	1.94%	1,794,772.94	-0.23%	-212,782.36	0.38%	351,553.46	2.09%	1,933,544.05	-138,771.10
364.00	Poles, Towers and Fixtures	167,558,546.62	3.52%	5,898,060.84	2.29%	3,837,090.72	-0.31%	-519,431.49	1.65%	2,764,716.02	3.63%	6,082,375.24	184,314.40
365.00	Overhead Conductors and Devices	160,511,631.53	3.02%	4,847,451.27	2.19%	3,515,204.73	-1.08%	-1,733,525.62	2.13%	3,418,897.75	3.24%	5,200,576.86	353,125.59
366.00	Underground Conduit	1,551,966.69	1.75%	27,159.42	1.84%	28,556.19	0.00%	0.00	0.21%	3,259.13	2.05%	31,815.32	4,655.90
367.00	Underground Conductors and Devices	49,804,065.26	3.29%	1,638,553.75	3.27%	1,628,592.93	-0.01%	-4,980.41	0.15%	74,706.10	3.41%	1,698,318.63	59,764.88
368.00	Line Transformers	209,705,230.76	2.41%	5,053,896.06	2.28%	4,781,279.26	-0.29%	-608,145.17	0.47%	985,614.58	2.46%	5,158,748.68	104,852.62
369.00	Services	81,680,930.54	3.75%	3,063,034.90	2.76%	2,254,393.68	-0.67%	-547,262.23	2.07%	1,690,795.26	4.16%	3,397,926.71	334,891.81
370.00	Meters	61,133,035.49	2.79%	1,705,611.69	2.35%	1,436,626.33	-0.10%	-61,133.04	-0.05%	-30,566.52	2.20%	1,344,926.78	-360,684.91
371.00	Installations on customers' Premises	18,270,303.32	6.27%	1,145,548.02	5.77%	1,054,196.50	-0.19%	-34,713.58	0.47%	85,870.43	6.05%	1,105,353.35	-40,194.67
373.00	Street Lighting and Signal Systems	45,406,623.49	3.85%	1,748,155.00	3.45%	1,566,528.51	-0.56%	-254,277.09	0.86%	390,496.96	3.75%	1,702,748.38	-45,406.62
	Total Distribution Plant	893,357,914.56	3.05%	27,287,798.81	2.46%	21,992,131.93	-0.45%	-3,987,692.15	1.09%	9,755,474.32	3.11%	27,759,914.13	472,115.32

Kentucky Utilities
Electric Division

Summary of Original Cost of Utility Plant in Service as of December 31, 2002
and Related Annual Depreciation Expense Under Present and Proposed Rates

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates Rate % (d)	Present Rates Annual Accrual (e)	Proposed Rates: Proposed Plant Only Rates Rate %	Proposed Plant Only Rates Annual Accrual	Proposed Gross Salv Rates Rate %	Proposed Gross Salv Rates Annual Accrual	Proposed COR Rates Rate % (f)	Proposed COR Rates Annual Accrual (g)	Total Proposed Rates Rate %	Total Proposed Rates Annual Accrual	Net Change Depr. Exp (h)
	GENERAL PLANT												
	Structures and Improvements												
390.10	Struct. And Improve. To Owned Property	28,987,368.24	1.76%	510,177.68	1.63%	472,494.10	-0.02%	-5,797.47	0.13%	37,683.58	1.74%	504,380.21	-5,797.47
390.20	Improvements to Leased Property	694,489.17	0.00%	0.00	2.85%	19,792.94	-0.45%	-3,125.20	0.00%	0.00	2.40%	16,667.74	16,667.74
	Total Account 390	29,681,857.41	1.72%	510,177.68	1.66%	492,287.04	-0.03%	-8,922.67	0.13%	37,683.58	1.76%	521,047.95	10,870.27
	Office Furniture and Equipment												
391.10	Office Equipment	6,168,471.98	5.82%	359,005.07	5.63%	347,284.97	-0.02%	-1,233.69	0.00%	0.00	5.61%	346,051.28	-12,953.79
391.30	Cash Processing Equipment	369,383.94	10.00%	36,938.39	4.88%	18,025.94	0.00%	0.00	0.00%	0.00	4.88%	18,025.94	-18,912.45
	Total Account 391	6,537,855.92	6.06%	395,943.46	5.59%	365,310.91	-0.02%	-1,233.69	0.00%	0.00	5.57%	364,077.22	-31,866.24
393.00	Stores Equipment	571,858.05	2.87%	16,412.33	2.04%	11,665.90	0.10%	571.86	0.00%	0.00	2.14%	12,237.76	-4,174.57
394.00	Tools, Shop and Garage Equipment	3,700,720.83	2.74%	101,399.75	2.62%	96,958.89	0.01%	370.07	0.00%	0.00	2.63%	97,328.96	-4,070.79
395.00	Laboratory Equipment	3,306,885.77	3.16%	104,497.59	2.57%	84,986.96	0.07%	2,314.82	0.00%	0.00	2.64%	87,301.78	-17,195.81
396.00	Power Operated Equipment	200,677.14	3.56%	7,144.11	4.02%	8,067.22	-1.63%	-3,271.04	0.00%	0.00	2.39%	4,796.18	-2,347.93
	Communication Equipment												
397.10	Carrier Communication Equipment	3,093,194.70	3.55%	109,808.41	4.11%	127,130.30	-0.20%	-6,186.39	0.00%	0.00	3.91%	120,943.91	11,135.50
397.20	Remote Control Communication Equipment	3,889,910.58	3.55%	138,091.83	4.27%	166,099.18	-0.07%	-2,722.94	0.00%	0.00	4.20%	163,376.24	25,284.41
397.30	Mobile Communication Equipment	4,579,895.62	3.55%	162,586.29	4.95%	226,704.83	-0.05%	-2,289.95	0.00%	0.00	4.90%	224,414.89	61,828.60
	Total Account 397	11,563,000.90	3.55%	410,486.53	4.50%	519,934.31	-0.10%	-11,199.28	0.00%	0.00	4.40%	508,735.04	98,248.51
398.00	Miscellaneous Equipment	457,348.94	5.19%	23,736.41	4.08%	18,659.84	-0.67%	-3,064.24	0.00%	0.00	3.41%	15,595.60	-8,140.81
	Total General Plant	56,020,204.96	2.80%	1,569,797.86	2.85%	1,597,871.07	-0.04%	-24,434.17	0.07%	37,683.58	2.88%	1,611,120.49	41,322.63
	Sub-Total Depreciable Plant	3,245,966,123.92	2.93%	95,260,842.59	2.61%	84,583,697.47	-0.17%	-5,425,150.10	0.62%	20,055,123.52	3.06%	99,213,670.94	3,952,828.35
	Other Plant (Not Studied)												
391.20	Non PC Computer Equipment	9,611,731.44											
391.40	Personal Computers	9,814,322.00											
392.00	Transportation Equipment - Cars & Trucks	23,749,238.51											
	Total Other Plant (Not Studied)	43,175,291.95											
	Total Depreciable Plant	3,289,141,415.87											
	NON-DEPRECIABLE PLANT												
	INTANGIBLE PLANT												
301.00	Organization	44,455.58											
302.00	Franchises and Consents	81,350.32											
303.00	Miscellaneous Intangible Plant	17,297,387.08											
	Total Intangible Plant	17,423,192.98											
	LAND & LAND RIGHTS												
310.20	Production Land	10,478,524.55											
330.20	Hydraulic Plant	13,479.47											
340.20	Other Production Land	98,602.74											
350.20	Transmission Land	1,162,528.04											
360.20	Distribution Land	1,584,825.82											
389.20	Land	2,826,347.43											
	Total Land	16,164,308.05											
	Total Non-Depreciable Plant	33,587,501.03											
	Total Electric Plant in Service	3,322,728,916.90											

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Summary of Original Cost of Utility Plant in Service as of December 31, 2002 and Related Annual Depreciation Expense Under Present and Proposed Rates

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates Rate % (d)	Present Rates Annual Accrual (e)	Proposed Plant Only Rates Rate %	Proposed Plant Only Rates Annual Accrual	Proposed Gross Salv Rates Rate %	Proposed Gross Salv Rates Annual Accrual	Proposed COR Rates Rate % (f)	Proposed COR Rates Annual Accrual (g)	Total Proposed Rates Rate %	Total Proposed Rates Annual Accrual	Net Change Depr. Exp. (h)
	DEPRECIABLE PLANT												
	STEAM PLANT												
311.00	Structures and Improvements	154,711,332.22	2.97%	4,594,926.57	1.31%	2,026,718.45	0.00%	0.00	0.43%	665,258.73	1.74%	2,691,977.18	-1,902,949.39
312.00	Boiler Plant Equipment	1,024,872,088.49	2.79%	28,593,931.27	2.90%	29,721,290.57	0.00%	0.00	0.28%	2,869,641.85	3.18%	32,590,932.41	3,997,001.14
314.00	Turbogenerator Units	191,722,845.06	2.51%	4,812,243.41	1.92%	3,681,078.63	0.00%	0.00	0.25%	479,307.11	2.17%	4,160,385.74	-651,857.67
315.00	Accessory Electric Equipment	81,289,114.47	2.48%	2,015,970.04	1.29%	1,048,629.58	0.00%	0.00	0.34%	276,382.99	1.63%	1,325,012.57	-690,957.47
316.00	Miscellaneous Power Plant Equipment	20,719,081.14	2.93%	607,069.08	2.61%	540,768.02	0.00%	0.00	-0.09%	-18,647.17	2.52%	522,120.84	-84,948.24
	Total Steam Production Plant	1,473,314,461.38	2.76%	40,624,140.37	2.51%	37,018,485.25	0.00%	0.00	0.29%	4,271,943.51	2.80%	41,290,428.74	666,288.37
	HYDRAULIC PLANT												
330.10	Land Rights	879,311.47	1.59%	13,981.05	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	-13,981.05
331.00	Structures and Improvements	497,427.20	1.71%	8,506.01	1.73%	8,605.49	0.00%	0.00	0.31%	1,542.02	2.04%	10,147.51	1,641.50
332.00	Reservoirs, Dams and Waterways	8,142,176.24	1.62%	131,903.26	1.93%	157,144.00	0.00%	0.00	-0.40%	-32,568.70	1.53%	124,575.30	-7,327.96
333.00	Waterwheel, Turbines and Generators	532,629.23	1.78%	9,480.80	-0.74%	-3,941.46	0.00%	0.00	0.73%	3,888.19	-0.01%	-53.26	-9,534.06
334.00	Accessory Electric Equipment	349,869.04	2.25%	7,872.05	10.51%	36,771.24	0.00%	0.00	-4.78%	-16,723.74	5.73%	20,047.50	12,175.45
335.00	Miscellaneous Power Plant Equipment	163,126.48	1.94%	3,164.65	5.45%	8,890.39	0.00%	0.00	-1.32%	-2,153.27	4.13%	6,737.12	3,572.47
336.00	Roads, Railroads and Bridges	48,145.91	1.61%	775.15	1.32%	635.53	0.00%	0.00	-0.52%	-250.36	0.80%	385.17	-389.98
	Total Hydraulic Plant	10,612,685.57	1.66%	175,682.97	1.96%	208,105.19	0.00%	0.00	-0.44%	-46,265.86	1.52%	161,839.34	-13,843.63
	OTHER PRODUCTION PLANT												
340.10	Land Rights	176,409.31	3.39%	5,980.28	1.64%	2,893.11	0.00%	0.00	0.00%	0.00	1.64%	2,893.11	-3,087.17
341.00	Structures and Improvements	21,174,956.60	3.37%	713,596.04	3.92%	830,058.30	0.00%	0.00	0.43%	91,052.31	4.35%	921,110.61	207,514.57
342.00	Fuel Holders, Producers and Accessory	18,325,891.25	3.37%	617,582.54	3.64%	667,062.44	0.00%	0.00	0.87%	159,435.25	4.51%	826,497.70	208,915.16
343.00	Prime Movers	251,279,024.10	3.42%	8,593,742.62	3.99%	10,026,033.06	0.00%	0.00	0.08%	201,023.22	4.07%	10,227,056.28	1,633,313.66
344.00	Generators	47,479,932.03	3.15%	1,495,617.86	3.16%	1,500,365.85	0.00%	0.00	0.41%	194,667.72	3.57%	1,695,033.57	199,415.71
345.00	Accessory Electric Equipment	19,116,795.73	3.32%	634,677.62	3.25%	621,295.86	0.00%	0.00	0.11%	21,028.48	3.36%	642,324.34	7,646.72
346.00	Miscellaneous Power Plant Equipment	4,681,000.69	3.41%	159,622.12	4.12%	192,857.23	0.00%	0.00	0.06%	2,808.60	4.18%	195,665.83	36,043.71
	Total Other Production Plant	362,234,009.71	3.37%	12,220,819.08	3.82%	13,840,565.85	0.00%	0.00	0.18%	670,015.58	4.01%	14,510,581.44	2,289,762.36
	TRANSMISSION PLANT												
350.10	Land Rights	22,991,433.46	1.34%	308,085.21	2.14%	492,016.68	-0.23%	-52,880.30	0.00%	0.00	1.91%	439,136.38	131,051.17
	Structures and Improvements												
352.10	Struct. and Improve. - Non Sys. Control/Com.	6,426,546.76	2.65%	170,303.49	2.34%	150,381.19	-0.42%	-26,991.50	0.70%	44,985.83	2.62%	168,375.53	-1,927.96
352.20	Struct. and Improve. - Sys. Control/Com.	1,166,434.25	2.65%	30,910.51	2.33%	27,177.92	-0.25%	-2,916.09	1.35%	15,746.86	3.43%	40,008.69	9,098.18
	Total Account 352	7,592,981.01	2.65%	201,214.00	2.34%	177,559.11	-0.39%	-29,907.59	0.80%	60,732.69	2.74%	208,384.22	7,170.22
	Station Equipment												
353.10	Station Equipment - Non Sys. Control/Com.	146,527,337.37	2.21%	3,238,254.16	2.04%	2,989,157.68	-0.09%	-131,874.60	0.33%	483,540.21	2.28%	3,340,823.29	102,569.13
353.20	Station Equip - Sys.Control/Com. (Microwave)	14,284,914.20	6.18%	882,807.70	6.89%	984,230.59	0.00%	0.00	0.68%	97,137.42	7.57%	1,081,368.00	198,560.30
	Total Account 353	160,812,251.57	2.56%	4,121,061.86	2.47%	3,973,388.27	-0.08%	-131,874.60	0.36%	580,677.63	2.75%	4,422,191.29	301,129.43
354.00	Towers and Fixtures	60,533,459.11	2.84%	1,719,150.24	1.88%	1,138,029.03	-0.88%	-532,694.44	1.87%	1,131,975.69	2.87%	1,737,310.28	18,160.04
355.00	Poles and Fixtures	74,915,940.37	4.03%	3,019,112.40	2.56%	1,917,848.07	-0.40%	-299,663.76	1.57%	1,176,180.26	3.73%	2,794,364.58	-224,747.82
356.00	Overhead Conductors and Devices	122,030,093.52	3.25%	3,965,978.04	1.79%	2,184,338.67	-0.30%	-366,090.28	1.97%	2,403,992.84	3.46%	4,222,241.24	256,263.20
357.00	Underground Conduit	435,926.80	2.01%	8,762.13	2.07%	9,023.68	0.02%	87.19	-0.05%	-217.96	2.04%	8,892.91	130.78
358.00	Underground Conductors and Devices	1,114,761.90	3.52%	39,239.62	3.08%	34,334.67	0.00%	0.00	1.16%	12,931.24	4.24%	47,265.90	8,026.28
	Total Transmission Plant	450,426,847.74	2.97%	13,382,603.50	2.20%	9,926,538.18	-0.31%	-1,413,023.78	1.19%	5,366,272.39	3.08%	13,879,786.80	497,183.30
	DISTRIBUTION PLANT												
360.10	Land Rights	1,423,182.13	1.14%	16,224.28	1.73%	24,621.05	-0.11%	-1,565.50	0.00%	0.00	1.62%	23,055.55	6,831.27
361.00	Structures and Improvements	3,798,329.41	1.89%	71,788.43	1.85%	70,269.09	-0.26%	-9,875.66	0.53%	20,131.15	2.12%	80,524.58	8,736.15
362.00	Station Equipment	92,514,069.32	2.24%	2,072,315.15	1.94%	1,794,772.94	-0.23%	-212,782.36	0.38%	351,553.46	2.09%	1,933,544.05	-138,771.10
364.00	Poles, Towers and Fixtures	167,558,546.82	3.52%	5,898,060.84	2.29%	3,837,090.72	-0.31%	-519,431.49	1.65%	2,764,716.02	3.63%	6,082,375.24	184,314.40
365.00	Overhead Conductors and Devices	160,511,631.53	3.02%	4,847,451.27	2.19%	3,515,204.73	-1.08%	-1,733,525.62	2.13%	3,418,897.75	3.24%	5,200,576.86	353,125.59
366.00	Underground Conduit	1,551,966.69	1.75%	27,159.42	1.84%	28,556.19	0.00%	0.00	0.21%	3,259.13	2.05%	31,815.32	4,655.90
367.00	Underground Conductors and Devices	49,804,065.26	3.29%	1,638,553.75	3.27%	1,628,592.93	-0.01%	-4,980.41	0.15%	74,706.10	3.41%	1,698,318.63	59,764.88
368.00	Line Transformers	209,705,230.76	2.41%	5,053,896.06	2.28%	4,781,279.26	-0.29%	-608,145.17	0.47%	985,614.58	2.46%	5,158,748.68	104,852.62
369.00	Services	81,680,930.54	3.75%	3,063,034.90	2.76%	2,254,393.68	-0.67%	-547,262.23	2.07%	1,690,795.26	4.16%	3,397,926.71	334,891.81
370.00	Meters	61,133,035.49	2.79%	1,705,611.69	2.35%	1,436,626.33	-0.10%	-61,133.04	-0.05%	-30,566.52	2.20%	1,344,926.78	-360,684.91
371.00	Installations on customers' Premises	18,270,303.32	6.27%	1,145,548.02	5.77%	1,054,196.50	-0.19%	-34,713.58	0.47%	85,870.43	6.05%	1,105,353.35	-40,194.67
373.00	Street Lighting and Signal Systems	45,406,623.49	3.85%	1,748,155.00	3.45%	1,566,528.51	-0.56%	-254,277.09	0.86%	390,496.96	3.75%	1,702,748.38	-45,406.62
	Total Distribution Plant	893,357,914.56	3.05%	27,267,798.81	2.46%	21,992,131.93	-0.45%	-3,987,692.15	1.09%	9,755,474.32	3.11%	27,759,914.13	472,115.32

