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BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

CASE NO. ER-82-66

In the matter of Kansas City Power & Light  
Company of Kansas City, Missouri, for  
authority to file tariffs increasing rates  
for electric service provided to customers  
in the Missouri service area of the Company.

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of the Missouri Public Service Commission.

Introduction

On August 26, 1981, the Kansas City Power & Light Company (hereinafter Company or KCPL) filed with the Missouri Public Service Commission (hereinafter Commission) revised tariffs reflecting increased rates for electric service provided to customers in the Missouri service area of the Company. The revised tariffs bore a requested effective date of September 26, 1981, and are designed to increase the Company's jurisdictional gross annual revenues by approximately \$62.3 million, exclusive of gross receipts taxes.

On September 14, 1981, the Commission suspended the revised rate schedules. By Second Suspension Order and Notice of Consolidated Proceedings dated October 6, 1981, the Commission further suspended the Company's revised electric rate schedules for a period of six months beyond January 4, 1982, to July 24, 1982. Those orders established a schedule of proceedings for the time of the filing of the Company's evidence, the date by which applications to intervene were to be filed, the date by which Staff and all other parties were to file evidence and, finally, dates for prehearing conference and hearing.

By its order of January 27, 1982, the Commission granted the applications to intervene filed by Armco Inc. (hereinafter Armco), the United States Department of Energy (hereinafter DOE), General Motors Corporation (hereinafter GM), and Kansas City, Missouri. On March 15, 1982, the Commission issued its order denying the petition for leave to intervene and the motion for leave to file petition out of time filed by the Missouri Public Interest Research Group, on February 23, 1982.

To permit the Company's customers an opportunity to testify concerning the proposed increases, local public hearings were held on March 26, 1982, in Kansas City, Missouri.

Before the hearing, the Commission heard oral arguments on a motion filed by Staff for the production of documents. The documents sought to be produced were copies of KCPL's presentations to the Standard & Poor's and Moody's Investor's Service, Inc., rating agencies for the years 1979, 1980 and 1981. The Commission subsequently ordered the Company to provide Staff complete and unedited copies of the disputed documents. By that order the Commission also provided for a procedure to be used at the hearing in the event that any of the documents considered proprietary and confidential by the Company were to be used for cross-examination or offered as evidence.

At the outset of the hearing on April 20, 1982, the parties submitted a hearing memorandum containing an agreement for true-up hearing and for the purpose of establishing the matters in issue in this case.

All parties have been afforded an opportunity to file briefs and reply briefs, and those documents have been considered in the deliberations in this matter.

#### Findings of Fact

The Missouri Public Service Commission, having considered all of the competent and substantial evidence upon the whole record, makes the following findings of fact:

#### THE COMPANY

Kansas City Power & Light Company is a public utility corporation duly organized and existing under the laws of the State of Missouri. The Company is an electric corporation as defined in Chapters 386 and 393, R.S.Mo. 1978, with its administrative offices and principal place of business located at 1330 Baltimore Avenue, Kansas City, Missouri 64105. It is engaged principally in the generation, transmission, distribution and sale of electric energy and to a lesser extent in the furnishing of steam service. Electric energy is distributed and sold to the public on a retail basis in an area in the states of Missouri and Kansas, and steam service is supplied and sold to the public on a retail basis in Kansas City, Missouri.

## ELEMENTS OF COST OF SERVICE

The Company's authorized rates are generally based on its cost of service or its revenue requirements. As elements of its revenue requirements, the Company is authorized to recover all of its reasonable and necessary operating expenses and, in addition, a reasonable rate of return on the value of its property used in public service. It is necessary, therefore, to establish the value of the Company's property and to establish a reasonable return to be applied to the value of its property or rate base which, when added to the allowable operating expenses, results in the total revenue requirements of the Company. By calculating the Company's reasonable level of earnings, it is possible to mathematically calculate the existence and extent of any deficiency between the present earnings and any additional revenue requirement to be allowed in any rate proceeding.

## THE TEST YEAR

The purpose of using a test year is to create or construct a reasonably expected level of revenues, expenses and investment during the future period during which the rates to be determined herein will be in effect. All of the aspects of the test year operations may be adjusted upward or downward to exclude unusual or unreasonable items or to include unusual items, by amortization or otherwise, in order to arrive at a proper allowable level of all of the elements of the Company's operations.

Both Company and Staff have utilized a test period based on actual data for the period ended December 31, 1981.

## TRUE-UP

A true-up hearing was held on July 8, 1982. Exhibits 106, 107, 108 and 109 were presented as the parties' true-up figures as of June 1, 1982.

## MISSOURI NET OPERATING INCOME

Company portrays its net operating income available to be \$47,126,000. Other parties to the proceeding have proposed adjustments which would establish a higher net operating income available to the Company.

#### A. Property Taxes

The Company has included in its case as a current expense property taxes associated with materials and supplies (M&S) inventory and the property taxes associated with the Northeast Steam Generating Plant (NE Plant). The Staff opposes the Company's treatment of the above items.

The Staff contends that the property taxes associated with materials and supplies inventory should be reflected in the accounts that the M&S are ultimately recorded in. Thus, Staff proposes that the M&S that ultimately become plant in service, such as a distribution pole, should have the property taxes associated therewith capitalized and expensed over the life of the asset. Those M&S that do not become plant in service, that is, those that are currently expensed, should have the property taxes associated therewith likewise currently expensed.

The Company argues that the property taxes are an expense incurred to maintain service to current customers. The inventory the Company keeps on hand appears basically to support the day-to-day rendering of service to customers and is not necessarily for the construction of facilities to create new generating capacity or new distribution and transmission lines. The Commission believes this argument is dispositive of the issue since M&S inventory is necessary to maintain current service to the customers of KCPL, and therefore should be treated as a current expense.

As concerns the Company's NE Plant, the Staff opposes the inclusion of any property taxes associated therewith. First, the Staff asserts that the intent of Section 393.135, R.S.Mo. 1978, which relates to property "before it is fully operational and used for service" should be applied to the retirement of the NE Plant. By Staff's interpretation, if a plant while under construction is not used or useful, then a plant that is retired is similarly not used or useful and the ratepayers should bear no current expenses associated with such a plant. Secondly, Staff views property taxes as an expense associated with plant, and since the plant is not allowed in rate base, neither should the property taxes be allowed as an expense. Staff's last reason for excluding property taxes associated with the

NE Plant is Staff's assertion that the Company could have avoided state assessment if the Company had removed the plant from its books when the Company physically retired the plant. Staff notes that the plant would still have incurred a local assessment and Staff still would oppose such an assessment being included in current operating expenses.

The Company argues that the only way KCPL could have avoided property taxes on the NE Plant would have been to dismantle the plant prior to January 1, 1982. Consequently, the property taxes will continue to accrue. The Company maintains that it would cost \$6,000,000 to dismantle the plant, a cost that would be borne by the ratepayers. Therefore, the Company maintains that it is more reasonable and prudent to incur the property tax. The Company also states that it has requested that the State Tax Commission remove the plant from distributable plant records and have the plant locally assessed by Jackson County "in hopes of negotiating the fair value of the retired plant down to a minimal level." (Exhibit 47, page 4.) Furthermore, the Company points out that the Federal Energy Regulatory Commission considers property taxes as a current expense not to be associated with retirement work in progress.

The Commission is of the opinion that the Company has acted in a reasonable and prudent manner in its treatment of the property taxes associated with the NE Plant. The Company has shown it is attempting to mitigate the state assessment. The Commission adopts the position that the property taxes relating to the retirement of plant should be expensed currently rather than deferred.

#### B. Distribution and Construction Standards

Staff proposes to capitalize \$91,000 in expenditures associated with the review and maintenance of transmission and distribution construction standards, alleging that the standards are an integral part of KCPL's ongoing construction program. The Company proposes that the expenditures be allowed as a current expense.

The issue is basically an accounting issue of how to treat a cost in relation to the revenue stream it produces. The Staff maintains that the activity engaged in by KCPL personnel in relation to this issue is one that relates to the

Company's ongoing construction program. The Staff believes that as a construction-related activity, the activity is a cost that affects assets over their life and therefore should be capitalized and amortized over the life of said assets.

The Company maintains that the activity in question is the maintenance of transmission and distribution construction standards. The Company defines maintenance as the review and updating, where appropriate, of existing standards. The Company states that the standards are used for reference with respect to any transmission and distribution construction or maintenance activity. The Company argues that the expenses are incurred to review and update standards that are kept on hand for use when KCPL employees construct or maintain KCPL's transmission and distribution system. The Company points out that the maintenance (review and updating) of the standards is not tied to the level of construction activity, as it is necessary whether construction is currently going on or not. The Company states those standards must be continually available for reference when construction activity or maintenance activity is done.

The Staff accuses the Company of engaging in a semantics game of substituting maintenance for the word construction. The Staff tries to relate the activity as having to do with actual construction and maintenance of the transmission and distribution system. However, the activity involved relates to development of written standards used for construction and maintenance, and not construction and maintenance itself.

Since the activity, review and updating, must be done regardless of whether construction exists (it would be illogical to extend this argument to say regardless of maintenance, since some maintenance is always required) the expense is not directly related to construction. Furthermore, since this is an ongoing process irrespective of the level of construction and maintenance, the expense is more properly a current expense.

C. Administrative and General Salaries and Expenses

The Staff proposes capitalizing 12 percent of administrative and general (A&G) salaries and expenses. The Company is required to account for all activities related to construction and assign them to construction-related accounts. A&G salaries and expenses related to construction are charged to Accounts 920 and 921. The Staff found that less than 1 percent of the A&G expenses charged to Account 920 are associated with the time spent by Messrs. Doyle, Miller and Rasmussen from the Company's financial and corporate planning department. The Staff submits that if a study were done it would be found that the three men listed above spend more than 1 percent of their time involved in construction-related activities.

Currently, KCPL has a policy of directly assigning A&G salaries and expenses to specific construction projects. The Company in its brief stated that it has "no objection to identifying and properly capitalizing incremental construction-related costs." The Company defines incremental costs as "costs which would not be incurred if construction were not undertaken".