Kentucky Utilities
Electric Division

**Summary of Original Cost of Utility Plant In Service as of December 31, 2002
and Related Annual Depreciation Expense Under Present and Proposed Rates**

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates Rate % (d)	Present Rates Annual Accrual (e)	Proposed Plant Only Rates Rate %	Proposed Plant Only Rates Annual Accrual	Proposed Gross Salv Rates Rate %	Proposed Gross Salv Rates Annual Accrual	Proposed COR Rates Rate % (f)	Proposed COR Rates Annual Accrual (g)	Total Proposed Rates Rate %	Total Proposed Rates Annual Accrual	Net Change Depr. Exp. (h)
	GENERAL PLANT												
	Structures and Improvements												
390.10	Struct. And Improve. To Owned Property	28,987,368.24	1.76%	510,177.68	1.63%	472,494.10	-0.02%	-5,797.47	0.13%	37,683.58	1.74%	504,380.21	-5,797.47
390.20	Improvements to Leased Property	694,489.17	0.00%	0.00	2.85%	19,792.94	-0.45%	-3,125.20	0.00%	0.00	2.40%	16,667.74	16,667.74
	Total Account 390	29,681,857.41	1.72%	510,177.68	1.66%	492,287.04	-0.03%	-8,922.67	0.13%	37,683.58	1.76%	521,047.95	10,870.27
	Office Furniture and Equipment												
391.10	Office Equipment	6,168,471.98	5.82%	359,005.07	5.63%	347,284.97	-0.02%	-1,233.69	0.00%	0.00	5.61%	346,051.28	-12,953.79
391.30	Cash Processing Equipment	369,383.94	10.00%	36,938.39	4.88%	18,025.94	0.00%	0.00	0.00%	0.00	4.88%	18,025.94	-18,912.45
	Total Account 391	6,537,855.92	6.06%	395,943.46	5.59%	365,310.91	-0.02%	-1,233.69	0.00%	0.00	5.57%	364,077.22	-31,866.24
393.00	Stores Equipment	571,858.05	2.87%	16,412.33	2.04%	11,665.90	0.10%	571.86	0.00%	0.00	2.14%	12,237.76	-4,174.57
394.00	Tools, Shop and Garage Equipment	3,700,720.83	2.74%	101,399.75	2.62%	96,958.89	0.01%	370.07	0.00%	0.00	2.63%	97,328.96	-4,070.79
395.00	Laboratory Equipment	3,306,885.77	3.16%	104,497.59	2.57%	84,986.96	0.07%	2,314.82	0.00%	0.00	2.64%	87,301.78	-17,195.81
396.00	Power Operated Equipment	200,677.14	3.56%	7,144.11	4.02%	8,067.22	-1.63%	-3,271.04	0.00%	0.00	2.39%	4,796.18	-2,347.93
	Communication Equipment												
397.10	Carrier Communication Equipment	3,093,194.70	3.55%	109,808.41	4.11%	127,130.30	-0.20%	-6,186.39	0.00%	0.00	3.91%	120,943.91	11,135.50
397.20	Remote Control Communication Equipment	3,889,910.58	3.55%	138,091.83	4.27%	166,099.18	-0.07%	-2,722.94	0.00%	0.00	4.20%	163,376.24	25,284.41
397.30	Mobile Communication Equipment	4,579,895.62	3.55%	162,586.29	4.95%	226,704.83	-0.05%	-2,289.95	0.00%	0.00	4.90%	224,414.89	61,828.60
	Total Account 397	11,563,000.90	3.55%	410,486.53	4.50%	519,934.31	-0.10%	-11,199.28	0.00%	0.00	4.40%	508,735.04	98,248.51
398.00	Miscellaneous Equipment	457,348.94	5.19%	23,736.41	4.08%	18,659.84	-0.67%	-3,064.24	0.00%	0.00	3.41%	15,595.60	-8,140.81
	Total General Plant	56,020,204.96	2.80%	1,569,797.86	2.85%	1,597,871.07	-0.04%	-24,434.17	0.07%	37,683.58	2.88%	1,611,120.49	41,322.63
	Sub-Total Depreciable Plant	3,245,966,123.92	2.93%	95,260,842.59	2.61%	84,583,697.47	-0.17%	-5,425,150.10	0.62%	20,055,123.52	3.06%	99,213,670.94	3,952,828.35
	Other Plant (Not Studied)												
391.20	Non PC Computer Equipment	9,611,731.44											
391.40	Personal Computers	9,814,322.00											
392.00	Transportation Equipment - Cars & Trucks	23,749,238.51											
	Total Other Plant (Not Studied)	43,175,291.95											
	Total Depreciable Plant	3,289,141,415.87											
	NON-DEPRECIABLE PLANT												
	INTANGIBLE PLANT												
301.00	Organization	44,455.58											
302.00	Franchises and Consents	81,350.32											
303.00	Miscellaneous Intangible Plant	17,297,387.08											
	Total Intangible Plant	17,423,192.98											
	LAND & LAND RIGHTS												
310.20	Production Land	10,478,524.55											
330.20	Hydraulic Plant	13,479.47											
340.20	Other Production Land	98,602.74											
350.20	Transmission Land	1,162,528.04											
360.20	Distribution Land	1,584,825.82											
389.20	Land	2,826,347.43											
	Total Land	16,164,308.05											
	Total Non-Depreciable Plant	33,587,501.03											
	Total Electric Plant In Service	3,322,728,916.90											

Rebuttal Exhibit EMR-2 (LG&E Common)

Louisville Gas and Electric
Common Plant

Summary or Original Cost of Utility Plant in Service as of December 31, 2002 and Related Annual Depreciation Expense Under Present and Proposed Rates

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates Rate % (d)	Present Rates Annual Accrual (e)	Proposed Rates: Proposed Plant Only Rates Rate % (f)	Proposed Plant Only Rates Annual Accrual (g)	Proposed Gross Salv Rates Rate % (f)	Proposed Gross Salv Rates Annual Accrual (g)	Proposed COR Rates Rate %	Proposed COR Rates Annual Accrual	Total Proposed Rates Rate %	Total Proposed Rates Annual Accrual	Net Change Depr. Exp. (h)
	DEPRECIABLE PLANT												
	GENERAL PLANT												
389.20	Land Rights	202,094.94	2.95%	5,961.80	2.02%	4,082.32	0.00%	0.00	0.00%	0.00	2.02%	4,082.32	-1,879.48
	Structures and Improvements												
390.10	Structures & Improvements - G.O.	44,852,641.93	2.18%	977,787.59	2.79%	1,251,388.71	-0.02%	-8,970.53	0.33%	148,013.72	3.10%	1,390,431.90	412,644.31
390.20	Structures & Improvements - Trans.	1,803,773.44	2.14%	38,600.75	2.26%	40,765.28	0.00%	0.00	0.25%	4,509.43	2.51%	45,274.71	6,673.96
390.30	Structures & Improvements - Stores	10,918,534.46	2.09%	228,197.37	2.31%	252,218.15	0.00%	0.00	0.28%	30,571.90	2.59%	282,790.04	54,592.67
390.40	Structures & Improvements - Shops	379,370.51	1.96%	7,435.66	1.98%	7,511.54	0.00%	0.00	0.24%	910.49	2.22%	8,422.03	986.37
390.60	Structures & Improvements - Micro	694,996.39	2.09%	14,525.42	3.43%	23,838.38	0.00%	0.00	0.37%	2,571.49	3.80%	26,409.86	11,884.44
	Total Account 390	58,649,316.73	2.16%	1,266,546.79	2.69%	1,575,722.06	-0.02%	-8,970.53	0.32%	186,577.03	2.99%	1,753,328.54	486,781.75
391.00	Office Furniture & Equipment	16,068,584.97	3.43%	551,152.46	1.69%	271,559.09	-0.04%	-6,427.43	0.00%	0.00	1.65%	265,131.65	-286,020.81
392.20	Transportation Equipment - Trailers	63,404.28	2.67%	1,692.89	5.13%	3,252.64	-2.05%	-1,299.79	0.00%	0.00	3.08%	1,952.85	259.96
393.00	Stores Equipment	1,229,701.73	2.75%	33,816.80	3.15%	38,735.60	-0.25%	-3,074.25	0.00%	0.00	2.90%	35,661.35	1,844.55
394.00	Tools, Shop and Garage Equipment	1,928,936.72	2.97%	57,289.42	5.01%	96,639.73	-0.23%	-4,436.55	0.00%	0.00	4.78%	92,203.18	34,913.76
395.00	Laboratory Equipment	22,281.50	2.59%	577.09	5.81%	1,294.56	-0.14%	-31.19	0.00%	0.00	5.67%	1,263.36	686.27
	Power Operated Equipment												
396.20	Power Operated Equipment - Other	14,147.08	2.51%	355.09	5.70%	806.38	-1.91%	-270.21	0.00%	0.00	3.79%	536.17	181.08
	Total Account 396	14,147.08	2.51%	355.09	5.70%	806.38	-1.91%	-270.21	0.00%	0.00	3.79%	536.17	181.08
	Communication Equipment												
397.00	Communication Equipment	29,922,166.57	3.72%	1,113,104.60	6.56%	1,962,894.13	0.00%	0.00	0.00%	0.00	6.56%	1,962,894.13	849,789.53
397.10	Communication Equipment - Computer	5,189,546.51	3.74%	194,089.04	10.12%	525,182.11	0.00%	0.00	0.00%	0.00	10.12%	525,182.11	331,093.07
	Total Account 397	35,111,713.08	3.72%	1,307,193.64	7.09%	2,488,076.24	0.00%	0.00	0.00%	0.00	7.09%	2,488,076.24	1,180,882.60
398.00	Miscellaneous Equipment	1,012,231.71	3.97%	40,185.60	5.02%	50,814.03	0.00%	0.00	0.00%	0.00	5.02%	50,814.03	10,628.43
	TOTAL General Plant	114,302,412.74	2.86%	3,264,771.58	3.96%	4,530,982.65	-0.02%	-24,509.95	0.16%	186,577.03	4.11%	4,693,049.69	1,428,278.11
	Sub-Total Depreciable Plant	114,302,412.74	2.86%	3,264,771.58	3.96%	4,530,982.65	-0.02%	-24,509.95	0.16%	186,577.03	4.11%	4,693,049.69	1,428,278.11
	Other Plant (Not Studied)												
390.11	Struct & Improv.-G.O. (LG&E Bldg & Actors)	2,409,305.82											
391.30	Computer Equipment	16,385,046.53											
391.31	Personal Computers	9,794,521.46											
392.10	Transportation Equipment - Cars & Trucks	223,351.84											
396.10	Power Operated Equipment - Hourly Rated	261,447.33											
	Total Other Plant (Not Studied)	29,073,672.98											
	Total Depreciable Plant	143,376,085.72											
	NON-DEPRECIABLE PLANT												
	INTANGIBLE PLANT												
301.00	Organization	83,782.29											
302.00	Franchises and Consents	4,200.00											
303.00	Miscellaneous Intangible Plant - Soft	24,365,948.39											
303.20	Miscellaneous Intangible Plant - Law	78,799.60											
	TOTAL Intangible Plant	24,532,730.28											
	LAND												
389.10	General Land	1,661,503.17											
	TOTAL Land	1,661,503.17											
	TOTAL Non-Depreciable Plant	26,194,233.45											
	TOTAL Common Utility Plant in Service	169,570,319.17											