The Company objects to Staff's method in this case and Staff's suggestion for future cases. The Company presently has no method for assigning construction-related A&G salaries and expenses that are not directly related to a specific construction project.

The Staff analyzed eleven electric utilities in Missouri and Kansas to develop the adjustment Staff made. Staff found that the percent of A&G salaries and expenses capitalized ranged from 5 to 38 percent. Staff chose to apply to KCPL the mode of the sample, which was 12 percent. The Company objects on the grounds that there are too many variables involved in determining an individual utility's capitalization of A&G salaries and expenses to allow a sample to be used in determining an adjustment for Kansas City Power & Light Company.

The Company questioned the Staff's witness on such variables as the construction programs the sample utilities had, the method by which the sample utilities assigned A&G salaries and expenses to construction accounts, and the



management structures of the sample companies. The Staff witness had done no investigation into the sample utilities to see how similar or dissimilar those utilities were in relation to KCPL. The method chosen by the Staff was due, admittedly, to Staff's inability to conduct a study of actual time reported by administrative employees in performing their daily activities before this rate case. The Staff indicates that such a study should be done. In addition to the Company's attack on Staff's method in arriving at the 12 percent figure, the Company also opposed conducting a study as Staff suggests should be done. The Company claims that such a study would be inappropriate. The Company believes that such a study would be costly and out-of-date the minute it would be implemented, because the levels of construction change over time. The Company believes it should be allowed to establish an updated policy of its direct charge method and conduct studies to establish detailed policies and procedures in this area. Furthermore, Company states that in the event construction-related A&G salaries and expenses cannot be charged to specific projects, it will set up a work order to accrue such amounts and load such amounts ratably among the various construction projects currently existing.

While the Commission agrees with the Staff's position that it appears the Company is capitalizing an inordinately small amount of A&G salaries and expenses, the Commission does not believe Staff's method for remedying this situation is sound, and therefore Staff's adjustment should not be allowed. However, some method must be developed for identifying and accounting for indirect overhead associated with construction. The Company will be ordered herein to conduct a study to establish detailed policies and procedures that direct what costs should be directly charged to construction. The study shall also establish detailed policies and procedures to account for those construction-related A&G salaries and expenses that cannot be charged to a specific project and assign those amounts ratably among the various construction projects. The study and its results are to be filed with the Staff on or before October 14, 1982, unless otherwise ordered by the Commission.

#### D. Normalization Versus Flow Through

KCPL proposes to continue the normalization of the timing differences associated with the tax effects of the interest component of the allowance for funds used during construction (AFUDC), and pensions, payroll taxes and property taxes capitalized as construction costs. The Staff, Public Counsel and DOE propose a return to flow-through accounting of the income tax effects of pensions, payroll taxes and property taxes. Public Counsel further proposes the flow-through method for the interest component of AFUDC.

The Commission, in determining this issue, has consistently applied a cash flow analysis, in order to determine whether or not the utility has proven such need in the areas of cash flow, external financing, interest coverage and financial stability, to justify normalization.

The Company and Public Counsel spent considerable effort arguing that their positions should prevail regardless of the Commission's cash flow analysis. Even Staff, who in its brief indicated that its position was reached by the Commission's cash flow analysis, argued the merits of flow through irrespective of the Company's cash flow position. The Commission has heard these arguments and addressed them on numerous occasions and, based on this record, the Commission declines to depart from the cash flow analysis, finding it to be the only reasonable way in this case to address and balance the needs of the Company in relation to the Company's ratepayers.

The Company's first mortgage bonds are currently rated A by both Standard & Poor's and Moody's Investor's Service, Inc., and the Company's evidence shows that the Company's funds generated internally as a percentage of construction expenditures was 39 percent as of December 31, 1981. The Company's evidence further shows a pretax coverage ratio (Securities and Exchange Commission method) of 2.75 for the Company at year-end 1981. The Company's coverage ratio under its Indenture of Mortgage and Deed of Trust was 3.31. The Company's Indenture of Mortgage and Deed of

Trust for the issuance of additional first mortgage bonds requires a 2.00 minimum ratio of earnings available for coverage to interest charges.

Staff witness Schallenberg testified that for the twelve months ending December 31, 1981, the funds generated internally as a percent of construction expenditures and the interest coverage under the Indenture of Mortgage and Deed of Trust were 41.29 percent and 3.31 percent, respectively, based on normalization of capitalized pensions, capitalized payroll taxes, and capitalized property taxes. He also stated that without the normalization of these items, funds generated internally as a percentage of construction expenditures would be 39.47 percent in 1981, and interest coverage under the Indenture of Mortgage and Deed of Trust would be 3.24 in 1981. Staff witness Stubblefield stated that at a December 2, 1981 seminar, Standard & Poor's indicated that the expected range for internal cash generated as a percent of construction expenditures is 20 to 50 percent for an A-rated company, and 40 percent or better for an AA-rated company. Furthermore, he indicated that Standard & Poor's expects a minimum coverage ratio of 2.5 for an A-rated electric utility. The Staff submits that the above information indicates that the Company's interest coverages and funds generated internally as a percentage of construction expenditures are not so poor as to require normalization under the Commission's cash flow analysis.

The Company points out that one of Staff's own exhibits which sets out information taken from the Company's presentations to the Standard & Poor's rating agency shows that the Company's estimated funds generated internally as a percent of construction expenditures for 1982 and 1983 would be 26 percent and 14.7 percent, respectively. This, the Company maintains, is proof of its need for the cash flow that would result from normalization. Furthermore, the Company submits that conditions have not changed enough since the Company's last rate case to return to flowing through the tax effects in question under the Commission's analysis. The Staff counters that in 1984 the Company's construction expenditures will decline and the percentage of funds generated internally will rise, as estimated by the Company

in its presentation to Standard & Poor's, to 183 percent. Public Counsel presented no evidence on this issue.

The Commission is of the opinion that the above evidence does not warrant requiring Company to change to flow-through treatment of pensions, payroll taxes, property taxes and interest component of AFUDC at this time. This is particularly true if the projected funds generated internally as a percentage of construction expenditures in 1982 and 1983 (26 percent and 14.7 percent) prove to be accurate, in which case the Company is experiencing a downward trend at this time.

#### E. Test Year Revenues

The Company proposes to annualize test year kilowatt hour sales, and thus test year revenues, for the effect of changes in the number of customers based on the projected number of customers at June 1, 1982. KCPL proposes to increase test year revenues by \$577,000 to reflect projected customer levels at June 1, 1982. The Staff proposes an increase in the amount of \$9,341,365 for annualized level of sales, based upon applying the base case projection of peak for 1982 that appears in the Company's econometric forecast report to the Company's actual 1981 Missouri load factor. The crux of the issue centers around how to determine the number of kilowatt hours to use in figuring test year revenues.

The Company argues that the Staff is going outside of the test year and is projecting an estimate of revenues to be generated in 1982. The Company alleges a violation of the test year concept when it argues that the Staff's method will result in a mismatch between rate base, expenses and revenues, presumably because the Staff's method goes beyond the test year. The Company also argues that the Staff's method has proved unreliable. The Company cites the fact that the actual kilowatt hour sales in 1981 were approximately 200,000 kilowatt hours less than the number of kilowatt hours Staff used in determining test year revenues in Case No. ER-81-42.

The Staff maintains that its method is proper and reliable. The Staff points out that the Company has not raised the mismatch argument where Staff has recognized other volumes outside the test year for other issues. The Staff argues it

is not attempting to estimate kilowatt hour sales for 1982, but is attempting to match the level of sales to be incurred in the period when the new rates are in effect with corresponding expenses. Furthermore, Staff points out that it is using a Company estimate for the Company's 1982 peak. While the Company argues for the use of the historical test year concept strictly on this issue, the Commission has allowed movement outside of the test year in other instances, e.g., forecasted fuel. Moreover, the Company's assertion as to the unreliability of Staff's method is not compelling. The Company witness in his direct testimony did prove that the Staff's method resulted in approximately 200,000 kilowatt hours more in sales than was actually incurred in 1981, and that amounts to 3.54 percent of total kilowatt hour sales. The Company alleges this is significant, but gives the Commission nothing with which to compare this number. The Commission does not believe that the 3.54 percent overage renders the Staff's otherwise reasonable and proper method invalid, and the Staff's method should be used in this case.

F. Payroll Overtime Adjustment

KCPL proposes to reflect the July 1, 1982, wage level for test year overtime. DOE, Public Counsel and Staff oppose any adjustment to the actual dollar amount of overtime incurred during the test year.

DOE presented evidence that the number of overtime hours the Company has experienced in the last two years has been decreasing. Consequently, DOE, supported by Staff and Public Counsel, takes the position that the Company's expenses for overtime are decreasing and therefore no adjustment to the test year expense for overtime should be made. The Company adjusted the test year expense to reflect the July 1, 1982, wage increase for overtime the Company will experience, thus increasing the allowance for overtime expenses the Company may recover in rates.

The Commission in the past has allowed for known and measurable wage increases. Consequently, the Company's adjustment to the test year is proper and should be allowed. The Commission declines to adjust one variable of an equation to compensate for the fact that a different variable has changed. That is, if indeed

the number of overtime hours KCPL incurs is decreasing and will decrease in 1982 and 1983, the time period the rates set herein will be in effect, then DOE could have proposed an adjustment to the number of hours of overtime in the test year and not the wage rate.

G. Indexing/Attrition

KCPL proposes that the Commission allow, as an increased revenue requirement, subject to refund if necessary, allowances in the amount of \$2,223,388 respecting projected cost increases in operation and maintenance (O&M) expenses other than fuel and labor at KCPL's generating stations through July 31, 1983, and \$1,467,992 respecting projected cost increases in approximately 6 percent of KCPL's total electric department O&M expenses through July 31, 1983, measured by applying a company-specific cost index of \$1.635 per megawatt hour of sales. The Company proposes these allowances to afford itself the opportunity to recover some of the price level changes through July 31, 1983, of O&M expenses other than fuel, labor, fringe benefits, and certain other expenses. The Staff, Public Counsel and DOE oppose the Company's proposal.

The Company indicates in its brief that this case represents its fourth attempt to have the Commission adopt a procedure to recognize the effects of continuing inflation. The Company's persistence is based on what it perceives as a Commission trend toward such a position and the Company's claimed deficiencies in earning its authorized rate of return due to attrition. Attrition is the word that has been adopted to describe the effect of setting rates on historical or past cost in a period of rising cost. The effect, according to the Company, is that due to rising costs it can never achieve its authorized rate of return.

The Company identifies two areas to which to apply an adjustment for anticipated inflation. In the area of total electric O&M expenses, the Company isolated six percent of those expenses and developed a specific cost index. The Company developed a rate of growth from the index and thereafter derived a service allowance to cover such. The growth rate of these expenses for the five-year period

ending in 1981 was 12.167 percent. This is the Company's proposed escalator for these expenses. In the area of production O&M expenses mentioned above, the Company apparently bases its allowance on the Company's budget and the personal opinions of Company personnel.

The Company maintains that the methods chosen by the Commission in the past to alleviate the problems associated with historical cost, such as true-up hearings, adjustments for known and measurable changes, and forecasted fuel, are not enough. The Company proffered Exhibit 8, which by the Company's account shows that the Company has only earned its rate of authorized return during a period in 1980 and 1981 which included abnormal revenues from the 1980 heat storm.

The Staff, Public Counsel and DOE take issue with the Company on two levels. First, all three question the existence of attrition and claim the Company has earned its authorized rate of return on equity over the past 18 to 24 months. Second, the opposing parties, assuming attrition exists, find the Company's procedure objectionable.

The Company's primary evidence of attrition is its Exhibit 8, which by Company's account shows the Company's actual rate of return on rate base and equity in relation to its authorized rate of return. On its face, the exhibit does show the Company has not earned its authorized rate of return except for a short period in 1980 and 1981. The opposing parties claim the Company's graphs in Exhibit 8 cannot be relied on for several reasons.

First, the time periods the Company displayed by Exhibit 8 are not comparable. The Company's graph shows the Company's performance from 1972 to the end of 1981. The Staff points out that the Commission's procedures for alleviating problems experienced in the past with the regulatory lag of a test year and inflation (e.g., true-up hearings, allowing for known and measurable changes outside the test year, and forecasted fuel prices) were not used until 1980. Consequently, in determining whether there is attrition, the Commission should look only to the data which reflects the rates set in Case Nos. ER-80-48 and ER-81-42, i.e., post-June 1980.

The Staff and Public Counsel point out that the Company's graphs in Exhibit 8 are based on year-end investments rather than the year's average investments. Public Counsel in his brief demonstrates the flaws inherent in attempting to show a company's rate of return based on year-end investments. Suffice it to say that one cannot expect to earn a full year's return on an investment made for less than a year. Consequently, the Company's rate of return is most likely understated on Exhibit 8, assuming that KCPL's shareholders' investment in the Company is greater at the end of the year than at the beginning of the year.

The year-end investment problem is also analogous to the next criticism of the Company's graphs, its step function. The Company displayed its authorized rate of return in a straight line with no slope except at those points where a rate increase took place, which is represented by a line of vertical slope with no run, hence the step function. The Staff and Public Counsel assert that the authorized rate of return as depicted on the Company's Exhibit 8 is improper and misleading. The Staff witness indicated that it takes 12 months before a company can achieve its authorized rate of return "because until that time the new rate levels will not have been achieved on an annual basis." (Exhibit 44, page 3.) This is due to the actual achieved returns being calculated on the most current 12-month period.

The Staff presented graphs (Exhibit 44, Appendix A) which correct the above flaws, and asserts that the data depicted thereon stands for the proposition that the Company has not only been earning its authorized rate of return on equity, but earning in excess of its authorized return. The Staff witness explained that these graphs are based on the Company's data modified for the above-mentioned flaws. It was pointed out by the Staff witness that the graph for rate of return on rate base does not show the Company earning its authorized rate of return on rate base after September 1981. The Staff noted that it is theoretically impossible for a company to earn below its authorized rate of return on rate base while earning in excess of its authorized rate of return on equity; however, it is possible for the converse to occur. Therefore, the Staff believes the graph depicting rate of return on equity is



the most accurate and stands for the proposition that the Company is earning, at the very least, its authorized rate of return on equity, and therefore its authorized rate of return on rate base.

The Company's graphs, and the Staff's graphs which are based on the Company's data, both include all of the Company's revenues and investments for all jurisdictions. Public Counsel and Company both claim that such inclusion supports their positions. The Company claims that since the Kansas Corporation Commission has given it a substantially higher rate of return than the Public Service Commission of Missouri, the actual rates of return shown on Exhibit 8 are inflated as concerns the Company's Missouri jurisdictional portion, and if only the Missouri jurisdictional part were shown then the distance between the actual and authorized rate of return lines would be even greater. Public Counsel counters that until the Company presents its evidence on the Company's actual rate of return restricted to the Company's Missouri jurisdictional operations, the above assumption cannot be accepted.

DOE argues that the Company should in theory never have been able to earn its authorized rate of return in 1980 and 1981 due to the following circumstances: (1) the exclusion from rate base of Iatan in ER-80-48; (2) coal inventories held in excess of the 90-day supply as authorized by this Commission; and (3) the fact that KCPL loaded its generating units in an uneconomical manner, such uneconomical loading not being reflected in the rates. The relevant point here made and argued by Staff and DOE is that the Company's figures used to support the Company's claim of attrition include items in investment that the Commission has excluded from rate base, and to allow an attrition adjustment "would over time effectively nullify the effect of the Commission's decisions to exclude items from KCPL's rate base or operating expenses." (Exhibit 44, page 5.)

If the Commission were to find attrition exists, the Staff, Public Counsel and DOE argue that the Company's chosen method of correction is improper. The Company bases its increases in the area of O&M expenditures at the Company's Iatan, Hawthorn and Montrose stations on the Company's budget. All three opposing parties

point out that the Company's budget record in the recent past in this particular area has been unreliable as a measure of future cost. That is, the Company has a record of overbudgeting.

The Staff also finds fault with the Company's indexing allowance figured for total electric department O&M expenses. The index does not account for decreases that occur in operating expenses or for the Company's declining plant that would offset expense increases. Furthermore, increases in kilowatt hour sales are not considered.

Public Counsel also made the argument that to allow increases in the areas as proposed by the Company would erode any Company efforts to make operations more efficient.

The Commission recognizes the Company's effort to develop some procedure in this area and its request for Commission guidance. In this particular case the underlying evidence necessary to support an attrition adjustment, if a procedure could be developed, is lacking. In the Commission's opinion the Company's Exhibit 8 is not competent in light of all the problems pointed out by the opposing parties. The Commission is especially concerned with the inclusion of data from other jurisdictions and the fact that the investment base used by the Company in calculating actual rates of return includes items excluded by this Commission.

Furthermore, the evidence in this case indicates that recent Commission procedures (true-ups, allowances for known and measurable changes, and forecasted fuel allowances) undertaken to alleviate the effects of inflation, regulatory lag and the use of an historical test year, are having the desired effect. If one were to accept Staff's graphs, which were based on Company data that included some of the above-mentioned flaws, the Company is earning in excess of its authorized rate of return on equity.

As concerns the Company's method for calculating the allowance for attrition, the Commission once again is left with a procedure that the evidence of

opposing parties have rendered untenable. The Commission commends the Company's effort in this area; however, the Commission, from the evidence in this record, cannot develop a cure-all or inform the Company how to develop an adequate procedure. Apparently, much progress has been made. This is demonstrated in the record regarding Company and Staff testimony on negotiations between the Company and Staff in this area. The Commission invites the Company and all parties to further develop their positions in the Commission's Case No. 00-82-277. However, the Commission is of the opinion that an attrition allowance should not be allowed in this case.

#### H. Electric Power Research Institute (EPRI) Dues

KCPL proposes to include in test year expense \$1,207,000 representing the Missouri jurisdictional portion of KCPL's EPRI assessment.

EPRI is a nonprofit research organization formed by the electric utility industry and funded by assessment against member companies. EPRI's efforts are directed toward producing technologies and equipment for the purpose of improving and lowering the cost of generating, transmitting and distributing electricity.

Staff proposes to capitalize and include in jurisdictional rate base about 77 percent of the Missouri jurisdictional portion of KCPL's EPRI assessment, and amortize such over 9.1 years. Staff further proposes to include the remaining 23 percent of the assessment in a Wolf Creek work order and accrue allowance for funds used during construction (AFUDC) thereon until Wolf Creek is completed. Public Counsel proposes to capitalize the entire Missouri jurisdictional portion of the EPRI assessment and amortize it over a period of 20 years, but to exclude the amortized portion from rate base.

Concerning Staff and Public Counsel's arguments that EPRI assessments should be capitalized for amortization over a period of years rather than treating the assessment as a current expense, the Commission notes that it has considered and rejected those arguments several times. See: ER-80-48, Re: In the Matter of Kansas City Power & Light Company; ER-81-42, Re: In the matter of Kansas City

Power & Light Company; and ER-82-52, Re: In the Matter of Union Electric Company.

The EPRI assessment is of a recurring nature and is not abnormal. Furthermore, the assessment fails to have the characteristics of an asset in that it is a fund used for research and development. Research and development is difficult to accurately measure in terms of future benefits. The Staff's method in and of itself demonstrates this by its divergence from past Staff methods and Public Counsel's method. Research and development also carries the dilemma of how to account for the projects that produce no benefits.

The Commission is aware that the accounting profession has struggled with the question of proper accounting treatment of research and development in the past, and has developed Financial Accounting Standards Board (FASB) Statement No. 2 and Accounting Principles Board (APB) Opinion No. 2, which generally require the expensing of research and development costs in the year they occur. While the Commission is not bound by financial accounting standards, that fact alone does not justify departure from generally accepted accounting principles.