(2) Account Fully Depreciation. No Further Depreciation

Rebuttal Exhibit EMR-2 (LG&E Electric)

Louisville Gas and Electric
Electric Division

Summary or Original Cost of Utility Plant in Service as of December 31, 2002 and Related Annual Depreciation Expense Under Present and Proposed Rates

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates: Rate % (d)	Present Rates: Annual Accrual (e)	Proposed Rates – Proposed Plant Only Rates: Rate %	Proposed Plant Only Rates: Annual Accrual	Proposed Gross Salv Rates: Rate %	Proposed Gross Salv Rates: Annual Accrual	Proposed COR Rates: Rate % (f)	Proposed COR Rates: Annual Accrual (g)	Total Proposed Rates: Rate %	Total Proposed Rates: Annual Accrual	Net Change Depr. Exp. (h)
	DEPRECIABLE PLANT												
	STEAM PLANT												
311.00	Structures and Improvements	321,615,851.53	2.56%	8,233,365.80	2.06%	6,625,286.54	0.00%	0.00	0.15%	482,423.78	2.21%	7,107,710.32	-1,125,655.48
312.00	Boiler Plant Equipment	1,121,611,543.02	3.07%	34,433,474.37	3.20%	35,891,569.36	0.00%	0.00	0.53%	5,944,541.18	3.73%	41,836,110.55	7,402,636.18
314.00	Turbogenerator Units	188,594,179.55	2.64%	4,978,886.34	2.22%	4,186,790.79	0.00%	0.00	0.24%	452,626.03	2.46%	4,639,416.82	-339,469.52
315.00	Accessory Electric Equipment	163,988,443.18	2.74%	4,493,283.34	2.46%	4,034,115.70	0.00%	0.00	0.28%	459,167.64	2.74%	4,493,283.34	0.00
316.00	Miscellaneous Power Plant Equipment	9,532,034.04	2.69%	256,411.72	2.86%	272,616.17	0.00%	0.00	0.62%	59,098.61	3.48%	331,714.78	75,303.07
	Total Steam Production Plant	1,805,342,051.32	2.90%	52,395,421.57	2.83%	51,010,378.58	0.00%	0.00	0.41%	7,397,857.24	3.24%	58,408,235.82	6,012,814.25
	HYDRAULIC PLANT												
	Project 289												
331.10	Structures and Improvements	4,995,148.82	1.81%	90,412.19	0.23%	11,488.84	0.00%	0.00	0.15%	7,492.72	0.38%	18,981.57	-71,430.63
332.10	Reservoirs, Dams and Waterways	303,530.35	1.81%	5,493.90	1.26%	3,824.48	0.00%	0.00	1.08%	3,278.13	2.34%	7,102.61	1,608.71
333.10	Waterwheel, Turbines and Generators	2,316,031.31	1.81%	41,920.17	0.00%	0.00	0.00%	0.00	0.17%	3,937.25	0.17%	3,937.25	-37,982.91
334.10	Accessory Electric Equipment	1,304,908.02	1.81%	23,618.84	1.22%	15,919.88	0.00%	0.00	0.51%	6,655.03	1.73%	22,574.91	-1,043.93
335.10	Miscellaneous Power Plant Equipment	151,460.96	1.81%	2,741.44	0.30%	454.38	0.00%	0.00	0.92%	1,393.44	1.22%	1,847.82	-893.62
336.10	Roads, Railroads and Bridges	178,846.99	1.81%	3,237.13	0.17%	304.04	0.00%	0.00	0.00%	0.00	0.17%	304.04	-2,933.09
	Total Project 289	9,249,926.45	1.81%	167,423.67	0.35%	31,991.63	0.00%	0.00	0.25%	22,756.58	0.59%	54,748.20	-112,675.47
	Other Than Project 289												
331.00	Structures and Improvements	65,796.14	1.76%	1,158.01	2.01%	1,322.50	0.00%	0.00	0.09%	59.22	2.10%	1,381.72	223.71
335.00	Miscellaneous Power Plant Equipment	7,813.67	1.76%	137.52	5.35%	418.03	0.00%	0.00	0.62%	48.44	5.97%	466.48	328.96
336.00	Roads, Railroads and Bridges	1,133.98	1.76%	19.96	1.60%	18.14	0.00%	0.00	0.00%	0.00	1.60%	18.14	-1.81
	Total Other Than Project 289	74,743.79	1.76%	1,315.49	2.35%	1,758.68	0.00%	0.00	0.14%	107.66	2.50%	1,866.34	550.85
	Total Hydraulic Plant	9,324,670.24	1.81%	168,739.16	0.36%	33,750.30	0.00%	0.00	0.25%	22,864.24	0.61%	56,614.54	-112,124.62
	OTHER PRODUCTION PLANT												
341.00	Structures and Improvements	6,641,030.83	3.25%	215,833.50	3.38%	224,466.84	0.00%	0.00	0.28%	18,594.89	3.66%	243,061.73	27,228.23
342.00	Fuel Holders, Producers and Accessory	5,833,515.86	3.31%	193,089.38	3.42%	199,506.24	0.00%	0.00	0.35%	20,417.31	3.77%	219,923.55	26,834.17
343.00	Prime Movers	100,745,869.68	3.36%	3,385,061.22	3.48%	3,505,956.26	0.00%	0.00	0.11%	110,820.46	3.59%	3,616,776.72	231,715.50
344.00	Generators	26,258,224.54	2.59%	680,088.02	3.52%	924,289.50	0.00%	0.00	0.32%	84,026.32	3.84%	1,008,315.82	328,227.81
345.00	Accessory Electric Equipment	9,281,384.05	3.26%	302,573.12	3.62%	335,986.10	0.00%	0.00	0.13%	12,065.80	3.75%	348,051.90	45,478.78
346.00	Miscellaneous Power Plant Equipment	3,678,700.81	3.41%	125,443.70	3.63%	133,536.84	0.00%	0.00	0.12%	4,414.44	3.75%	137,951.28	12,507.58
	Total Other Production Plant	152,438,725.77	3.22%	4,902,088.93	3.49%	5,323,741.80	0.00%	0.00	0.16%	250,339.21	3.66%	5,574,081.00	671,992.07
	TRANSMISSION PLANT												
	Project 289												
353.10	Station Equipment - Non Sys. Control/Com.	0.00	2.25%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00
356.10	Overhead Conductors and Devices	0.00	2.25%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00
	Total Project 289	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00
	Other Than Project 289												
350.10	Land Rights	2,592,773.81	1.31%	33,965.34	1.27%	32,928.23	0.00%	0.00	0.00%	0.00	1.27%	32,928.23	-1,037.11
352.10	Struct. and Improve. - Non Sys. Control/Com.	2,907,082.83	2.02%	58,723.07	1.52%	44,187.66	0.00%	0.00	0.30%	8,721.25	1.82%	52,908.91	-5,814.17
353.10	Station Equipment - Non Sys. Control/Com.	116,591,836.76	2.10%	2,448,428.57	1.54%	1,795,514.29	0.00%	0.00	0.31%	361,434.69	1.85%	2,156,948.98	-291,479.59
354.00	Towers and Fixtures	23,879,707.58	2.40%	573,112.98	1.41%	336,703.88	-0.97%	-231,633.16	1.82%	434,610.68	2.26%	539,681.39	-33,431.59
355.00	Poles and Fixtures	26,398,387.92	2.95%	778,751.85	2.42%	638,840.50	-0.92%	-242,864.98	1.37%	361,657.64	2.87%	757,633.16	-21,118.69
356.00	Overhead Conductors and Devices	33,372,312.49	2.91%	971,134.29	2.20%	734,190.87	-0.77%	-256,966.81	1.25%	417,153.91	2.68%	894,377.97	-76,756.32
357.00	Underground Conduit	1,868,318.57	1.98%	36,992.71	1.93%	36,058.55	0.00%	0.00	0.00%	0.00	1.93%	36,058.55	-934.16
358.00	Underground Conductors and Devices	5,312,495.63	2.47%	131,218.84	3.44%	182,749.85	0.00%	0.00	1.01%	53,656.20	4.45%	236,406.05	105,187.41
	Total Other Than Project 289	212,922,895.49		5,032,327.46	1.79%	3,801,173.82	-0.34%	-731,464.95		1,637,234.37	2.21%	4,706,943.24	-325,384.22
	Total Transmission Plant	212,922,895.49	2.36%	5,032,327.46	1.79%	3,801,173.82	-0.34%	-731,464.95	0.77%	1,637,234.37	2.21%	4,706,943.24	-325,384.22
	DISTRIBUTION PLANT												
361.00	Structures and Improvements	5,969,141.37	2.21%	131,918.02	1.79%	106,847.63	0.00%	0.00	0.33%	19,698.17	2.12%	126,545.80	-5,372.23
362.00	Station Equipment	77,088,050.08	2.57%	1,981,162.89	2.17%	1,672,810.69	-0.20%	-154,176.10	0.34%	262,099.37	2.31%	1,780,733.96	-200,428.93
364.00	Poles, Towers and Fixtures	92,365,173.96	3.55%	3,278,963.68	4.56%	4,211,851.93	-2.61%	-2,410,731.04	1.97%	1,819,593.93	3.92%	3,620,714.82	341,751.14
365.00	Overhead Conductors and Devices	141,726,406.02	3.82%	5,413,948.71	3.79%	5,371,430.79	-2.28%	-3,231,362.06	2.78%	3,939,994.09	4.29%	6,080,062.82	666,114.11

Louisville Gas and Electric
Electric Division

Summary or Original Cost of Utility Plant in Service as of December 31, 2002
and Related Annual Depreciation Expense Under Present and Proposed Rates

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates Rate % (d)	Present Rates Annual Accrual (e)	Proposed Rates: Proposed Plant Only Rates Rate %	Proposed Plant Only Rates Annual Accrual	Proposed Gross Salv Rates Rate %	Proposed Gross Salv Rates Annual Accrual	Proposed COR Rates Rate % (f)	Proposed COR Rates Annual Accrual (g)	Total Proposed Rates Rate %	Total Proposed Rates Annual Accrual	Net Change Depr. Exp. (h)
366.00	Underground Conduit	52,616,554.86	1.49%	783,986.67	1.37%	720,846.80	-0.19%	-99,971.45	0.35%	184,157.94	1.53%	805,033.29	21,046.62
367.00	Underground Conductors and Devices	77,051,441.80	3.08%	2,373,184.41	3.26%	2,511,877.00	-1.54%	-1,186,592.20	2.49%	1,918,580.90	4.21%	3,243,865.70	870,681.29
	Line Transformers												
368.10	Line Transformers	86,278,030.41	2.70%	2,329,506.82	2.48%	2,139,695.15	-0.19%	-163,928.26	0.62%	534,923.79	2.91%	2,510,690.68	181,183.86
368.20	Line Transformers Installations	8,778,300.38	2.70%	237,014.11	2.51%	220,335.34	-0.01%	-877.83	0.42%	36,868.86	2.92%	256,326.37	19,312.26
	Total Account 368	95,056,330.79	2.70%	2,566,520.93	2.48%	2,360,030.49	-0.17%	-164,806.09	0.60%	571,792.65	2.91%	2,767,017.06	200,496.12
	Services												
369.10	Underground Services	2,342,286.94	3.21%	75,187.41	2.19%	51,296.08	-0.40%	-9,369.15	2.71%	63,475.98	4.50%	105,402.91	30,215.50
369.20	Overhead Services	20,427,859.34	4.46%	911,082.53	2.89%	590,365.13	-1.01%	-206,321.38	2.82%	576,065.63	4.70%	960,109.39	49,026.86
	Total Account 369	22,770,146.28	4.33%	986,269.94	2.82%	641,661.22	-0.95%	-215,690.53	2.81%	639,541.61	4.68%	1,065,512.30	79,242.36
	Meters & Installations												
370.10	Meters	25,219,577.02	3.37%	849,899.75	3.35%	844,855.83	-0.05%	-12,609.79	0.67%	168,971.17	3.97%	1,001,217.21	151,317.46
370.20	Meter Installations	8,352,742.98	3.37%	281,487.44	3.26%	272,299.42	0.00%	0.00	0.62%	51,787.01	3.88%	324,086.43	42,598.99
	Total Account 370	33,572,320.00	3.37%	1,131,387.18	3.33%	1,117,155.25	-0.04%	-12,609.79	0.66%	220,758.17	3.95%	1,325,303.64	193,916.45
	Street Lighting												
373.10	Overhead Street Lighting	22,600,470.37	5.93%	1,340,207.89	4.22%	953,739.85	-0.52%	-117,522.45	3.14%	709,654.77	6.84%	1,545,872.17	205,664.28
373.20	Underground Street Lighting	32,156,589.32	4.34%	1,395,595.98	3.48%	1,119,049.31	-0.33%	-106,116.74	1.49%	479,133.18	4.64%	1,492,065.74	96,469.77
373.40	Street Lighting Transformers	87,546.43	0.00%	0.00	5.47%	4,788.79	-0.66%	-577.81	-0.86%	-752.90	3.95%	3,458.08	3,458.08
	Total Account 373	54,844,606.12	4.99%	2,735,803.87	3.79%	2,077,577.95	-0.41%	-224,217.00	2.17%	1,188,035.05	5.55%	3,041,396.00	305,592.13
	Total Distribution Plant	653,060,171.28	3.27%	21,383,146.29	3.18%	20,792,089.75	-1.18%	-7,700,156.26	1.65%	10,764,251.88	3.65%	23,856,185.37	2,473,039.08
	GENERAL PLANT												
392.20	Transportation Equipment - Trailers	590,217.25	2.60%	15,345.65	2.42%	14,283.26	-0.49%	-2,892.06	0.00%	0.00	1.93%	11,391.19	-3,954.46
394.00	Tools, Shop and Garage Equipment	2,687,990.96	3.50%	94,079.68	2.80%	75,263.75	-0.12%	-3,225.59	0.00%	0.00	2.68%	72,038.16	-22,041.53
395.00	Laboratory Equipment	1,548,796.71	2.70%	41,817.51	1.55%	24,006.35	-0.08%	-1,239.04	0.00%	0.00	1.47%	22,767.31	-19,050.20
396.20	Power Operated Equipment - Other	145,466.83	2.11%	3,069.35	0.62%	901.89	-0.62%	-901.89	0.00%	0.00	0.00%	0.00	-3,069.35
	Total General Plant	4,972,471.75	3.10%	154,312.19	2.30%	114,455.25	-0.17%	-8,258.59	0.00%	0.00	2.14%	106,196.66	-48,115.53
	Sub-Total Depreciable Plant	2,838,060,985.85	2.96%	84,036,035.61	2.86%	81,075,589.50	-0.30%	-8,439,879.80	0.71%	20,072,546.93	3.27%	92,708,256.64	8,672,221.03
	Other Plant (Not Studied)												
392.10	Transportation Equipment - Cars & Trucks	12,069,086.02											
396.10	Power Operated Equipment - Hourly Rated	2,337,037.87											
	Total Other Plant (Not Studied)	14,406,123.89											
	Total Depreciable Plant	2,852,467,109.74											
	NON-DEPRECIABLE PLANT												
	INTANGIBLE PLANT												
301.00	Organization	2,240.29											
302.00	Franchises and Consents	100.00											
	Total Intangible Plant	2,340.29											
	LAND												
310.20	Production Land	5,053,819.49											
330.20	Hydraulic Plant	13.00											
340.20	Other Production Land	41,125.94											
350.20	Transmission Land	888,237.78											
360.20	Distribution Land	2,629,414.76											
	Total Land	8,612,610.97											
	Total Non-Depreciable Plant	8,614,951.26											
	Total Utility Plant in Service	2,861,082,061.00											

Louisville Gas and Electric
Gas Division

Summary or Original Cost of Utility Plant in Service as of December 31, 200[illegible]
and Related Annual Depreciation Expense Under Present and Proposed Rate

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates: Rate % (d)	Present Rates: Annual Accrual (e)	Proposed Rates – Proposed Plant Only Rates: Rate %	Proposed Plant Only Rates: Annual Accrual	Proposed Gross Salv Rates: Rate % (f)	Proposed Gross Salv Rates: Annual Accrual (g)	Proposed COR Rates: Rate % (f)	Proposed COR Rates: Annual Accrual (g)	Total Proposed Rates: Rate %	Total Proposed Rates: Annual Accrual	Net Change Depr., Exp. (h)
	DEPRECIABLE PLANT												
	NATURAL GAS STORAGE PLANT												
350.20	Rights of Ways	63,678.14	0.00%	0.00	1.87%	1,190.78	0.00%	0.00	0.00%	0.00	1.87%	1,190.78	1,190.78
	Structures												
351.20	Compressor Station Structures	1,011,754.95	2.45%	24,788.00	1.75%	17,705.71	0.00%	0.00	0.04%	404.70	1.79%	18,110.41	-6,677.59
351.30	Measuring and Regulating Station Structures	10,879.61	0.00%	0.00	0.56%	60.93	0.00%	0.00	-0.09%	-9.79	0.47%	51.13	51.13
351.40	Other Structures	1,148,713.70	1.74%	19,987.62	2.15%	24,697.34	0.00%	0.00	0.03%	344.61	2.18%	25,041.96	5,054.34
	Total Account 351	2,171,348.26	2.06%	44,775.62	1.96%	42,463.98	0.00%	0.00	0.03%	739.52	1.99%	43,203.50	-1,572.12
	Wells												
352.20	Reservoirs	400,511.40	0.69%	2,763.53	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	-2,763.53
352.30	Nonrecoverable Natural Gas	9,648,855.00	1.73%	166,925.19	1.10%	106,137.41	0.00%	0.00	0.00%	0.00	1.10%	106,137.41	-60,787.78
352.40	Well Drilling	2,549,654.96	1.67%	42,579.24	0.60%	15,297.93	0.00%	0.00	0.35%	8,923.79	0.95%	24,221.72	-18,357.52
352.50	Well Equipment	5,037,990.48	2.35%	118,392.78	1.42%	71,539.46	0.00%	0.00	0.36%	18,136.77	1.78%	89,676.23	-28,716.55
	Total Account 352	17,637,011.84	1.87%	330,660.74	1.09%	192,974.80	0.00%	0.00	0.15%	27,060.56	1.25%	220,035.36	-110,625.38
353.00	Lines	10,349,000.14	2.53%	261,829.70	1.74%	180,072.60	-0.01%	-1,034.90	0.19%	19,663.10	1.92%	198,700.80	-63,128.90
354.00	Compressor Station Equipment	13,404,078.82	1.78%	238,592.60	1.57%	210,444.04	0.00%	0.00	0.16%	21,446.53	1.73%	231,890.56	-6,702.04
355.00	Measuring and Regulating Equipment	370,320.90	1.54%	5,702.94	1.71%	6,332.49	0.00%	0.00	0.15%	555.48	1.86%	6,887.97	1,185.03
356.00	Purification Equipment	9,314,575.58	3.50%	326,010.15	2.07%	192,811.71	0.00%	0.00	0.62%	57,750.37	2.69%	250,562.08	-75,448.07
357.00	Other Equipment	961,279.76	2.49%	23,935.87	2.57%	24,704.89	0.00%	0.00	0.00%	0.00	2.57%	24,704.89	769.02
	Total Natural Gas Storage Plant	54,271,293.44	2.27%	1,231,507.62	1.57%	850,895.29	0.00%	-1,034.90	0.23%	127,215.56	1.80%	977,175.94	-254,331.68
	TRANSMISSION PLANT												
365.20	Rights of Way	220,659.05	1.68%	3,707.07	0.42%	926.77	0.00%	0.00	0.00%	0.00	0.42%	926.77	-2,780.30
367.00	Mains	12,193,974.86	1.68%	204,858.78	1.43%	174,373.84	-0.88%	-107,306.98	0.59%	71,944.45	1.14%	139,011.31	-65,847.47
	Total Transmission Plant	12,414,633.91	1.68%	208,565.85	1.41%	175,300.61	-0.86%	-107,306.98	0.58%	71,944.45	1.13%	139,938.08	-68,627.77
	DISTRIBUTION PLANT												
374.22	Other Distribution Land Rights	74,018.23	2.95%	2,183.54	2.39%	1,769.04	0.00%	0.00	0.00%	0.00	2.39%	1,769.04	-414.50
	Structures and Improvements												
375.10	City Gate Check Station Struct. and Improve.	133,639.45	3.59%	4,797.66	3.48%	4,650.65	0.04%	53.46	-0.25%	-334.10	3.27%	4,370.01	-427.65
375.20	Other Distribution Struct. and Improve.	788,487.48	3.34%	26,335.48	4.03%	31,776.05	0.00%	0.00	0.09%	709.64	4.12%	32,485.68	6,150.20
	Total Account 375	922,126.93	3.38%	31,133.14	3.95%	36,426.70	0.01%	53.46	0.04%	375.54	4.00%	36,855.69	5,722.55
376.00	Mains	213,002,709.24	2.23%	4,749,960.42	1.88%	4,004,450.93	-0.15%	-319,504.06	0.81%	1,725,321.94	2.54%	5,410,268.81	660,308.39
378.00	Measuring and Regulating Station Equip. - Gen.	4,590,719.10	3.03%	139,098.79	2.49%	114,306.91	-0.40%	-18,362.88	0.45%	20,658.24	2.54%	116,604.27	-22,494.52
379.00	Measuring and Reg. Station Eq. - City Gate	2,947,888.13	3.14%	92,563.69	2.42%	71,338.89	-0.03%	-884.37	0.14%	4,127.04	2.53%	74,581.57	-17,982.12
380.00	Services	103,680,138.72	4.25%	4,406,405.90	3.13%	3,245,188.34	0.00%	0.00	1.49%	1,544,834.07	4.62%	4,790,022.41	383,616.51
381.00	Meters	18,573,635.12	3.11%	577,640.05	4.06%	754,089.59	-0.36%	-66,865.09	-0.01%	-1,857.36	3.69%	685,367.14	107,727.09
382.00	Meter Installations	7,218,670.36	3.22%	232,441.19	3.61%	260,594.00	-0.19%	-13,715.47	0.40%	28,874.68	3.82%	275,753.21	43,312.02
383.00	House Regulators	3,106,054.85	2.42%	75,166.53	2.50%	77,651.37	-0.30%	-9,318.16	0.59%	18,325.72	2.79%	86,658.93	11,492.40
384.00	House Regulator Installations	970,849.46	2.28%	22,135.37	2.60%	25,242.09	-0.11%	-1,067.93	0.00%	0.00	2.49%	24,174.15	2,038.78
385.00	Industrial Measuring and Reg. Station Equip.	142,801.65	3.62%	5,169.42	2.36%	3,370.12	0.00%	0.00	0.21%	299.88	2.57%	3,670.00	-1,499.42
387.00	Other Equipment	65,051.59	2.36%	1,535.22	2.58%	1,678.33	0.00%	0.00	0.00%	0.00	2.58%	1,678.33	143.11
	Total Distribution Plant	355,294,663.38	2.91%	10,335,433.26	2.42%	8,598,108.31	-0.12%	-429,664.50	0.94%	3,340,959.75	3.24%	11,507,403.55	1,171,970.29
	GENERAL PLANT												
392.20	Transportation Equipment - Trailers	354,281.36	4.49%	15,906.34	4.62%	16,366.87	-0.12%	-425.11	0.00%	0.00	4.50%	15,941.76	35.42
394.00	Tools, shop and Garage Equipment	2,896,381.98	3.76%	108,903.21	2.92%	84,573.77	-0.30%	-8,689.09	0.00%	0.00	2.62%	75,884.68	-33,018.53
395.00	Laboratory Equipment	435,068.27	3.16%	13,748.16	2.81%	12,225.42	-0.56%	-2,436.38	0.00%	0.00	2.25%	9,789.04	-3,959.12
396.20	Power Operated Equipment - Other	58,118.72	2.99%	1,737.75	3.10%	1,801.68	-0.73%	-424.27	0.37%	215.04	2.74%	1,592.45	-145.30
	Total General Plant	3,743,810.31	3.75%	140,295.46	3.07%	114,967.74	-0.31%	-11,550.58	0.01%	215.04	2.76%	103,207.93	-37,087.53
	Sub-Total Depreciable Plant	425,724,401.04	2.80%	11,915,802.19	2.29%	9,737,371.95	-0.13%	-549,556.96	0.83%	3,540,334.80	2.99%	12,727,725.50	811,923.31

Rebuttal Exhibit EMR-2 (LG&E Gas)

Louisville Gas and Electric
Gas Division

Summary or Original Cost of Utility Plant in Service as of December 31, 200[illegible] and Related Annual Depreciation Expense Under Present and Proposed Rate

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates Rate % (d)	Present Rates Annual Accrual (e)	Proposed Rates: Proposed Plant Only Rates Rate %	Proposed Plant Only Rates Annual Accrual	Proposed Gross Salv Rates Rate % (f)	Proposed Gross Salv Rates Annual Accrual (g)	Proposed COR Rates Rate % (f)	Proposed COR Rates Annual Accrual (g)	Total Proposed Rates Rate %	Total Proposed Rates Annual Accrual	Net Change Depr. Exp. (h)
	Other Plant (Not Studied)												
392.10	Transportation Equipment - Cars & Trucks	3,209,727.45											
396.10	Power Operated Equipment - Hourly Rated	2,029,908.51											
	Total Other Plant (Not Studied)	5,239,635.96											
	Total Depreciable Plant	430,964,037.00											
	NON-DEPRECIABLE PLANT												
	INTANGIBLE PLANT												
302.00	Franchises and Consents	1,187.49											
352.10	Storage Leaseholds and Rights	552,045.10											
	Total Intangible Plant	553,232.59											
	LAND												
350.10	Land	32,864.07											
374.11	City Gate Check Station Land	0.00											
374.12	Other Distribution Land	62,043.73											
	Total Land	94,907.80											
	Total Non-Depreciable Plant	648,140.39											
	Total Gas Plant in Service	431,612,177.39											

Kentucky Utilities

COMPARISON OF M. MAJOROS DEPRECIATION RECOMMENDATIONS

Acct No.	Description	Current Life/Curve	Best Fit (Actuarial)	GMT Results	Qty Reporting Companies	Industry Data Range (Yrs)	Industry Data Avg (Yrs)	Majoros Proposed Life/Curve	Majoros Retirement Band	Majoros Fit Selected	Robinson Life/Curve
353.1	Station Eq - Non Sys Cont/Com	50-R4	54-R4		95	5-57	**37**	54-R4	1952-1997	1st	50-R4
353.2	Station Eq - Non Sys Cont/Com-Microwave	18-R4	38-L15	40.82	95	N/A	N/A	38-L1.5	1956-2002	1st	15-R3
355	Poles & Fixtures	40-R3	Re	68.03	79	26-65	**39**	58-L1.5	1952-2002	1st	43-R2.5
356	Overhead Conductor & Dev	45-R3	62-R3	128.60	96	20-60	**42**	62-R3	1952-2002	1st	50-R3
365	Overhead Conductor & Dev	44-R1.5	70-L0	51.61	81	3-65	**36**	61-R0.5	1952-2002	4th	41-R2
367	UG Conductors & Dev	32-R1	38-L3	30.83	76	19-55	**35**	38-L3	1952-2002	1st	30-R3
369	Services	36-R1	61-O1	40.24	102	20-50	**34**	61-O1	1936-21002	1st	30-R3