The Staff also seeks to have 23 percent of the EPRI assessment assigned to a Wolf Creek work order and allow AFUDC to accrue thereon. The Staff argues that EPRI's nuclear-related research and development projects cannot benefit KCPL since KCPL has no current nuclear capacity, and therefore a percentage of the assessment should be capitalized and put in Wolf Creek construction work in progress. The Staff's argument fails to recognize that the Company's EPRI assessment is not a specific cost associated with the Wolf Creek construction, and therefore a part of the EPRI assessment should not be capitalized as a part thereof. Furthermore, the EPRI assessment, and its particular projects, exist independent of the Company's construction of the Wolf Creek generating station.

The Commission continues to believe that electric research and development, which can benefit both the companies and their customers, is a necessary function in this age of rapidly advancing technology. Electric research and development,

however, is too expensive an undertaking for any one company standing alone. Thus, the most effective and efficient approach to electric research and development is through the pooling of resources, as is accomplished by the members companies of EPRI. The Commission recognizes that not all research and development will necessarily be immediately applicable to KCPL. This is true of all utilities due to the inherent nature of research and development.

The Commission finds Public Counsel's arguments on amortization with an offset to rate base without merit for the same reasons Staff's arguments on amortization fail. The Commission does not find the dangers Public Counsel asserts exist in the present method of allowing recovery of EPRI assessments. Consequently, the Commission finds no reason for any amortization of the EPRI assessment, and likewise, there is no need for an exclusion from rate base.

Due to the recurring nature of the assessment and the inherent difficulties associated with accounting for research and development, the Commission is of the opinion that it is reasonable for the Company to expense its EPRI assessment. However, this decision should not be interpreted by the parties as a signal to terminate all inquiry into the merit of research and development payments.

#### I. Edison Electric Institute (EEI) Dues

KCPL included \$105,000 of its EEI dues in Missouri jurisdictional cost of service. The Edison Electric Institute is a voluntary organization whose membership is made up of electric utilities throughout the United States. EEI studies and develops information concerning all aspects of the electric utility industry, including accounting, energy analysis, engineering and operation, environmental, finances and general industry relations. Most of EEI's work is done by numerous EEI committees. Twenty-five employees of the Company are members of EEI committees. The Company alleges that information brought to the Company's attention through EEI committee meetings and publications aids the Company in its operations and results in operational and financial benefits to the Company and its ratepayers.

The Staff and Office of Public Counsel oppose the recovery of this expense from the ratepayers on two levels. First, both contend that EEI is a lobbying organization whose primary objective is to promote shareholder interests, and therefore the expense should be disallowed. Second, both question the existence of any benefits accruing to the ratepayers from EEI activities.

The expense treatment sought by the Company excludes 2 percent of the Company's annual EEI dues. The Company itself disallowed this amount on the basis that this amount represents the kind of activities that federal statutes define as lobbying, and therefore should not be collected from ratepayers.

The 2 percent figure is based solely on the amount reported by EEI pursuant to the Federal Registration of Lobbying Act, 2 U.S.C., Section 267(a). That federal statute requires any person engaged for pay in attempting to influence the passage or defeat of any legislation by the United States Congress to register with the Clerk of the Congress and file a quarterly verified report of all money received and expended by such person during the previous calendar quarter in carrying on his work. By its own terms, the Act does not apply to any person who "merely appears before a committee of the Congress of the United States in support of or in opposition to legislation." Nor does the Federal Registration of Lobbying Act require EEI to report expenditures related to its efforts to influence the executive branch of the federal government, regulatory commissions and presidential task forces, or its efforts related to its support of witnesses testifying before congressional committees.

The Staff, on the other hand, uses the Commission's definition of lobbying found in the Commission's report and order in Kansas City Power & Light Company's last rate case, ER-81-42. There, the Commission defined lobbying as "an attempt to influence the decisions of regulators and legislators in general." See: ER-81-42, Re: In the Matter of Kansas City Power & Light Company, page 23 (June 17, 1981). The Staff, Public Counsel and the Company spent a considerable amount of time arguing over what a definition of lobbying should be. The evidence in this case makes it

clear that substantially more than 2 percent of EEI's expenditures and efforts are directed toward influencing the decisions of regulators and legislators in general. The Commission once again reaffirms its definition of lobbying as found in ER-81-42. However, the Commission has heard this 2 percent argument concerning EEI's lobbying activities on numerous occasions in the past, and has uniformly rejected that argument. The Commission holds that the fact that EEI reports 2 percent of its expenditures as lobbying expenses under the Federal Registration of Lobbying Act is irrelevant to the Commission's consideration of this issue.

The fact that EEI applies a substantial portion of its expenditures and efforts toward lobbying is not necessarily, however, determinative of this issue either. The Company attempts to show direct benefits to ratepayers accruing from EEI's activities in several areas. Most notable is the Company's argument that the ratepayers were saved millions of dollars by the modification of the Staggers Act. The Staff asserts that it could find no quantifiable evidence that the amendment of the Staggers Act was due to EEI activity. Staff claims that the amendment of the Staggers Act was due to the actions of groups other than the Edison Electric Institute. The Commission finds in this case that there is insufficient direct evidence of what "extensive efforts" went into EEI's "coordinated industry attack to amend the Staggers Act bill during its legislative process."

In ER-81-42, Re: In the Matter of Kansas City Power & Light Company, page 24 (June 17, 1981), the Commission stated the following:

The rule has always been that dues to organizations may be allowed as operating expenses where a direct benefit can be shown to accrue to the ratepayers of the company. Conversely, where that sort of benefit does not appear, disallowance of the dues is required. It follows that the mere fact that an activity might fall within the very broad general definition of lobbying as used by Public Counsel should not necessarily mean that it is an improper expense for ratemaking purposes. This question is one of benefit or lack of benefit to the ratepayers.

The Commission still believes the question is one of benefit to the ratepayer. In the instant case there appears to be some possible benefit, but until the Company can better quantify the benefit and the activities that were the causal

factor of the benefit, the Commission must disallow EEI dues as an expense. The Commission also points out that the Company needs to develop some method of allocating expenses between its shareholders and the ratepayers once the benefits and activities leading thereto have been adequately quantified.

#### J. Forecasted Fuel Stipulation

During the hearing the Company, Staff and Public Counsel entered into a stipulation and agreement on the issue of forecasted fuel. The stipulation and agreement was marked and offered as Exhibit 76. Intervenor DOE, GM, and Armco did not sign the stipulation and agreement and opposed it at the hearing.

The stipulation and agreement provides a method for setting fuel prices based on forecasted prices. A refund provision exists in the event the actual prices fall below the projected prices set by the stipulation and agreement.

DOE, GM and Armco are not opposed to the pricing method of the stipulation and agreement. They oppose the stipulation only as it concerns the handling of any refund that may result. The stipulation and agreement states that "the amount to be refunded, plus interest, shall be held and accounted for by the Company until its next electric permanent general rate increase proceeding at which time such amount, plus accrued interest for the period held, shall be credited against any revenue deficiency therein determined." (Exhibit 76, paragraph 7.) DOE, GM and Armco assert that any refund that might accrue should not be allowed to offset any revenue deficiency in the next rate case. GM and Armco's position is that the increase will be collected on a kilowatt hour basis. Consequently, if a refund results and it is used to offset any revenue deficiency in the next rate case, the customers who paid the higher fuel prices may not receive the full benefit of a refund associated with those higher fuel prices.

At the presentation of the stipulation, paragraphs 11 through 17 of the stipulation and agreement, Exhibit 76, were withdrawn by the Company, Staff and Public Counsel, and the stipulation and agreement was submitted as an amendment to



the hearing memorandum. The Commission is of the opinion that the stipulation and agreement should be accepted, except for the last sentence in paragraph 7, which provides how any refund will be handled. The Commission is of the opinion that should any refund become necessary, the Commission shall determine at that time how to apply the refund. The Commission therefore, by this report and order, hereby accepts Exhibit 25 (Wasson), Exhibit 17 and Exhibits 76 through 82. The substantive portion of the stipulation and agreement as adopted by the Commission is as follows:

1. Since fuel quantities required for Missouri retail use are directly related to normalized and annualized test year megawatt hours generated, precise quantification of fuel quantities required for purposes of this stipulation and agreement is subject to the Commission's decision with respect to the issues of "Test Year Revenues" and "Fuel Mix and Interchange" wherein Staff and Company differ on the appropriate level of normalized and annualized test year megawatt hours and fuel mix and interchange sales and purchases. Once normalized and annualized fuel use is determined, all parties agree that the fuel price component of permanent base rates shall be based on May 1982 fuel prices as determined at the time of the June 28, 1982 audit date for the true-up proceeding recommended in this matter.

2. The additional revenue requirement resulting from this stipulation and agreement will be based on fuel quantities required to generate electricity for Missouri retail use, directly related to normalized and annualized test year megawatt hours, priced at fuel prices as described in Appendix A hereto.

3. The revenue requirement associated with forecasted increases in the prices of coal from Peabody Power Mine, Amax Coal Company, Arch Mineral Corporation, and Pittsburg and Midway Coal Mining Company, the forecasted price of coal from Atlantic Richfield (ARCO) Company, and the forecasted increase of the cost of gas will be subject to refund, pending investigation and audit of actual last known delivered prices as of October 31, 1982. Such additional revenue requirement associated with the forecasting of coal and gas prices will be collected pursuant to rate schedules filed as authorized by the Commission in this case, and calculated to recover such amount on a cents per kilowatt hour basis. Said rate schedules will bear an appropriate legend identifying the cents per kilowatt hour subject to refund.

4. It is anticipated that last known delivered coal and gas prices as of October 31, 1982 will be determined and capable of audit by no later than November 30, 1982; said latter date is thus agreed to be the cutoff date for purposes of accumulating and determining such prices as of October 31, 1982. Company states that, to its knowledge, no changes in natural gas prices to the Company will be imposed and be effective between October 31, 1982 and January 31, 1983.