Louisville Gas & Electric

Electric

COMPARISON OF M. MAJOROS DEPRECIATION RECOMMENDATIONS

Acct No.	Description	Current Life/Curve	Best Fit (Actuarial)	Best Fit (SPR)	GMT Results	Qty Reporting Companies	Industry Data Range (Yrs)	Industry Data Avg (Yrs)	Majoros Proposed Life/Curve	Majoros Retirement Band	Majoros Fit Selected	Robinson Life/Curve
353.1	Station Eq - Non Sys Cont/Com	44-S3	57-R2		85.40	95	5-57	**37**	57-R2	1952-2002	1st	50-R3
354	Towers & Fixtures	45-R4	63-R5		338.86	85	30-86	**50**	63-R5	1952-2002	1st	55-R4
356	Overhead Conductor & Dev	39-R3	63-R1.5		78.09	96	20-60	**42**	63-R1.5	1952-2002	1st	47-R1.5
365	Overhead Conductor & Dev	32-R3		89-O3	166.26	81	3-65	**36**	49-R0.5	1899-2002	4th	35-R2.5

Louisville Gas & Electric

Gas

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COMPARISON OF M. MAJOROS DEPRECIATION RECOMMENDATIONS

Acct No.	Description	Current Life/Curve	Best Fit (Actuarial)	Best Fit (SPR)	GMT Results	Qty Reporting Companies	Industry Data Range (Yrs)	Industry Data Avg (Yrs)	Majoros Proposed Life/Curve	Majoros Retirement Band	Majoros Fit Selected	Robinson Life/Curve
353	Lines	28-L4	51-L0.5		58.27	15	15-58	**38**	51-L0.5	1952-2002	1st	40-L2
367	Trans Mains	45-R4	98-L1		236.26	32	10-100	**53**	69-R2.5	1952-2002	5th	55-R3
376	Distr Mains	55-S3		72-R1.5	78.11	98	26-80	**55**	72-R1.5	1936-2002	1st	55-R3
382	Meter Installations	35-R5		49-O1	58.60	52	8-63	**37**	35-R5	1905-2002	*R5 Curve is 23rd and has 28 yr life	31-R4

CHAPTER VII

TURNOVER AND SIMULATION ANALYSES

Introduction

As discussed in the previous chapter, actuarial methods are used to analyze retirements that took place at various ages in relationship to the property exposed to the risk of retirement. "Turnover" methods may be used to study retirements in relation to plant balances irrespective of the age of the property retired. Although actuarial methods yield more reliable results, they require considerably more detailed data. Turnover methods are used when actuarial (i.e., aged) data are lacking or when a more elaborate study is not economical or not possible.

Turnover methods provide an indication of the average life of the property. The methods assume the account balance is growing uniformly and the dispersion of retirements is the same for each vintage. A more reliable estimate may be made if the property has experienced at least one life cycle (roughly twice its average life) since, under the constancy assumptions above, the property will have reached stability.

The *Turnover-Period* method is based, as its name indicates, on the turnover period, which is the time required to exhaust a balance through successive annual retirements. The period is converted into an estimate of average life using the property's calculated account growth rate and estimated dispersion.

The *Half-Cycle* method was developed to overcome the Turnover-Period method's requirement that data be available for a period approximating average life. This method requires data for only half of the average life and is more responsive to trends. As with the full Turnover-Period method, adjustment factors based on the account growth rate and retirement dispersion are used to convert a preliminary calculation to a life indication. The Half-Cycle method may be used simultaneously with the Turnover-Period method to provide an indication of the retirement dispersion.

The *Asymptotic* method and its simplified form, the *Geometric Mean* method, are based on ratios of annual additions and retirements. The latter method more readily indicates trends but is also prone to producing results with considerable variability.

The simplicity of the turnover methods and ease with which they may be applied explain their popularity. Their use is restricted by the assumptions of uniformity and their failure to provide an indication of retirement dispersion. These problems led to their replacement by the *Simulated Plant Record (SPR)* model.

The selection of retirement dispersion (e.g., Iowa curve) by the SPR model is based upon the closeness of the match between actual annual amounts and those that have been simulated. In the "Balances" method, annual balances are compared. In the "Cumulative Retirements" and "Period Retirements" methods, retirements are compared.

The closeness of the match between balances is measured by the Conformance Index (CI) or its reciprocal, the Index of Variation (IV). The maturity of the account is measured by the Retirement Experience Index (REI).

Limitations

A major drawback to all of the turnover methods is that they do not provide an indication as to the retirement dispersion pattern. This limitation is most pronounced with the Turnover-Period method, which requires a dispersion estimate if the account balance has been changing. As noted above, some indication as to dispersion may be gained from simultaneous application of the Turnover-Period and Half-Cycle methods.

All the methods assume uniformity for the growth ratio and the dispersion of retirements for each vintage. A more reliable estimate may be made if the property has experienced at least one life cycle (roughly twice average life) since, under the constancy assumptions above, the property will be at stability.

Since utility property typically does not meet the above constancy assumptions, the methods may produce considerable variation in life indications. This is especially true for the Geometric Mean method. Therefore, modifications involving smoothing or the use of cumulative data have been proposed.

A drawback of the above modifications is that they may mask trends. Trends are most readily revealed by the Half-Cycle method and most concealed by the Turnover-Period method.

[The use of turnover methods has decreased considerably with the increased experience in applying and interpreting the results of improved life analysis methods. These improved methods used with unaged data are discussed in the following sections.]

Simulated Plant Record Method

Overview

The Simulated Plant Record (SPR) method is used by utilities and commissions to indicate generalized survivor curves that best represent the life characteristics of property when the property records do not contain the age of the property upon retirement. The selection of curves is based upon the closeness of the match between actual and simulated annual amounts.

The closeness of the match between annual amounts is measured by the Conformance Index (CI) or its reciprocal, the Index of Variation (IV). These measures are based upon the sum of squared differences between simulated and actual annual amounts. The highest ranked curves are those with the highest CIs (or lowest IVs).

The maturity of the account is measured by the Retirement Experience Index (REI). The higher the REI, the more assurance that a unique retirement pattern was used in the simulation. In 1947, Bauhan proposed a scale to rank the REI and the CI from poor to excellent.

The amounts that are compared may be balances or retirements depending upon which model is used: SPR Balances, SPR Period Retirements, or SPR Cumulative Retirements. The SPR Balances model is discussed in detail below, followed by a brief look at the retirements models. The CI, IV, and REI measures are explained and illustrated.

Louisville Gas & Electric - Gas Div.
All Divisions
353.00 LINES

Observed Life Table
Retirement Expr. 1952 TO 2002
Placement Years 1930 TO 2002

Age Interval	$ Surviving At Beginning of Age Interval	$ Retired During The Age Interval	Retirement Ratio	% Surviving At Beginning of Age Interval
0.0 - 0.5	$11,064,623.43	$0.00	0.00000	100.00
0.5 - 1.5	$11,124,849.24	$251.00	0.00002	100.00
1.5 - 2.5	$10,980,565.52	$11,010.00	0.00100	100.00
2.5 - 3.5	$10,806,447.08	$2,329.00	0.00022	99.90
3.5 - 4.5	$10,428,379.93	$500.00	0.00005	99.88
4.5 - 5.5	$10,245,951.92	$5,831.00	0.00057	99.87
5.5 - 6.5	$10,235,271.16	$22,825.00	0.00223	99.81
6.5 - 7.5	$9,347,911.65	$0.00	0.00000	99.59
7.5 - 8.5	$9,181,247.61	$25,913.00	0.00282	99.59
8.5 - 9.5	$9,094,846.33	$7,358.00	0.00081	99.31
9.5 - 10.5	$8,877,625.54	$8,177.00	0.00092	99.23
10.5 - 11.5	$8,172,318.24	$499.00	0.00006	99.14
11.5 - 12.5	$7,856,842.18	$17,225.00	0.00219	99.13
12.5 - 13.5	$7,541,913.47	$15,676.00	0.00208	98.92
13.5 - 14.5	$7,461,352.05	$9,302.00	0.00125	98.71
14.5 - 15.5	$7,002,225.98	$32,915.00	0.00470	98.59
15.5 - 16.5	$5,972,215.42	$118,548.00	0.01985	98.12
16.5 - 17.5	$5,338,931.16	$89,286.00	0.01672	96.18
17.5 - 18.5	$5,024,226.34	$135,867.00	0.02704	94.57
18.5 - 19.5	$4,743,010.44	$75,237.00	0.01586	92.01
19.5 - 20.5	$4,765,929.69	$81,631.00	0.01713	90.55
20.5 - 21.5	$3,291,485.08	$138,882.00	0.04219	89.00
21.5 - 22.5	$3,127,944.54	$51,108.00	0.01634	85.24
22.5 - 23.5	$2,391,376.86	$144,258.00	0.06032	83.85
23.5 - 24.5	$2,127,641.04	$88,685.00	0.04168	78.79
24.5 - 25.5	$2,046,217.95	$51,285.00	0.02506	75.51
25.5 - 26.5	$1,979,840.41	$44,244.00	0.02235	73.62
26.5 - 27.5	$1,864,009.89	$92,875.00	0.04983	71.97
27.5 - 28.5	$1,776,235.80	$39,873.00	0.02245	68.39
28.5 - 29.5	$1,595,973.23	$5,948.00	0.00373	66.85
29.5 - 30.5	$1,574,454.86	$15,543.00	0.00987	66.60
30.5 - 31.5	$1,537,206.26	$42,732.00	0.02780	65.94
31.5 - 32.5	$1,285,266.31	$42,050.00	0.03272	64.11
32.5 - 33.5	$1,197,586.75	$38,587.00	0.03222	62.01
33.5 - 34.5	$810,706.04	$2,619.00	0.00323	60.01
34.5 - 35.5	$794,854.48	$10,233.00	0.01287	59.82
35.5 - 36.5	$692,152.27	$8,037.00	0.01161	59.05

Louisville Gas & Electric - Gas Div.
All Divisions
353.00 LINES

Observed Life Table
Retirement Expr. 1952 TO 2002
Placement Years 1930 TO 2002

Age Interval	*$ Surviving At Beginning of Age Interval*	*$ Retired During The Age Interval*	*Retirement Ratio*	*% Surviving At Beginning of Age Interval*
36.5 - 37.5	$643,693.24	$5,491.00	0.00853	58.37
37.5 - 38.5	$539,764.49	$1,551.00	0.00287	57.87
38.5 - 39.5	$523,853.34	$10,816.00	0.02065	57.70
39.5 - 40.5	$449,430.92	$77,467.00	0.17237	56.51
40.5 - 41.5	$343,134.19	$34,205.00	0.09968	46.77
41.5 - 42.5	$305,469.45	$0.00	0.00000	42.11
42.5 - 43.5	$303,721.23	$0.00	0.00000	42.11
43.5 - 44.5	$231,601.30	$32.00	0.00014	42.11
44.5 - 45.5	$231,470.03	$2,069.00	0.00894	42.10
45.5 - 46.5	$152,473.45	$0.00	0.00000	41.72
46.5 - 47.5	$148,927.25	$166.00	0.00111	41.72
47.5 - 48.5	$128,426.08	$281.00	0.00219	41.68
48.5 - 49.5	$109,202.71	$0.00	0.00000	41.59
49.5 - 50.5	$103,931.97	$0.00	0.00000	41.59
50.5 - 51.5	$10,082.89	$305.00	0.03025	41.59
51.5 - 52.5	$8,697.21	$0.00	0.00000	40.33
52.5 - 53.5	$5,211.28	$0.00	0.00000	40.33
53.5 - 54.5	$3,561.48	$176.00	0.04942	40.33
54.5 - 55.5	$2,887.61	$172.00	0.05956	38.34
55.5 - 56.5	$359.77	$0.00	0.00000	36.05
56.5 - 57.5	$359.77	$0.00	0.00000	36.05
57.5 - 58.5	$359.77	$0.00	0.00000	36.05
58.5 - 59.5	$179.77	$0.00	0.00000	36.05
59.5 - 60.5	$179.77	$0.00	0.00000	36.05
60.5 - 61.5	$179.77	$0.00	0.00000	36.05
61.5 - 62.5	$179.77	$0.00	0.00000	36.05
62.5 - 63.5	$179.77	$0.00	0.00000	36.05
63.5 - 64.5	$179.77	$0.00	0.00000	36.05
64.5 - 65.5	$179.77	$0.00	0.00000	36.05
65.5 - 66.5	$179.77	$0.00	0.00000	36.05
66.5 - 67.5	$179.77	$0.00	0.00000	36.05
67.5 - 68.5	$179.77	$0.00	0.00000	36.05
68.5 - 69.5	$0.00	$0.00	0.00000	36.05
69.5 - 70.5	$0.00	$0.00	0.00000	36.05
70.5 - 71.5	$0.00	$0.00	0.00000	36.05
71.5 - 72.5	$0.00	$0.00	0.00000	36.05

Louisville Gas & Electric - Gas Div.

All Divisions

376.00 MAINS

Simulated Plant Record Analysis Calculated As Of 12/31/2002

Simulated Balances Method

No. Of Test Points -	5
Interval Between Test Points -	1
First Test Point -	1998
Last Test Point -	2002

Curve Type	*Average Service Life*	*Sum Of Squares Difference*	*Conformance Index*	*Index Of Variation*	*Ret Exp Index*
S6	47.13 Yrs.	5.0767E+12	182.09	5.49	100.00
S5	48.22 Yrs.	5.1001E+12	181.67	5.50	99.98
L5	49.38 Yrs.	5.1014E+12	181.64	5.51	97.46
S4	50.13 Yrs.	5.1698E+12	180.44	5.54	97.83
L4	51.97 Yrs.	5.2942E+12	178.31	5.61	88.98
S3	53.03 Yrs.	5.3271E+12	177.75	5.63	86.18
R5	48.78 Yrs.	5.3387E+12	177.56	5.63	100.00
R4	51.78 Yrs.	5.5307E+12	174.45	5.73	95.44
L3	56.88 Yrs.	5.5541E+12	174.08	5.74	74.42
R3	55.91 Yrs.	5.6293E+12	172.92	5.78	76.23
S2	56.94 Yrs.	5.7086E+12	171.71	5.82	71.19
R2.5	60.44 Yrs.	5.7975E+12	170.39	5.87	60.71
L2	65.00 Yrs.	5.9335E+12	168.43	5.94	58.97
S1.5	60.44 Yrs.	5.9411E+12	168.32	5.94	62.11
R2	66.47 Yrs.	5.9938E+12	167.58	5.97	47.57
R1.5	77.78 Yrs.	6.1325E+12	165.67	6.04	35.61
L1.5	72.44 Yrs.	6.1461E+12	165.49	6.04	49.65
S1	64.66 Yrs.	6.1601E+12	165.30	6.05	53.99
R1	93.22 Yrs.	6.2155E+12	164.56	6.08	28.76
R0.5	117.75 Yrs.	6.2388E+12	164.25	6.09	24.70
SC	146.28 Yrs.	6.2447E+12	164.18	6.09	23.07
O1	146.28 Yrs.	6.2447E+12	164.18	6.09	23.07
O2	164.34 Yrs.	6.2450E+12	164.17	6.09	23.08
S0.5	72.19 Yrs.	6.2673E+12	163.88	6.10	44.80
S.5	107.56 Yrs.	6.2757E+12	163.77	6.11	28.19
L1	81.72 Yrs.	6.2788E+12	163.73	6.11	42.24
L0.5	96.75 Yrs.	6.3207E+12	163.19	6.13	35.19
S0	81.75 Yrs.	6.3688E+12	162.57	6.15	37.97
L0	115.80 Yrs.	6.3803E+12	162.42	6.16	30.42
SQ	46.00 Yrs.	8.8907E+12	137.59	7.27	100.00
O3	201.00 Yrs.	2.6662E+13	.00	.00	26.80
O4	201.00 Yrs.	2.3268E+14	.00	.00	35.46

Louisville Gas & Electric - Gas Div.

All Divisions

376.00 MAINS

Simulated Plant Record Analysis Calculated As Of 12/31/2002

Simulated Balances Method

No. Of Test Points -	5
Interval Between Test Points -	1
First Test Point -	1993
Last Test Point -	1997

Curve Type	Average Service Life	Sum Of Squares Difference	Conformance Index	Index Of Variation	Ret Exp Index
S6	49.44 Yrs.	1.0025E+11	920.31	1.09	100.00
SQ	48.00 Yrs.	1.1949E+11	842.98	1.19	100.00
L0	139.67 Yrs.	1.8972E+11	668.99	1.49	24.21
SC	186.56 Yrs.	2.0434E+11	644.62	1.55	18.09
O1	186.56 Yrs.	2.0434E+11	644.62	1.55	18.09
R0.5	148.22 Yrs.	2.0720E+11	640.15	1.56	19.08
S.5	131.75 Yrs.	2.0757E+11	639.58	1.56	21.88
S0	95.19 Yrs.	2.0935E+11	636.85	1.57	30.21
R1	114.16 Yrs.	2.1513E+11	628.24	1.59	21.63
L0.5	113.72 Yrs.	2.1716E+11	625.30	1.60	28.10
R1.5	91.94 Yrs.	2.3817E+11	597.09	1.67	26.28
S0.5	81.97 Yrs.	2.5318E+11	579.11	1.73	36.05
L1	93.03 Yrs.	2.6793E+11	562.95	1.78	34.92
R2	75.09 Yrs.	2.9558E+11	535.97	1.87	36.20
L1.5	80.75 Yrs.	3.1352E+11	520.41	1.92	41.59
S1	71.50 Yrs.	3.2850E+11	508.40	1.97	44.93
R2.5	66.19 Yrs.	3.8867E+11	467.40	2.14	48.09
S5	50.53 Yrs.	3.9338E+11	464.59	2.15	99.84
L2	70.72 Yrs.	4.1270E+11	453.59	2.20	51.67
S1.5	65.66 Yrs.	4.2103E+11	449.08	2.23	52.95
L5	51.59 Yrs.	5.3178E+11	399.59	2.50	95.49
R5	51.44 Yrs.	5.4148E+11	395.99	2.53	99.84
O2	201.00 Yrs.	5.4429E+11	.00	.00	18.87
R3	59.69 Yrs.	5.4935E+11	393.14	2.54	65.13
S2	60.78 Yrs.	5.6819E+11	386.57	2.59	62.97
L3	60.34 Yrs.	6.0193E+11	375.58	2.66	68.77
L4	54.53 Yrs.	6.7301E+11	355.20	2.82	84.89
S3	55.50 Yrs.	8.0890E+11	323.99	3.09	80.42
S4	52.16 Yrs.	8.1611E+11	322.55	3.10	95.48
R4	54.31 Yrs.	8.5779E+11	314.62	3.18	89.92
O3	201.00 Yrs.	5.0678E+13	.00	.00	26.80
O4	201.00 Yrs.	2.2140E+14	.00	.00	35.46

Louisville Gas & Electric - Gas Div.

All Divisions

376.00 MAINS

Simulated Plant Record Analysis Calculated As Of 12/31/2002

Simulated Balances Method

No. Of Test Points -	5
Interval Between Test Points -	1
First Test Point -	1988
Last Test Point -	1992

Curve Type	*Average Service Life*	*Sum Of Squares Difference*	*Conformance Index*	*Index Of Variation*	*Ret Exp Index*
S6	48.41 Yrs.	2.5315E+10	1252.07	.80	100.00
O1	170.75 Yrs.	5.1630E+10	876.73	1.14	19.77
SC	170.75 Yrs.	5.1630E+10	876.73	1.14	19.77
O2	191.81 Yrs.	5.1662E+10	876.46	1.14	19.78
R0.5	136.00 Yrs.	5.5670E+10	844.32	1.18	20.99
R1	105.28 Yrs.	6.6320E+10	773.56	1.29	24.18
S.5	121.84 Yrs.	6.6854E+10	770.47	1.30	24.13
L0	130.38 Yrs.	7.3688E+10	733.87	1.36	26.37
R1.5	85.22 Yrs.	8.7942E+10	671.77	1.49	30.10
L0.5	106.28 Yrs.	9.6394E+10	641.64	1.56	30.94
S0	89.34 Yrs.	1.0549E+11	613.36	1.63	33.26
SQ	49.00 Yrs.	1.3213E+11	548.04	1.82	100.00
R2	70.09 Yrs.	1.4384E+11	525.25	1.90	42.26
S0.5	77.00 Yrs.	1.4626E+11	520.89	1.92	40.18
L1	87.16 Yrs.	1.4961E+11	515.04	1.94	38.51
L1.5	75.78 Yrs.	1.9306E+11	453.38	2.21	46.25
R2.5	61.94 Yrs.	2.2541E+11	419.60	2.38	57.15
S1	67.22 Yrs.	2.2594E+11	419.11	2.39	50.38
S5	48.25 Yrs.	2.3161E+11	413.94	2.42	99.98
L2	66.44 Yrs.	2.8085E+11	375.90	2.66	57.10
S1.5	61.69 Yrs.	2.9774E+11	365.09	2.74	59.80
L5	48.97 Yrs.	3.0135E+11	362.89	2.76	97.74
R3	56.00 Yrs.	3.7752E+11	324.23	3.08	75.96
S2	57.03 Yrs.	4.1615E+11	308.81	3.24	70.98
L3	56.72 Yrs.	4.1640E+11	308.72	3.24	74.66
L4	51.41 Yrs.	4.5734E+11	294.57	3.39	89.80
R5	48.81 Yrs.	4.7203E+11	289.95	3.45	100.00
S4	49.19 Yrs.	5.2451E+11	275.07	3.64	98.54
S3	52.09 Yrs.	5.6586E+11	264.83	3.78	88.19
R4	51.06 Yrs.	6.7399E+11	242.66	4.12	96.60
O3	201.00 Yrs.	1.9341E+13	.00	.00	26.80
O4	201.00 Yrs.	1.0518E+14	.00	.00	35.46

Louisville Gas & Electric - Gas Div.

All Divisions

376.00 MAINS

Simulated Plant Record Analysis Calculated As Of 12/31/2002

Simulated Balances Method

No. Of Test Points -	5
Interval Between Test Points -	1
First Test Point -	1983
Last Test Point -	1987

Curve Type	Average Service Life	Sum Of Squares Difference	Conformance Index	Index Of Variation	Ret Exp Index
S2	54.31 Yrs.	1.2207E+10	1352.16	.74	76.91
R3	53.44 Yrs.	1.2333E+10	1345.27	.74	83.18
L3	54.16 Yrs.	1.2545E+10	1333.85	.75	78.58
S1.5	59.03 Yrs.	1.6528E+10	1162.07	.86	64.76
L2	63.69 Yrs.	1.9277E+10	1076.01	.93	60.70
S3	49.56 Yrs.	1.9877E+10	1059.65	.94	92.87
L4	49.16 Yrs.	2.0498E+10	1043.48	.96	92.83
L5	47.28 Yrs.	2.1417E+10	1020.85	.98	98.71
S4	47.06 Yrs.	2.3260E+10	979.58	1.02	99.52
S1	64.56 Yrs.	2.6745E+10	913.52	1.09	54.13
S5	46.72 Yrs.	3.2674E+10	826.49	1.21	100.00
R2.5	59.56 Yrs.	3.6117E+10	786.11	1.27	62.86
L1.5	73.06 Yrs.	3.9295E+10	753.66	1.33	49.00
R4	48.47 Yrs.	5.4427E+10	640.38	1.56	99.26
S0.5	74.63 Yrs.	5.7290E+10	624.17	1.60	42.38
L1	84.44 Yrs.	5.8194E+10	619.30	1.61	40.32
R2	68.00 Yrs.	7.1473E+10	558.82	1.79	45.23
R5	46.75 Yrs.	7.7632E+10	536.19	1.86	100.00
S0	87.28 Yrs.	8.2986E+10	518.61	1.93	34.45
L0.5	104.13 Yrs.	9.7398E+10	478.70	2.09	31.83
S6	47.28 Yrs.	1.1725E+11	436.30	2.29	100.00
R1.5	83.75 Yrs.	1.1833E+11	434.30	2.30	31.06
L0	128.73 Yrs.	1.1958E+11	432.03	2.31	26.78
S.5	120.81 Yrs.	1.3951E+11	399.98	2.50	24.39
R1	104.47 Yrs.	1.4452E+11	392.99	2.54	24.44
R0.5	135.91 Yrs.	1.6221E+11	370.94	2.70	21.01
O2	192.34 Yrs.	1.6960E+11	362.77	2.76	19.72
O1	171.22 Yrs.	1.6970E+11	362.66	2.76	19.71
SC	171.22 Yrs.	1.6970E+11	362.66	2.76	19.71
SQ	48.00 Yrs.	3.5047E+12	79.80	12.53	100.00
O3	201.00 Yrs.	1.1608E+13	.00	.00	26.80
O4	201.00 Yrs.	6.2230E+13	.00	.00	35.46

Kentucky Utilities
Electric Division

Summary of Original Cost of Utility Plant in Service as of December 31, 2002
and Related Annual Depreciation Expense Under Present and Proposed Rates