5. For purposes of determining actual last known delivered coal and gas prices as of October 31, 1982, Company, Public Counsel and Staff recommend that the Commission open an investigatory proceeding separate and distinct from this case for the purposes of audit and verification of said actual delivered coal and gas prices. The entirety of the record made in this case shall be incorporated by reference as evidence in said investigatory proceeding. Hearings in said investigatory proceeding are recommended to commence and conclude during the month of December 1982, with an order therefrom to be issued and made effective by no later than December 31, 1982.

6. At the time of said investigatory hearing, it shall be determined whether the aggregate of the actual last known delivered fuel prices for coal from Peabody Power Mine, Amax Coal Company, Arch Mineral Corporation, Pittsburg and Midway Coal Mining Company, and Atlantic Richfield (ARCO) Company as of October 31, 1982 is less than, equal to, or greater than those aggregate prices as forecasted in this Case No. ER-82-66. It shall also be determined whether the actual last known gas price to the Company is less than, equal to, or greater than that gas price forecasted in this Case No. ER-82-66. In the event said actual aggregate coal price or said actual gas price is equal to or greater than said respective forecasted prices with respect to the fuel burn as set by this Commission in this case, the Company shall have no refund obligation, and the legend on the filed rate schedules shall have no further force and effect; the Commission at its option may direct the refile of said schedules to remove such legend. In the event, however, that said actual aggregate coal price or said actual gas price is less than the respective forecasted prices, then the Company shall be obligated to refund an amount, with interest, as determined in paragraph 7 below, and shall submit to the Commission permanent tariff sheets reflecting rates based on actual October 31, 1982 prices.

7. In the event it is determined that the Company is obligated to refund amounts collected pursuant hereto, the refund amount shall be calculated on the basis of actual kilowatt hours billed at the rates subject to refund for the period July 24, 1982 through the period interim rates are collected, multiplied by the cents per kilowatt hour difference between the actual price as of October 31, 1982 and the price as forecast for October. In addition to the amount calculated above, the Company shall be obligated to pay simple interest thereon at the authorized overall rate of return set in Case No. ER-82-66 for the Company by the Commission.

8. Company agrees that in its next electric permanent general rate proceeding, it will, to the extent practicable, base any procedure which it proposes to utilize for forecasting of coal prices upon the contracts which control coal prices from its suppliers. Such procedure will include disaggregating coal prices into component parts. These components shall include, without limitation: labor expense, materials and supplies, capital recovery, electricity (where rate increases are known), and severance, ad valorem and black lung taxes where these price components can be calculated in accordance with known relationships. Where increases in such components are fixed (as in the case of union-management labor contracts) or otherwise

known, the established levels of increase shall be utilized to determine the corresponding component of coal price. Where components are related to specific indices, Company shall forecast the changes in these indices to establish the level of the associated coal price component. Any residual costs which cannot be determined as set forth above may be forecast by any party.

9. Attached hereto and incorporated herein by reference is Appendix A. Said appendix sets forth the amounts to be included in rates subject to refund.

10. Attached hereto and incorporated herein by reference is Appendix B, which sets forth an illustration of the methodologies to be used to calculate fuel expense to be included in rates subject to refund and revised permanent rates after the December 1982 true-up. In the event, however, that the difference so calculated is less than .01¢ per kilowatt hour, the Company shall not file new tariff sheets but will continue to charge its ratepayers under the provisions as set forth in paragraph 7 below. All said differences above .01¢ per kilowatt will be rounded to the next .01¢ per kilowatt.

Appendix A is attached to Exhibit 76. Appendix B has been updated by the parties and is marked as Exhibit 109.

#### K. Fuel Mix and Interchange

The Staff and Company disagree on the amount of oil and gas to be used in the Company's fuel mix. The Company and Staff also disagree as to the price of replacement energy in relation to the fuel mix and the pricing of interchange sales and purchases.

Oil use in the Company's fuel mix is 111,000 barrels, whereas the Staff's mix calls for 53,000 barrels. The ultimate question raised by the parties is whether oil consumption is going up or down. The Staff points out that oil consumption has been declining over the last two years. This, the Staff claims, is due to cheaper purchased power being available and the availability of the Company's Iatan plant, which became operable in 1980.

The Company, on the other hand, claims that unusual circumstances existed in 1981 that resulted in a low consumption of oil. The Company maintains that significant amounts of cheap purchased power were available in the summer of 1981 which cannot be expected to be available in 1982. The Company found that while

) Kansas City was experiencing hot weather, the areas to the north of Kansas City were substantially cooler. The Company presented specific evidence that Dubuque, Iowa, in July 1981 was 10 degrees cooler than Kansas City, and that Chicago and Peoria, Illinois, were up to 17 degrees cooler. This, the Company asserts, explains why large amounts of cheap purchased energy were available. Therefore, the Company maintains that there is no downward trend to follow and that 1981 should not be considered normal. The Company also points out that the first three months of oil consumption in 1982 was 32,000 barrels, as proof that Staff's 53,000 barrels is inadequate.

) The evidence presented shows that the Company burned 94,076 barrels in 1980 (year of the heat storm) and 13,026 barrels in 1981. Ten thousand barrels of the 32,000 barrels used in the first three months of 1982 were, as admitted by the Company, used for interchange sales. The Company's lower oil use in 1981, the Staff asserts, was due to purchased power, which also will be available in 1982, and to the Iatan generating station. The Staff counters the Company's explanation of 1981's purchased power availability with the testimony of the Company's president in Case No. ER-81-42. In that case Company president Doyle indicated that 1981 would be a buyer's market due to excess reserve capacity that would be available in 1981. The Company witness on this issue testified that a number of new generating units came on line in 1980 and 1981 throughout the Company's interconnect system and that more will go on line in 1982. The Staff also points out that June and July of 1981 were 29 percent warmer than the 47-year cooling degree day normal used in the Company's presentations to the Standard & Poor's rating agency. The Company did not present evidence of what Dubuque, Chicago and Peoria's cooling degree day normals were and whether the temperatures that were 10 and 17 degrees cooler than Kansas City were necessarily cool for those areas. That is, Dubuque, Chicago and Peoria could have been experiencing normal weather, which could be 10 to 17 degrees cooler than Kansas City's weather when Kansas City weather is 29 percent warmer than its normal. Based on the foregoing, and with the 300 additional megawatts that the Company will

have available from the expiration of the AEC sale and the above evidence, the Commission is of the opinion that the Staff's oil level for fuel mix is reasonable and should be applied.

The Company and Staff also used different amounts for the gas burn level. KCPL used the gas burn level of 1981, because that amount represented the gas required to start up units, to stabilize the flame, and to be used for some peaking capacity. The Staff points out that gas burn levels at the Company's Hawthorn station have steadily declined over the last five years. It is Staff's position that gas burn levels will continue to decline. Staff witness Featherstone testified that it is unrealistic to expect an increase in gas consumption at the Hawthorn station because: (1) there will be less dependence placed on the Hawthorn station in the future due to the increase in the Company's coal generating capacity, and (2) Staff believes that the rate case levels in the fuel run of gas burn at Hawthorn station units 1 through 4 should not be compared with actual levels of gas burn at the Hawthorn station units 1 through 4, because Staff questions the Company's assertion that two units of the Hawthorn station units 1 through 4 are required to be on line at all times throughout the year in order to provide electrical service to its customers.

The Company contends that the trends in this area mean nothing. The Company appears to be stating that its burn level is the minimum to operate the Hawthorn station. In fact, its burn level includes peaking capacity. Nowhere does it appear that Staff's amount is too little to run Hawthorn for purposes other than peaking. It also appears that Hawthorn's peaking capabilities are not needed as much as the Company's burn level allows for. Consequently, the Commission is of the opinion that Staff's gas burn level should be used in this case. Furthermore, the Commission believes that Staff's request for a detailed study to support all contentions by KCPL that two units at Hawthorn station units 1 through 4 should be on line at all times should be granted. Since the Company has already initiated such a study, it should file the results of such study with the Staff on or before October 14, 1982, or at such other time as may be ordered by the Commission.

The parties also disagree on the pricing of replacement power for combustion turbines. The Staff priced the replacement power at the average annual cost of purchased energy. The Company maintains that the majority of replacement energy purchased to cover the reduced generation from the combustion turbines will occur during peak periods, and therefore should be priced as such. The Staff witness testified that the reduction to the proposed level of combustion turbine generation occurs throughout the first year the rates will be in effect, not just at the time of KCPL's system peak. Therefore, Staff maintains that an average price is the appropriate price.

The Commission is of the opinion that Staff's pricing of replacement energy should be used, since it appears that usage of the combustion turbines is being reduced equally in peak and off-peak months.

As concerns interchange sales and purchases, Staff priced interchange sales from KCPL's system using 1982 fuel prices and the cost of interchange purchases using 1981 prices. The Company does not appear to protest Staff's pricing of interchange sales, but uses it as evidence that Staff has been inconsistent in the treatment of interchange sales and purchases. The Company maintains that Staff has underpriced the cost of interchange purchases.

The Company believes there is no reason or evidence to support Staff's position that interchange prices will be the same in 1982 as they were in 1981. However, Staff's uncontroverted evidence shows the cost of interchange power declined from 1979 to 1980 and from 1980 to 1981. The Company argues that if its fuel prices are rising, indeed Staff priced its interchange sales at 1982 fuel prices, then it is only logical to infer that other utilities will experience the same, and therefore purchased power will be more expensive in 1982 than 1981. What that argument seems to ignore is the fact that KCPL's own fuel expense has declined even though fuel prices have increased. This appears to be due to economies resulting from a fuel mix made up of less costly fuels and more efficient generating capacity. With the fact that other utilities are bringing new plants on line, it can be inferred that this

may occur with them. Consequently, the Commission is of the opinion that the Staff's pricing of interchange sales and purchases is reasonable and proper.

L. Allocations

The Company and Staff disagree on whether power production operation and maintenance expenses, other than fuel, interchange and labor, are a fixed or variable cost. The Company claims these expenses are variable with the amount of power produced and should be allocated on a variable energy basis. Staff, on the other hand, asserts that the expenses are fixed and should be allocated on the same basis as production plant.

The Company claims to have used an analytical approach which shows that production O&M expenses other than fuel, interchange and labor are variable. The Company indicates that while these expenses appear fixed and a current year's O&M expenses do not directly fluctuate with the amount of kilowatt hours produced, the expenses over a longer period "will tend to increase or decrease with load factor increases or decreases." (Exhibit 67, page 3.) However, the Staff points out that there is no evidence of what this analytical approach entails, and no figures to support the Company's claimed correlation between production O&M expenses and kilowatt hours produced.

The Staff maintains that the expenses in question are fixed and should be allocated on a demand basis. The Staff witness testified that if production goes down 10 percent, production O&M expenses other than fuel, interchange and labor will remain the same. Furthermore, Staff introduced a data request to the Company, which was answered by the Company (No. 124, Exhibit 68, Appendix A), that indicates the expenses in question are fixed.

The Company on cross-examination of Staff's witness proffered an example to the Staff witness and claims that his answer supports the Company's claim. While the Staff witness indicated that a coal-fired plant that is run 75 percent of the time would require boiler tube maintenance sooner than a plant run only 35 percent of the time, the Staff witness stated that there is no direct relationship between the load

on a coal-fired generating unit and the amount of abrasion that causes the boiler tube maintenance.

Based on the foregoing, the Commission finds Staff's approach more reasonable, and is of the opinion that production O&M expenses other than fuel, interchange and labor should be allocated on a demand basis. The Commission would like to point out that the Commission believes it would be desirable for the parties to meet among themselves and the other jurisdictions affecting the Company's operations.

M. Summary

As a result of all of the adjustments herein found to be reasonable and proper, the Commission finds that the Company's net operating income available for purposes of this case is in the amount of \$57,084,000.

RATE BASE

As a result of the Staff's investigation it is of the opinion that the Company's net original cost rate base is in the amount of \$531,217,000. Company claims a rate base of \$553,939,000. A difference of opinion is contained in a number of issues which will hereinafter be discussed seriatim.

A. Iatan AFUDC Allocation

The Commission in its report and order in ER-81-42, Re: In the Matter of Kansas City Power & Light Company, allocated to the Associated Energy Cooperative, Inc. (AEC) that portion of KCPL's Iatan generating unit revenues, and expenses incident thereto, associated with the Company's capacity sale to the AEC. Consequently, KCPL's rate base was reduced by that amount. Now that the capacity sale is ending, KCPL is seeking the inclusion in rate base of the amount of Iatan which was allocated to the AEC in Case No. ER-81-42.

The Staff opposes the inclusion in rate base of the allowance for funds used during construction (AFUDC), net of cost savings accrued between May 5, 1980, and July 3, 1981, that was allocated to AEC. The Staff appears to argue that since the sale to AEC during the time that Iatan was not allowed in rate base was at a loss



and Iatan was completed early, solely for the AEC sale, then that portion of the plant dedicated by contract to AEC should not have had AFUDC accrued thereon, while dedicated to AEC. Therefore, Staff contends that the AFUDC accrued on that part of Iatan dedicated to AEC and allocated to AEC by the Commission in ER-81-42 should not be allowed in rate base.

The Company argues that the Commission specifically calculated and recognized the amount of Iatan that was to be allowed in rate base, including AFUDC, and then allocated to AEC that part of Iatan which was dedicated by contract to AEC, and now that portion should return to rate base.

The Commission agrees with the Company's position that the portion of Iatan allocated to AEC should now revert to KCPL's rate base. The Commission finds that KCPL should be allowed to include in Missouri jurisdictional rate base that part of Iatan (including AFUDC net of cost savings accrued between May 5, 1980, and July 3, 1981) which was allocated to AEC in Case No. ER-81-42.

B. Iatan Unauditable Costs and Cost Overages

The hearing memorandum indicates that the Company has included \$1,106,000 in rate base that Staff did not put in its calculation of rate base. This amount stems from costs incurred in the construction of KCPL's Iatan generation station that Staff claims should not be allowed in rate base. The particular items in question, unauditable costs, cost overages in the functional accounts for hot reheat piping and structural steel, were addressed by the Commission in ER-81-43, et al., Re: In the Matter of St. Joseph Light & Power Company, and ER-81-42, Re: In the Matter of Kansas City Power & Light Company.

By the above-mentioned cases the Commission indicated that the Company had not met its burden of proof in regard to the costs found by the Staff to be unauditable. The Company in this case has come forward with evidence of what it asserts explains the prior year's figure that led to the exclusion from rate base of some \$2,155,000. Said evidence was the actual expenditures in the amount of \$2,932,000 made in 1975 to show a paper trail indicating the \$2,155,000 figure was

based on actual and budgeted amounts for 1975, and therefore the Staff could audit those amounts.

This created a dispute on two levels between the Company and Staff. First, the Staff maintains that the August 1975 estimate, from which the prior year's caption and figure appears, has no indication that the prior year's figure included budgeted dollars for the last three months of 1975. Second and more importantly, the fact that the Company spent \$2.9 million in 1975 does not create auditable material. Nowhere in the record does the Company present the work papers showing how the \$2,155,000 figure was calculated so that the Staff can determine what construction it related to. However, the most important point is that in addition to not knowing what facts and figures the \$2,155,000 number was based on, there were no cost controls in effect at the time of expenditure to later scrutinize the expenditure against. The \$2,155,000 figure cannot even be broken down to functional accounts.

The Commission is of the opinion that in light of the lack of evidence concerning the unauditable expenditures, that amount found by Staff to be unauditable should be excluded from rate base.

The Company also presented evidence on the issues of cost overruns in the accounts of hot reheat piping and structural steel, indicating that the Commission's findings in ER-81-43 and ER-81-42 were wrong. The Commission is unpersuaded that its findings in the previously mentioned cases were wrong.

In the matter of hot reheat piping, the Company contends that since the problem of the turbine shell lifting one leg off the ground remained after modifications were done, which the Company claims were to bring the piping closer to the original construction specifications, the costs incurred should not be disallowed. The Staff maintains that the piping was incorrectly installed to start with.

The Commission finds that the evidence shows that the piping was incorrectly installed, and that the Company's ratepayers should not bear the expense for correcting this contractor error.

The Company also retried the issue concerning the repainting of structural steel. The Company and Staff presented evidence as to whether the steel was delivered according to contract. The Company contends that the steel was delivered according to contract and had it been erected on schedule the steel would not have needed repainting. Regardless of whether the steel was delivered according to contract, the main causal factor requiring repainting was Daniel Construction Company's (Daniel) delay in erecting the steel.

The Commission indicated in Case Nos. ER-81-43 and ER-81-42 that due to contractor error the cost overage due to the repainting was not allowed. Daniel was behind schedule and no action was taken to stop deliveries of the structural steel when it was known by the Company that Daniel was behind schedule. The Commission still believes that this is an overage due to contractor error that should not be borne by the ratepayers.

Therefore, the Commission is of the opinion that Staff's adjustments in the matter of Iatan's cost overages and unauditable costs are reasonable and proper.

#### C. Fuel Inventory

The Company and Staff disagree in three areas of fuel inventory: the amount of coal inventory, the amount of base mat for coal, and the amount of oil inventory.

The major disagreement over coal inventory is the amount of coal to be allowed in rate base. The Company attempts to redefine the 90-day supply utilized previously by the Commission on the basis that the Staff's method does not result in a safe and adequate inventory supply to cope with uncertainties. Since both parties to this issue used different annual burn levels, reflecting the parties' disagreement on the number of kilowatt hours to be used for test year purposes (see Test Year Revenues), it is difficult to determine just what the difference between each party's position is in real terms, that is, number of tons of coal.

The Company determined its coal inventory by multiplying its annualized level of coal burn by a fraction to develop its 90-day level. The fraction uses

90 days as its numerator and a denominator of less than 365 days. The denominator in the Company's calculation excludes scheduled maintenance from the year. The only difference with Staff's method is that Staff uses 365 days for the denominator. Both parties argue that their method results in a 90-day supply of inventory to run the Company's plants. The question becomes, then, what is 90 days? The Company contends that it should maintain an inventory sufficient for each plant to run 90 days continuously; that is, the Company claims it uses its actual burn rate in computing inventory to be allowed in rate base. The Staff points out that Company's method will not result in a supply of coal large enough to run every plant for 90 days straight. This is due to the fact that Company, like Staff, included the number of days of forced outages in its denominator. Then, Staff points out that the purpose of Staff's method is not to allow inventory to run every coal plant for 90 days straight, but to provide an inventory that "is designed to allow the Company, based on its expected mix of plant and fuel use, to be able to generate power for 90 days in the event of a total shutoff of fuel deliveries." (Tr. 1220.) Staff further points out that the Company's method is inconsistent in that the Company's equation discriminates against a plant shutdown depending on whether the shutdown is forced or scheduled. The Staff asserts that its method results in a reasonable level of inventory, pointing out that Staff's method has been used to no detriment over the past several years. The end result is that the Company's method produces a higher inventory amount.

The Company argues that the Staff's method results in an inadequate amount of inventory when considering the uncertainties of supply. The Company's main example of such an uncertainty was the 1981 United Mine Workers strike. The Staff points out that the present United Mine Workers contract does not expire for three years, and consequently this is not an uncertainty to consider in setting rates in this case. Furthermore, the Staff points out that in 1980 and 1981 less than half of the Company's coal purchases came from UMW mines, and based on the Company's own figures, less than 40 percent of the Company's coal use in 1982 will be from UMW mines.

The Company makes the additional argument that in the absence of a showing by the Staff of inefficiency or improvidence on the Company's part, case law requires the Company's position be accepted. However, as Staff pointed out, the Missouri Court of Appeals has determined that coal inventories are a "purely factual determination" which it has left to the Commission's discretion. State ex rel. Kansas City Power & Light Company v. Public Service Commission, 615 S.W.2d 596, 598 (Mo. App. 1981).