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates Rate % (d)	Present Rates Annual Accrual (e)	Proposed Rates: Proposed Plant Only Rates Rate %	Proposed Plant Only Rates Annual Accrual	Proposed Gross Salv Rates Rate %	Proposed Gross Salv Rates Annual Accrual	Proposed COR Rates Rate % (f)	Proposed COR Rates Annual Accrual (g)	Total Proposed Rates Rate %	Total Proposed Rates Annual Accrual	Net Change Depr. Exp (h)
	DEPRECIABLE PLANT												
	STEAM PLANT												
311.00	Structures and Improvements	154,711,332.22	2.97%	4,594,926.57	1.31%	2,026,718.45	-0.03%	-46,413.40	0.42%	649,787.60	1.70%	2,630,092.65	-1,964,833.92
312.00	Boiler Plant Equipment	1,024,872,088.49	2.79%	28,593,931.27	2.90%	29,721,290.57	-0.01%	-102,487.21	0.24%	2,459,693.01	3.13%	32,078,496.37	3,484,565.10
314.00	Turbogenerator Units	191,722,845.06	2.51%	4,812,243.41	1.92%	3,681,078.63	-0.33%	-632,685.39	0.16%	306,756.55	1.75%	3,355,149.79	-1,457,093.62
315.00	Accessory Electric Equipment	81,289,114.47	2.48%	2,015,970.04	1.29%	1,048,629.58	0.11%	89,418.03	0.40%	325,156.46	1.80%	1,463,204.06	-552,765.98
316.00	Miscellaneous Power Plant Equipment	20,719,081.14	2.93%	607,069.08	2.61%	540,768.02	-0.04%	-8,287.63	-0.09%	-18,847.17	2.48%	513,833.21	-93,235.87
	Total Steam Production Plant	1,473,314,461.38	2.76%	40,624,140.37	2.51%	37,018,485.25	-0.05%	-700,455.60	0.25%	3,722,746.45	2.72%	40,040,776.08	-583,364.29
	HYDRAULIC PLANT												
330.10	Land Rights	879,311.47	1.59%	13,981.05	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	-13,981.05
331.00	Structures and Improvements	497,427.20	1.71%	8,506.01	1.73%	8,605.49	0.00%	0.00	0.28%	1,392.80	2.01%	9,998.29	1,492.28
332.00	Reservoirs, Dams and Waterways	8,142,176.24	1.62%	131,903.26	1.93%	157,144.00	0.00%	0.00	-0.40%	-32,568.70	1.53%	124,575.30	-7,327.96
333.00	Waterwheel, Turbines and Generators	532,629.23	1.78%	9,480.80	-0.74%	-3,941.46	0.00%	0.00	0.73%	3,888.19	-0.01%	-53.26	-9,534.06
334.00	Accessory Electric Equipment	349,869.04	2.25%	7,872.05	10.51%	36,771.24	0.00%	0.00	-4.78%	-16,723.74	5.73%	20,047.50	12,175.45
335.00	Miscellaneous Power Plant Equipment	163,126.48	1.94%	3,164.65	5.45%	8,890.39	0.00%	0.00	-1.32%	-2,153.27	4.13%	6,737.12	3,572.47
336.00	Roads, Railroads and Bridges	48,145.91	1.61%	775.15	1.32%	635.53	0.00%	0.00	-0.52%	-250.36	0.80%	385.17	-389.98
	Total Hydraulic Plant	10,612,685.57	1.66%	175,682.97	1.96%	208,105.19	0.00%	0.00	-0.44%	-46,415.08	1.52%	161,690.12	-13,992.85
	OTHER PRODUCTION PLANT												
340.10	Land Rights	176,409.31	3.39%	5,980.28	1.64%	2,893.11	0.00%	0.00	0.00%	0.00	1.64%	2,893.11	-3,087.17
341.00	Structures and Improvements	21,174,956.60	3.37%	713,596.04	3.92%	830,058.30	-1.09%	-230,807.03	0.25%	52,937.39	3.08%	652,188.66	-61,407.38
342.00	Fuel Holders, Producers and Accessory	18,325,891.25	3.37%	617,582.54	3.64%	667,062.44	-0.85%	-155,770.08	0.73%	133,779.01	3.52%	645,071.37	27,488.83
343.00	Prime Movers	251,279,024.10	3.42%	8,593,742.82	3.99%	10,026,033.06	-1.32%	-3,316,883.12	0.08%	201,023.22	2.75%	6,910,173.16	-1,683,569.46
344.00	Generators	47,479,932.03	3.15%	1,495,617.86	3.16%	1,500,365.85	-0.01%	-4,747.99	0.40%	189,919.73	3.55%	1,685,537.59	189,919.73
345.00	Accessory Electric Equipment	19,116,795.73	3.32%	634,677.62	3.25%	621,295.86	-0.07%	-13,381.76	0.11%	21,028.48	3.29%	628,942.58	-5,735.04
346.00	Miscellaneous Power Plant Equipment	4,681,000.69	3.41%	159,622.12	4.12%	192,857.23	-1.99%	-93,151.91	0.06%	2,808.60	2.19%	102,513.92	-57,108.20
	Total Other Production Plant	362,234,009.71	3.37%	12,220,819.08	3.82%	13,840,565.85	-1.05%	-3,814,741.89	0.17%	601,496.43	2.93%	10,627,320.39	-1,593,498.69
	TRANSMISSION PLANT												
350.10	Land Rights	22,991,433.46	1.34%	308,085.21	2.14%	492,016.68	-0.56%	-128,752.03	0.86%	197,726.33	2.44%	560,990.98	252,905.77
	Structures and Improvements												
352.10	Struct. and Improve. - Non Sys. Control/Com.	6,426,546.76	2.65%	170,303.49	2.34%	150,381.19	-0.85%	-54,625.65	5.48%	352,174.76	6.97%	447,930.31	277,626.82
352.20	Struct. and Improve. - Sys. Control/Com.	1,166,434.25	2.65%	30,910.51	2.33%	27,177.92	-0.87%	-10,147.98	8.36%	97,513.90	9.82%	114,543.84	83,633.33
	Total Account 352	7,592,981.01	2.65%	201,214.00	2.34%	177,559.11	-0.85%	-64,773.63	5.92%	449,688.66	7.41%	562,474.15	361,260.15
	Station Equipment												
353.10	Station Equipment - Non Sys. Control/Com.	146,527,337.37	2.21%	3,238,254.16	2.04%	2,989,157.68	-1.45%	-2,124,646.39	0.10%	146,527.34	0.69%	1,011,038.63	-2,227,215.53
353.20	Station Equip - Sys.Control/Com. (Microwave)	14,284,914.20	6.18%	882,807.70	6.89%	984,230.59	-0.01%	-1,428.49	-0.68%	-97,137.42	6.20%	885,664.68	2,856.98
	Total Account 353	160,812,251.57	2.56%	4,121,061.86	2.47%	3,973,388.27	-1.32%	-2,126,074.88	0.03%	49,389.92	1.18%	1,896,703.31	-2,224,358.55
354.00	Towers and Fixtures	60,533,459.11	2.84%	1,719,150.24	1.88%	1,138,029.03	-1.30%	-786,934.97	1.86%	1,125,922.34	2.44%	1,477,016.40	-242,133.84
355.00	Poles and Fixtures	74,915,940.37	4.03%	3,019,112.40	2.56%	1,917,848.07	-0.39%	-292,172.17	1.56%	1,168,688.67	3.73%	2,794,364.58	-224,747.82
356.00	Overhead Conductors and Devices	122,030,093.52	3.25%	3,965,978.04	1.79%	2,184,338.67	-3.17%	-3,868,353.96	1.32%	1,610,797.23	-0.06%	-73,218.06	-4,039,196.10
357.00	Underground Conduit	435,926.80	2.01%	8,762.13	2.07%	9,023.68	0.02%	87.19	-0.05%	-217.96	2.04%	8,892.91	130.78
358.00	Underground Conductors and Devices	1,114,761.90	3.52%	39,239.62	3.08%	34,334.67	0.00%	0.00	-0.14%	-1,560.67	2.94%	32,774.00	-6,465.62
	Total Transmission Plant	450,426,847.74	2.97%	13,382,603.50	2.20%	9,926,538.18	-1.61%	-7,266,974.45	1.02%	4,600,434.52	1.61%	7,259,998.27	-6,122,605.23

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and Related Annual Depreciation Expense Under Present and Proposed Rates

Account No. (a)	Description (b)	Original Cost 12/31/02 (c)	Present Rates: Rate % (d)	Present Rates: Annual Accrual (e)	Proposed Plant Only Rates: Rate %	Proposed Plant Only Rates: Annual Accrual	Proposed Gross Salv Rates: Rate %	Proposed Gross Salv Rates: Annual Accrual	Proposed COR Rates: Rate % (f)	Proposed COR Rates: Annual Accrual (g)	Total Proposed Rates: Rate %	Total Proposed Rates: Annual Accrual	Net Change Depr Exp (h)
	DISTRIBUTION PLANT												
360.10	Land Rights	1,423,182.13	1.14%	16,224.28	1.73%	24,621.05	-1.88%	-26,755.82	0.77%	10,958.50	0.62%	8,823.73	-7,400.55
361.00	Structures and Improvements	3,798,329.41	1.89%	71,788.43	1.85%	70,269.09	-0.41%	-15,573.15	0.40%	15,193.32	1.84%	69,889.26	-1,899.17
362.00	Station Equipment	92,514,069.32	2.24%	2,072,315.15	1.94%	1,794,772.94	-1.16%	-1,073,163.20	0.11%	101,765.48	0.89%	823,375.22	-1,248,939.93
364.00	Poles, Towers and Fixtures	167,558,546.62	3.52%	5,898,060.84	2.29%	3,837,090.72	-1.90%	-3,183,612.39	1.07%	1,792,876.45	1.46%	2,446,354.78	-3,451,706.06
365.00	Overhead Conductors and Devices	160,511,631.53	3.02%	4,847,451.27	2.19%	3,515,204.73	-1.68%	-2,696,595.41	1.19%	1,910,088.42	1.70%	2,728,697.74	-2,118,753.53
366.00	Underground Conduit	1,551,966.69	1.75%	27,159.42	1.84%	28,556.19	-0.23%	-3,569.52	0.32%	4,966.29	1.93%	29,952.96	2,793.54
367.00	Underground Conductors and Devices	49,804,065.26	3.29%	1,638,553.75	3.27%	1,628,592.93	-3.45%	-1,718,240.25	0.68%	338,667.64	0.50%	249,020.33	-1,389,533.42
368.00	Line Transformers	209,705,230.76	2.41%	5,053,896.06	2.28%	4,781,279.26	-0.53%	-1,111,437.72	0.52%	1,090,467.20	2.27%	4,760,308.74	-293,587.32
369.00	Services	81,680,930.54	3.75%	3,063,034.90	2.76%	2,254,393.68	-0.87%	-710,624.10	1.86%	1,519,265.31	3.75%	3,063,034.90	0.00
370.00	Meters	61,133,035.49	2.79%	1,705,611.69	2.35%	1,436,626.33	-0.11%	-67,246.34	-0.11%	-67,246.34	2.13%	1,302,133.66	-403,478.03
371.00	Installations on customers' Premises	18,270,303.32	6.27%	1,145,548.02	5.77%	1,054,196.50	-2.09%	-381,849.34	2.73%	498,779.28	6.41%	1,171,126.44	25,578.42
373.00	Street Lighting and Signal Systems	45,406,823.49	3.85%	1,748,155.00	3.45%	1,566,528.51	-1.75%	-794,615.91	0.69%	313,305.70	2.39%	1,085,218.30	-662,936.70
	Total Distribution Plant	893,357,914.56	3.05%	27,287,798.81	2.46%	21,992,131.93	-1.32%	-11,783,283.15	0.84%	7,529,087.25	1.99%	17,737,936.06	-9,549,862.75
	GENERAL PLANT												
	Structures and Improvements												
390.10	Struct. And Improve. To Owned Property	28,987,368.24	1.76%	510,177.68	1.63%	472,494.10	-1.45%	-420,316.84	0.06%	17,392.42	0.24%	69,569.68	-440,608.00
390.20	Improvements to Leased Property	694,489.17	0.00%	0.00	2.85%	19,792.94	-0.45%	-3,125.20	0.00%	0.00	2.40%	16,667.74	16,667.74
	Total Account 390	29,681,857.41	1.72%	510,177.68	1.66%	492,287.04	-1.43%	-423,442.04	0.06%	17,392.42	0.29%	86,237.42	-423,940.26
	Office Furniture and Equipment												
391.10	Office Equipment	8,168,471.98	5.82%	359,005.07	5.63%	347,284.97	-0.19%	-11,720.10	0.06%	3,701.08	5.50%	339,265.96	-19,739.11
391.30	Cash Processing Equipment	369,383.94	10.00%	36,938.39	4.88%	18,025.94	0.00%	0.00	0.00%	0.00	4.88%	18,025.94	-18,912.45
	Total Account 391	8,537,855.92	6.06%	395,943.46	5.59%	365,310.91	-0.18%	-11,720.10	0.06%	3,701.08	5.46%	357,291.90	-38,651.56
393.00	Stores Equipment	571,858.05	2.87%	16,412.33	2.04%	11,665.90	0.10%	571.86	0.00%	0.00	2.14%	12,237.76	-4,174.57
394.00	Tools, Shop and Garage Equipment	3,700,720.83	2.74%	101,399.75	2.62%	96,958.89	-1.16%	-42,928.36	0.00%	0.00	1.46%	54,030.52	-47,369.23
395.00	Laboratory Equipment	3,306,885.77	3.16%	104,497.59	2.57%	84,986.96	-0.62%	-20,502.69	0.01%	330.69	1.96%	64,814.96	-39,682.63
396.00	Power Operated Equipment	200,677.14	3.56%	7,144.11	4.02%	8,067.22	0.00%	0.00	0.00%	0.00	4.02%	8,067.22	923.11
	Communication Equipment												
397.10	Carrier Communication Equipment	3,093,194.70	3.55%	109,808.41	4.11%	127,130.30	-0.20%	-6,186.39	0.00%	0.00	3.91%	120,943.91	11,135.50
397.20	Remote Control Communication Equipment	3,889,910.58	3.55%	138,091.83	4.27%	166,099.18	-0.07%	-2,722.94	0.00%	0.00	4.20%	163,376.24	25,284.41
397.30	Mobile Communication Equipment	4,579,895.62	3.55%	162,586.29	4.95%	226,704.83	-0.05%	-2,289.95	0.00%	0.00	4.90%	224,414.89	61,828.60
	Total Account 397	11,563,000.90	3.55%	410,486.53	4.50%	519,934.31	-0.10%	-11,199.28	0.00%	0.00	4.40%	508,735.04	98,248.51
398.00	Miscellaneous Equipment	457,348.94	5.19%	23,736.41	4.08%	18,659.84	-4.61%	-21,083.79	0.02%	91.47	-0.51%	-2,332.48	-26,068.89
	Total General Plant	58,020,204.96	2.80%	1,569,797.86	2.85%	1,597,871.07	-0.95%	-530,304.40	0.04%	21,515.66	1.94%	1,089,082.34	-480,715.52
	Sub-Total Depreciable Plant	3,245,966,123.92	2.93%	95,260,842.59	2.61%	84,583,697.47	-0.74%	-24,095,759.49	0.51%	16,428,865.23	2.37%	76,916,803.26	-18,344,039.33

Kentucky Utilities
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	Other Plant (Not Studied)												
391.20	Non PC Computer Equipment	9,611,731.44											
391.40	Personal Computers	9,814,322.00											
392.00	Transportation Equipment - Cars & Trucks	23,749,238.51											
	Total Other Plant (Not Studied)	43,175,291.95											
	Total Depreciable Plant	3,289,141,415.87											
	NON-DEPRECIABLE PLANT												
	INTANGIBLE PLANT												
301.00	Organization	44,455.58											
302.00	Franchises and Consents	81,350.32											
303.00	Miscellaneous Intangible Plant	17,297,387.08											
	Total Intangible Plant	17,423,192.98											
	LAND & LAND RIGHTS												
310.20	Production Land	10,478,524.55											
330.20	Hydraulic Plant	13,479.47											
340.20	Other Production Land	98,602.74											
350.20	Transmission Land	1,162,528.04											
360.20	Distribution Land	1,584,825.82											
389.20	Land	2,826,347.43											
	Total Land	16,164,308.05											
	Total Non-Depreciable Plant	33,587,501.03											
	Total Electric Plant in Service	3,322,728,916.90											