The Commission in ER-77-118, Re: In the Matter of Kansas City Power & Light Company, page 25, found that it "must balance the desire of the Company to always have adequate fuel available and the cost to its ratepayers of maintaining inventories . . . ." The Commission finds the Company's arguments concerning coal inventory unpersuasive, and therefore is of the opinion that the Staff's method for determining coal inventory for inclusion in rate base should be accepted.

In KCPL's previous rate case, ER-81-42, the Commission accepted a stipulated settlement concerning the treatment of the Company's base mat in rate base. Base mat is the term applied to coal and coke that form the base of a coal or coke pile which protects the coal and coke in the pile from the ground. In this case the Company proposes to include in base mat the same amount it stipulated to in its previous case, 158,263 tons of coal. The Staff opposes this on the contention that 90 percent of that coal is burnable and therefore should not be considered base mat but, rather, as inventory.

The Company maintains that an 18-inch layer of coal at the bottom of its coal piles is contaminated coal. The Company indicates that 10 percent is not practical to burn at all and the other 90 percent is burnable only when other fuel, such as oil, is mixed with it. The Company contends that it is not practical to consider contaminated coal that cannot be burned without a supplemental fuel as part of its 90-day inventory.

Since it appears from this record that 18 inches of base mat is necessary to protect coal from becoming contaminated, the Commission is of the opinion that the

Company's position is reasonable and should prevail. The base mat, as the Company defines it, contains unburnable coal and contaminated coal. The Commission finds that it would be unreasonable to include contaminated coal as regular inventory and value it as such. The Commission notes that the base mat may have the characteristics of a depreciable asset and may more appropriately be treated as an item to be amortized over its life, taking into account the fact that part of the coal is unburnable and part is only contaminated. Since the Staff indicates that it does not oppose treating the base mat in this manner, and that it is impractical to develop the necessary calculations to treat it as such for this rate case, the Commission believes such calculations, if appropriate, should be presented in KCPL's next rate case.

The Company also seeks to include in rate base its base mat made up of coke. The Staff determined that since the Company no longer burns coke, it should not be allowed to include coke in its base mat. The Company indicated that coal could be piled on the coke base mat, although at the time of hearing this was not being done.

The Commission is of the opinion that since the Company no longer needs a base mat of coke for piling coke and there is no evidence that the Company's base mat for coal is inadequate, the coke base mat is not at the present time used to provide service to ratepayers, and the Company has not shown that it will ever be used. Therefore, it should not presently be allowed in rate base. Some accounting treatment might be appropriate for the coke base mat, if it is to be retired. However, there is no evidence in this case on the point.

The Company proposes to include 148,297 barrels of oil inventory in rate base. The Staff proposes 202,054 barrels of oil inventory be allowed in rate base. The record indicates that the Company has reduced its oil inventory and will continue to do so until it reaches the Company's desired level. The Staff does not dispute this. Furthermore, the Staff is proposing the Company use less oil in its fuel mix, as discussed elsewhere in this report and order. There is no evidence that any

detriment to the Company or its ratepayers will result from acceptance of the Company's position. Therefore, the Commission is of the opinion that the Company's level of oil inventory is reasonable, proper and should be used in determining the Company's rate base.

D. Deferred Taxes as an Offset to Rate Base

Staff proposes to change the method of calculating allowance for funds used during construction (AFUDC) on Wolf Creek construction work in progress from a net of tax basis to a gross of tax basis, and to offset KCPL's rate base by a deferred tax reserve created by such change. This offset is calculated by Staff to be \$16,878,000. KCPL opposes such a change in the accounting of AFUDC.

An allowance for funds used during construction is accrued on KCPL's construction work in progress (CWIP). AFUDC represents the cost of funds invested in the construction work in progress. AFUDC has two components: a debt component and an equity component. The debt component recognizes the interest cost of the debt funds invested in construction. The interest costs associated with CWIP are proper income tax deductions when paid or accrued; however, such interest costs are capitalized for book purposes as part of the cost of the construction.

The Company presently capitalizes the interest costs associated with CWIP net of tax. That is, the tax benefit created by the interest expense is used to offset the interest cost capitalized. As a consequence, the cost of the plant under construction is reduced by the amount of the tax savings. The Staff advocates a gross of tax method whereby the interest costs associated with CWIP are capitalized in the amount incurred. The tax benefit is recognized by setting up a deferred tax reserve, which is then used as an offset to rate base.

The arguments presented by Staff and Company on this issue are similar to the arguments made on the issue of normalization versus flow through. The Staff maintains that the present ratepayers are providing the Company cost-free funds since the Company collects rates based on cost of service that does not reflect the tax benefits created by CWIP. Therefore, the Staff maintains, the ratepayers are paying



rates that include tax expenses the Company does not incur. To recognize the funds provided by the ratepayers, the Staff suggests the gross of tax method with an offset from rate base.

The Company argues that since ratepayers provide none of the funds for CWIP and pay no return on CWIP, they should not be allowed any benefits therefrom, that is, where CWIP in rate base expressly is excluded, it is totally inappropriate to further reduce rate base by a portion of the AFUDC accrued in excluded CWIP.

The Staff argues that under the net of tax method it is possible for ratepayers to provide cost-free capital to the Company and not get the offset to rate base. The Staff further argues that allocation factors are likely to be different when a construction project goes into service than when deferred taxes are used to reduce the cost of the construction project under the net of tax method. Thus, assuming that deferred taxes provided currently to the Company under the net of tax method are allocated 60 percent to Missouri and when Wolf Creek goes into service the allocation factor for Missouri is 58 percent, then in the ratemaking process Missouri ratepayers would never receive an offset for the 2 percent of the taxes they allegedly provided.

Based upon the evidence in this case, the Commission is of the opinion that the Staff's position on this matter is the most reasonable in this case and should prevail.

#### E. Summary

As a result of the foregoing adjustments, the Commission finds the net original cost, depreciated, rate base to be \$532,632,000.

#### RATE OF RETURN

The parties recommend the following rates of return on common equity and overall rates of return, respectively: KCPL, 18 percent and 13.14 percent; Staff, a range of 15.56-15.99-16.42 percent and 11.80-11.96-12.12 percent; DOE, 15.83 percent and 11.568 percent; Public Counsel, 15.56 percent and 11.66 percent. The appropriate capital structure to which the rate of return shall apply is also at issue.



The Company developed its suggested rate of return on equity using four different approaches. The first three are variations of a method called risk premium analysis. The underlying principle of the risk premium analysis approach is founded on the risk versus reward (or return) relationship between bonds and common stock. It is assumed that the required return on common equity is higher than the return investors require for bonds, due to the fact that common stock is considered to have more risk than bonds. The difference between the required return for stock versus bonds is the equity risk premium.

The Company's first approach used data collected by the Benore survey, conducted periodically by Charles Benore of Paine Webber Mitchell Hutchins, which purportedly reveals the return institutional investors require on utility common equity vis-a-vis current bond interest rates. The Benore study surveys institutional investors as to what kind of return they would require on AA-rated electric utility common stock to be attractive, given current yield on AA bonds.

The Staff, Public Counsel and DOE question the credibility of the survey. All three point out that there is no underlying documentation as to how the survey was conducted. Staff adds that there is nothing in the record to reflect whether the survey is a probability sample or a convenience sample. It is therefore difficult to determine whether proper sampling procedures were followed.

The second risk premium calculation utilized historical returns on Standard & Poor's (S&P) 40 utilities stocks over a period from 1926-1980 and compared those returns to historical yields on long term U.S. Government bonds for the same period. The Staff witness testified that it is not appropriate to strike an average over such a long period of time because that methodology ignores important fluctuations in bond and equity prices. Public Counsel goes on to assert that there is no evidence establishing that KCPL's risk is comparable to that of the companies in S&P's 40, and therefore cannot be applied to KCPL.

The third risk premium calculation proposed by Company uses an approximate ten-year historical return from a portfolio of public utility stocks whose bonds are

rated AA by Moody's Investor's Service, Inc. (Moody's) and S&P as compared to yields on U.S. Government bonds for the same period. Public Counsel points out that this method uses a recent historical period which is so volatile as concerns bonds that it should not be considered.

Public Counsel's point is supported in Staff's three-point attack of the risk premium analysis in general. Staff indicates that three assumptions, which Staff asserts are false, must be accepted as true when using the risk premium analysis. Those assumptions are: (1) ex post rate of return is equivalent to the required rate of return; (2) the risk of bonds relative to stocks is constant through time and this relationship will remain unchanged in the future; and (3) the average premium, measured as a difference between the average return on equity of a group of companies and bond returns, is applicable in determining a future return on equity for a specific company.

The Staff witness testified that: "Ex post ROE's [returns on equity] may or may not be equivalent to investors' required rate of return. Before 1973, most utilities traded well above book value, suggesting that they could have earned less and still fulfilled investors' requirements. Therefore, risk premiums developed using ROE's before 1973 (as Mr. Beaudoin does for the S&P 40 utilities for the period 1926 through 1980) may be overstated." As for the second assumption, even the Company witness admitted that the bond market in the United States has been rather volatile in the past year. The Staff witness also testified that the risk of bonds relative to common stock has been increasing over the last two years due to the volatile conditions reflected in interest rate swings. As concerns the third assumption, Staff states that using an average premium implies that individual differences between companies can be ignored when developing an expected return on equity. The Staff asserts it is not clear that investors would expect the same return for a given company that they expect from an average company. Hence, average risk premium results have very limited application and validity.

Due to the deficiencies pointed out by the parties with the Company's risk premium approach and the assumptions associated therewith, the Commission will focus its view on the discounted cash flow (DCF) method. In this case, the Commission is of the opinion that the DCF method has certain advantages over other methods due to the four advantages pointed out by DOE witness Dr. Stolnitz, which are: (1) the DCF method is market-oriented and incorporates the all-important variable of stock price; (2) its use is strongly supported by the literature on economically rational principles of investment under widely varying circumstances; (3) future price changes are taken into account, although implicitly; (4) DCF estimates have the advantage of providing a measure of built-in or compensatory stability through the workings of their two components.