Louisville Gas and Electric
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	DEPRECIABLE PLANT												
	STEAM PLANT												
311.00	Structures and Improvements	321,815,851.53	2.56%	8,233,365.80	2.06%	6,625,286.54	0.00%	0.00	0.13%	418,100.61	2.19%	7,043,387.15	-1,189,978.65
312.00	Boiler Plant Equipment	1,121,811,543.02	3.07%	34,433,474.37	3.20%	35,891,569.38	-0.02%	-224,322.31	0.40%	4,486,446.17	3.58%	40,153,693.24	5,720,218.87
314.00	Turbogenerator Units	188,594,179.55	2.64%	4,978,886.34	2.22%	4,186,790.79	-0.01%	-18,859.42	0.12%	226,313.02	2.33%	4,394,244.38	-584,641.96
315.00	Accessory Electric Equipment	163,988,443.18	2.74%	4,493,283.34	2.46%	4,034,115.70	-0.02%	-32,797.69	0.09%	147,589.60	2.53%	4,148,907.61	-344,375.73
316.00	Miscellaneous Power Plant Equipment	9,532,034.04	2.69%	256,411.72	2.86%	272,616.17	-0.09%	-8,578.83	0.44%	41,940.95	3.21%	305,978.29	49,566.58
	Total Steam Production Plant	1,805,342,051.32	2.90%	52,395,421.57	2.83%	51,010,378.58	-0.02%	-284,558.25	0.29%	5,320,390.34	3.10%	56,046,210.68	3,650,789.11
	HYDRAULIC PLANT												
	Project 289												
331.10	Structures and Improvements	4,995,148.82	1.81%	90,412.19	0.23%	11,488.84	0.00%	0.00	0.64%	31,968.95	0.87%	43,457.79	-46,954.40
332.10	Reservoirs, Dams and Waterways	303,530.35	1.81%	5,493.90	1.26%	3,824.48	0.00%	0.00	1.35%	4,097.66	2.61%	7,922.14	2,428.24
333.10	Waterwheel, Turbines and Generators	2,316,031.31	1.81%	41,920.17	0.00%	0.00	0.00%	0.00	0.15%	3,474.05	0.15%	3,474.05	-38,446.12
334.10	Accessory Electric Equipment	1,304,908.02	1.81%	23,618.84	1.22%	15,919.88	0.00%	0.00	0.15%	1,957.36	1.37%	17,877.24	-5,741.60
335.10	Miscellaneous Power Plant Equipment	151,460.96	1.81%	2,741.44	0.30%	454.38	-0.12%	-181.75	-0.60%	-908.77	-0.42%	-636.14	-3,377.58
336.10	Roads, Railroads and Bridges	178,846.99	1.81%	3,237.13	0.17%	304.04	0.00%	0.00	4.05%	7,243.30	4.22%	7,547.34	4,310.21
	Total Project 289	9,249,926.45	1.81%	167,423.67	0.35%	31,991.63	0.00%	-181.75	0.52%	47,832.55	0.86%	79,642.43	-87,781.24
	Other Than Project 289												
331.00	Structures and Improvements	65,796.14	1.76%	1,158.01	2.01%	1,322.50	0.00%	0.00	0.39%	256.60	2.40%	1,579.11	421.10
335.00	Miscellaneous Power Plant Equipment	7,813.67	1.76%	137.52	5.35%	418.03	-0.19%	-14.85	-1.82%	-142.21	3.34%	260.98	123.46
336.00	Roads, Railroads and Bridges	1,133.98	1.76%	19.96	1.60%	18.14	0.00%	0.00	4.05%	45.93	5.65%	64.07	44.11
	Total Other Than Project 289	74,743.79	1.76%	1,315.49	2.35%	1,758.68	-0.02%	-14.85	0.21%	160.32	2.55%	1,904.15	588.66
	Total Hydraulic Plant	9,324,670.24	1.81%	168,739.16	0.36%	33,750.30	0.00%	-196.60	0.51%	47,992.88	0.87%	81,546.58	-87,192.57
	OTHER PRODUCTION PLANT												
341.00	Structures and Improvements	6,641,030.83	3.25%	215,833.50	3.38%	224,466.84	0.00%	0.00	0.66%	43,830.80	4.04%	268,297.65	52,464.14
342.00	Fuel Holders, Producers and Accessory	5,833,515.86	3.31%	193,089.38	3.42%	199,506.24	0.00%	0.00	0.35%	20,417.31	3.77%	219,923.55	26,834.17
343.00	Prime Movers	100,745,869.68	3.36%	3,385,061.22	3.48%	3,505,956.26	0.00%	0.00	0.13%	130,969.63	3.61%	3,636,925.90	251,864.67
344.00	Generators	26,258,224.54	2.59%	680,088.02	3.52%	924,289.50	0.00%	0.00	0.32%	84,026.32	3.84%	1,008,315.82	328,227.81
345.00	Accessory Electric Equipment	9,281,384.05	3.26%	302,573.12	3.62%	335,986.10	0.00%	0.00	0.11%	10,209.52	3.73%	346,195.63	43,622.51
346.00	Miscellaneous Power Plant Equipment	3,678,700.81	3.41%	125,443.70	3.63%	133,536.84	0.00%	0.00	0.07%	2,575.09	3.70%	136,111.93	10,668.23
	Total Other Production Plant	152,438,725.77	3.22%	4,902,088.93	3.49%	5,323,741.80	0.00%	0.00	0.19%	292,028.67	3.68%	5,615,770.47	713,681.53
	TRANSMISSION PLANT												
	Project 289												
353.10	Station Equipment - Non Sys. Control/Com.	0.00	2.25%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00
356.10	Overhead Conductors and Devices	0.00	2.25%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00
	Total Project 289	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00
	Other Than Project 289												
350.10	Land Rights	2,592,773.81	1.31%	33,965.34	1.27%	32,928.23	-4.50%	-116,674.82	0.00%	0.00	-3.23%	-83,746.59	-117,711.93
352.10	Struct. and Improve. - Non Sys. Control/Com.	2,907,082.83	2.02%	58,723.07	1.52%	44,187.66	-0.02%	-581.42	0.23%	6,686.29	1.73%	50,292.53	-8,430.54
353.10	Station Equipment - Non Sys. Control/Com.	116,591,838.76	2.10%	2,448,428.57	1.54%	1,795,514.29	-0.40%	-466,367.35	0.43%	501,344.90	1.57%	1,830,491.84	-617,936.73
354.00	Towers and Fixtures	23,879,707.58	2.40%	573,112.98	1.41%	336,703.88	-0.61%	-145,666.22	1.71%	408,343.00	2.51%	599,380.66	26,267.68
355.00	Poles and Fixtures	26,398,367.92	2.95%	778,751.85	2.42%	638,840.50	-0.82%	-216,466.62	1.31%	345,818.62	2.91%	768,192.51	-10,559.35
356.00	Overhead Conductors and Devices	33,372,312.49	2.91%	971,134.29	2.20%	734,190.87	-0.87%	-290,339.12	1.13%	377,107.13	2.46%	820,958.89	-150,175.41
357.00	Underground Conduit	1,868,318.57	1.98%	36,992.71	1.93%	36,058.55	-0.03%	-560.50	0.00%	0.00	1.90%	35,498.05	-1,494.65
358.00	Underground Conductors and Devices	5,312,495.53	2.47%	131,216.64	3.44%	182,749.85	-0.10%	-5,312.50	6.67%	354,343.45	10.01%	531,780.80	400,562.16
	Total Other Than Project 289	212,922,895.49		5,032,327.46	1.79%	3,801,173.82	-0.58%	-1,241,968.53		1,993,643.39	2.14%	4,552,848.69	-479,478.77
	Total Transmission Plant	212,922,895.49	2.36%	5,032,327.46	1.79%	3,801,173.82	-0.58%	-1,241,968.53	0.94%	1,993,643.39	2.14%	4,552,848.69	-479,478.77

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	DISTRIBUTION PLANT												
361.00	Structures and Improvements	5,969,141.37	2.21%	131,918.02	1.79%	106,847.63	-0.15%	-8,953.71	0.46%	27,458.05	2.10%	125,351.97	-6,566.06
362.00	Station Equipment	77,088,050.08	2.57%	1,981,162.89	2.17%	1,672,810.69	-0.27%	-208,137.74	0.19%	146,467.30	2.09%	1,611,140.25	-370,022.64
364.00	Poles, Towers and Fixtures	92,365,173.96	3.55%	3,278,963.68	4.56%	4,211,851.93	-2.70%	-2,493,859.70	3.07%	2,835,610.84	4.93%	4,553,603.08	1,274,639.40
365.00	Overhead Conductors and Devices	141,726,406.02	3.82%	5,413,948.71	3.79%	5,371,430.79	-2.42%	-3,429,779.03	2.71%	3,840,785.60	4.08%	5,782,437.37	368,488.66
366.00	Underground Conduit	52,616,554.86	1.49%	783,986.67	1.37%	720,846.80	-0.46%	-242,036.15	0.56%	294,652.71	1.47%	773,463.36	-10,523.31
367.00	Underground Conductors and Devices	77,051,441.80	3.08%	2,373,184.41	3.26%	2,511,877.00	-2.37%	-1,826,119.17	1.54%	1,186,592.20	2.43%	1,872,350.04	-500,834.37
	Line Transformers												
368.10	Line Transformers	86,278,030.41	2.70%	2,329,506.82	2.48%	2,139,695.15	-0.64%	-552,179.39	0.98%	845,524.70	2.82%	2,433,040.46	103,533.64
368.20	Line Transformers Installations	8,778,300.38	2.70%	237,014.11	2.51%	220,335.34	-0.60%	-52,669.80	0.93%	81,638.19	2.84%	249,303.73	12,289.62
	Total Account 368	95,056,330.79	2.70%	2,566,520.93	2.48%	2,360,030.49	-0.64%	-604,849.20	0.98%	927,162.89	2.82%	2,682,344.19	115,823.26
	Services												
369.10	Underground Services	2,342,286.94	3.21%	75,187.41	2.19%	51,296.08	-1.85%	-43,332.31	3.46%	81,043.13	3.80%	89,006.90	13,819.49
369.20	Overhead Services	20,427,859.34	4.46%	911,082.53	2.89%	590,365.13	-1.58%	-322,760.18	3.49%	712,932.29	4.80%	980,537.25	69,454.72
	Total Account 369	22,770,146.28	4.33%	986,269.94	2.82%	641,661.22	-1.61%	-366,092.49	3.49%	793,975.42	4.70%	1,069,544.15	83,274.21
	Meters & Installations												
370.10	Meters	25,219,577.02	3.37%	849,899.75	3.35%	844,855.83	-0.36%	-90,790.48	0.77%	194,190.74	3.76%	948,256.10	98,356.35
370.20	Meter Installations	8,352,742.98	3.37%	281,487.44	3.26%	272,299.42	-0.28%	-23,387.68	0.72%	60,139.75	3.70%	309,051.49	27,564.05
	Total Account 370	33,572,320.00	3.37%	1,131,387.18	3.33%	1,117,155.25	-0.34%	-114,178.16	0.76%	254,330.49	3.75%	1,257,307.59	125,920.40
	Street Lighting												
373.10	Overhead Street Lighting	22,600,470.37	5.93%	1,340,207.89	4.22%	953,739.85	-3.48%	-786,496.37	4.35%	983,120.46	5.09%	1,150,363.94	-189,843.95
373.20	Underground Street Lighting	32,156,589.32	4.34%	1,395,595.98	3.48%	1,119,049.31	-1.23%	-395,526.05	1.90%	610,975.20	4.15%	1,334,498.46	-61,097.52
373.40	Street Lighting Transformers	87,546.43	0.00%	0.00	5.47%	4,788.79	-1.41%	-1,234.40	0.02%	17.51	4.08%	3,571.89	3,571.89
	Total Account 373	54,844,606.12	4.99%	2,735,803.87	3.79%	2,077,577.95	-2.16%	-1,183,256.82	2.91%	1,594,113.17	4.54%	2,488,434.29	-247,369.58
	Total Distribution Plant	653,060,171.28	3.27%	21,383,146.29	3.18%	20,792,089.75	-1.60%	-10,477,262.16	1.82%	11,901,148.67	3.40%	22,215,976.27	832,829.98
	GENERAL PLANT												
392.20	Transportation Equipment - Trailers	590,217.25	2.60%	15,345.65	2.42%	14,283.26	-0.49%	-2,892.06	0.00%	0.00	1.93%	11,391.19	-3,954.46
394.00	Tools, Shop and Garage Equipment	2,687,990.96	3.50%	94,079.68	2.80%	75,263.75	-0.13%	-3,494.39	0.00%	0.00	2.67%	71,769.36	-22,310.33
395.00	Laboratory Equipment	1,548,796.71	2.70%	41,817.51	1.55%	24,006.35	-0.12%	-1,858.56	0.00%	0.00	1.43%	22,147.79	-19,669.72
396.20	Power Operated Equipment - Other	145,466.83	2.11%	3,069.35	0.62%	901.89	-0.63%	-916.44	0.00%	0.00	-0.01%	-14.55	-3,083.90
	Total General Plant	4,972,471.75	3.10%	154,312.19	2.30%	114,455.25	-0.18%	-9,161.45	0.00%	0.00	2.12%	105,293.80	-49,018.40
	Sub-Total Depreciable Plant	2,838,060,985.85	2.96%	84,036,035.61	2.86%	81,075,589.50	-0.42%	-12,013,146.98	0.69%	19,555,203.96	3.12%	88,617,646.48	4,581,610.87

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	Other Plant (Not Studied)												
392.10	Transportation Equipment - Cars & Trucks	12,069,086.02											
396.10	Power Operated Equipment - Hourly Rated	2,337,037.87											
	Total Other Plant (Not Studied)	14,406,123.89											
	Total Depreciable Plant	2,852,467,109.74											
	NON-DEPRECIABLE PLANT												
	INTANGIBLE PLANT												
301.00	Organization	2,240.29											
302.00	Franchises and Consents	100.00											
	Total Intangible Plant	2,340.29											
	LAND												
310.20	Production Land	5,053,819.49											
330.20	Hydraulic Plant	13.00											
340.20	Other Production Land	41,125.94											
350.20	Transmission Land	888,237.78											
360.20	Distribution Land	2,629,414.76											
	Total Land	8,612,610.97											
	Total Non-Depreciable Plant	8,614,951.26											
	Total Utility Plant In Service	2,861,082,061.00											