The DCF model is based upon the equation:  $r = \frac{d}{p} + g$ ; where  $r$  is the rate return on equity,  $d$  stands for dividends per share,  $p$  stands for stock price, and  $g$  for growth. All parties' DCF models follow the definition stated above.

To develop the market yield term ( $\frac{d}{p}$ ) the Staff used KCPL's average yield on common stock based on 36 months ended December 1981, and 27 months ended December 1981. During that period of time, KCPL stock yielded an average of 12.2 and 12.88 percent, respectively. The range utilized by Staff acknowledges current economic conditions of high interest rates and at the same time recognizes the possibility of some moderation in those rates in the future. The three-year average for dividend yields includes ten months when interest rates were stable, relative to today's rates, and 27 months constituting those months after the Federal Reserve altered its policy to place greater emphasis on controlling the supply of bank reserves. For the  $g$  term the Staff used the trended growth in both KCPL's dividends per share as well as KCPL's earnings per share. Staff utilized the trended growth rate of KCPL's earnings per share from 1965 to 1981, excluding the low earning years of 1973, 1974, 1977 and 1979. The Staff witness concluded that a growth rate in the range of 2.85 to 3 percent for the next 12 to 18 months is reasonable to assume for earnings and dividends of KCPL.

The Company criticizes the method by which Staff developed its growth component. The Company points out that Staff's method results in the lowest possible trended growth rates between the years 1965-1981. The Staff witness testified that he plotted the dividends per share and earnings per share on a graph. After visually observing the years 1968 and 1969 appeared to be a new plateau in earnings per share and dividends for the Company, he used this as his starting point to develop his growth component.

Dr. Stolnitz, who appeared on behalf of DOE, also used a DCF analysis. With respect to the market yield term, Dr. Stolnitz utilized the annual dividend rate announced since the fourth quarter of 1981 of \$2.96 for the d component of the DCF formula. At the hearing Dr. Stolnitz introduced the latest KCPL stock price for the p component of the yield term, which was 25.25 as recorded in the Wall Street Journal of May 6, 1982, at page 46. This resulted in a dividend yield of 11.72 percent. Dr. Stolnitz testified that he also analyzed yield tendency of KCPL's stock for approximately half a year using Standard & Poor's Stock Guide, which reports yield measures. S&P's Stock Guide shows that from end-August through end-February, yields on KCPL's stock ranged from 12.7 to 14.1. Dr. Stolnitz believes that the odds favor a year or two average trend downward in interest rates, and since dividend yields tend to track interest rates, it is more probable that the Company's dividend yield will move downward toward 12 percent or less rather than return to 13 percent or more over the relevant foreseeable term. Therefore, in Dr. Stolnitz's opinion KCPL's next year-plus dividend yield will average no more than 12.25 percent. As a result, his recommendation for the  $\frac{d}{p}$  value is 12.25.

Dr. Stolnitz arrived at the g term of the DCF formula by studying the growth in Company's dividends per share over the past decade, which he notes fluctuated between 0 and 5 percent. The reasonableness of that range was tested by checking Value Line's latest survey of KCPL's dividend growth, which shows an average growth rate of 3.5 percent over the past five and ten years. Based upon the foregoing, Dr. Stolnitz utilized 3.5 percent as the g or growth component in his DCF

analysis. His recommendation for the r component of his DCF analysis is, then, 15.75. The Company also criticizes Dr. Stolnitz's growth component as it did Staff's. The Company in its brief questions why Dr. Stolnitz does not use Value Line's growth projection for KCPL if he relies on information published in Value Line's publications. Dr. Stolnitz replied on cross-examination that Value Line's growth projections have been "almost invariably wrong ... ". Furthermore, Dr. Stolnitz's use of Value Line's information was merely Value Line's computation of historical growth over the last five and ten years.

The Company also used a DCF model, which was the Company's fourth approach. In the Company's opinion the DCF approach to determining the cost of equity capital assumes the current market price of the stock represents the present value of all expected future payments, that is, dividends and sale price. Using the current annual dividend rate of \$2.96 per share and the current (as of the Company's December 1981 filing) market price results in a yield portion of the formula of about 13 percent. As Public Counsel pointed out, if the Company's position is that the most current market yield should be used, then Dr. Stolnitz's May 6, 1982, yield of 11.72 percent would seem to be most appropriate, rather than the Company's use of a December 1981 stock price to develop its yield of 13 percent. Consequently, to achieve the Company's requested rate of return on equity, the Company's growth component would have to be raised to 5.3 percent and 6.3 percent. Using the most current market yield as the Company contends is the proper method, which at the time of hearing was 11.72 percent as testified to by Dr. Stolnitz, and the Company's growth rate of 4 to 5 percent, the r value of the DCF model would be 15.72 to 16.72 percent. These figures do not include the additional calculations done by the parties for flotation costs or the effect of market pressure.

The Staff, DOE and Company all recognize that flotation costs occur and should be considered in determining a company's rate of return on equity. Staff found flotation costs have averaged 3.8 percent between 1972 and 1980 and therefore assumed a cost of 4 percent as being reasonable. Dr. Stolnitz found flotation costs

have amounted to no more than 5 percent of market price and used this figure in adjusting the  $r$  component developed from his DCF analysis. The Company witness testified that flotation costs have typically been 3 to 5 percent of the issuing amount and used 4 percent in his calculations. Considering the closeness in range of the flotation costs testified to, the Commission considers the Staff's average of 4 percent to be the most reasonable figure. While the parties all found flotation costs to be in the same range, they did not apply them in the same manner.

The Company, in making its adjustment for flotation costs, made an additional adjustment for what it termed as market pressure. Company defined pressure as the measurement of the downward movement of prices below market levels that would exist if there were no issue of stock. Dr. Stolnitz did not make an adjustment for pressure. Dr. Stolnitz testified that market pressure, if it exists, would already be reflected in price, and therefore would already be accounted for in the  $\frac{d}{p}$  term of the DCF analysis. To permit a separate allowance over and above the DCF return would, in Dr. Stolnitz's opinion, constitute double-dipping. Staff witness Stubblefield agreed with Dr. Stolnitz and indicated that if an oversupply of a particular stock exists, or investors fear earnings dilution from a new issue, the impact will be reflected in the stock price, and hence the dividend yield term of the DCF measure. In light of the testimony of Dr. Stolnitz and Mr. Stubblefield, the Commission is of the opinion that market pressure as allowed for by the Company is not a proper adjustment to the DCF model.

The Staff applied its flotation adjustment to the market yield component of its DCF model. The Company applied its flotation adjustment to the  $r$  component of its DCF model. Dr. Stolnitz applied his flotation adjustment to the  $r$  component of his DCF analysis and then did an added analysis of flotation costs. Dr. Stolnitz reviewed the proceeds from six new stock sales made during 1975 to 1980 and found they averaged about 10 percent of common equity capitalization during those years. He then assumed for the next 12 to 18 months that new stock issues will amount to 10 percent of Company's average common equity capitalization from all sources.

Consequently, Dr. Stolnitz applied his flotation costs to his r component, then factored the costs on the basis that the flotation costs should only be applied to 10 percent of the r component.

The Commission determines that Dr. Stolnitz's flotation method should be used in determining the rate of return on equity to be set for this company, because it recognizes that flotation costs only apply to new public offerings. Using Dr. Stolnitz's method with 4 percent as the flotation cost on Staff's r component results in a range of rate of return on equity of 15.11 percent to 15.91 percent. Using 4 percent for flotation costs on Dr. Stolnitz's r component results in a return on equity of 15.81 percent. Using the market yield component as was found above to be consistent with the Company's DCF method and with the Company's growth rate of 4 and 5 percent, and applying Dr. Stolnitz's flotation method at a 4 percent cost, results in a range of 15.75 percent to 16.79 percent rate of return on equity for the Company. Consequently, using the r components as set out above and applying the flotation costs as set out above results in the following numbers for the parties:

Staff	— 15.11 percent to 15.91 percent
DOE	— 15.81 percent
Company	— 15.75 percent to 16.79 percent

Public Counsel used Staff's low point of 15.56 percent. Applying the modified calculations that have resulted from the Commission's above findings, Public Counsel's rate of return would be changed to the new low point of Staff, that is, 15.11 percent.

The Company argues that inflation will continue at a rate of 10 percent. Furthermore, the Company argues that its financial integrity is at stake in determining what rate of return on equity to allow. The Company defines financial integrity as "a financial condition by which a company has the financial strength and flexibility to issue the type of security it desires when needed, even during difficult or tight money periods. Most importantly, financial integrity corresponds to obtaining capital at the most reasonable cost." The Company goes on to assert

that to have financial integrity a company must have an AA bond rating. Both Staff witness Stubblefield and DOE witness Dr. Stolnitz testified that a rating of A does not bar the Company from the financial markets. Witness Stubblefield further noted in his direct testimony that it is not unusual for an electric utility at this time to have an A rating and that many utilities have financial needs similar to KCPL.

As concerns the inflation rate, both Staff witness Stubblefield and DOE witness Dr. Stolnitz were of the opinion that inflation would run well below 10 percent. The DCF model relies on the market which, in and of itself, is a barometer of future expectations of buyers and sellers, which implicitly accounts for inflation. The Commission is also of the opinion that the Staff's procedure for selecting data input for the dividend yield component of the DCF model is the most reasonable. The Commission notes that Staff's method uses averages over a period of time that will account for any abnormalities existing in the marketplace at any one point in time. To use the Company's or DOE's method would allow for abnormalities to come in, or for the pick-the-best-day method the Company appears to advocate. Dr. Stolnitz recognizes this in not using the actual data from May 6, 1982, in determining his market yield, but adjusts for that in what, in his expert opinion, would result in the future.

The Commission finds that the 36-month time period utilized by Staff for determining dividend yield is appropriate in this case. The Commission further finds that the five- and ten-year average of dividend growth used by Dr. Stolnitz in this proceeding is appropriate. Utilizing flotation costs of 4 percent and Dr. Stolnitz's flotation methodology, which the Commission finds appropriate herein, the Commission finds that the reasonable return on equity for the Company is 15.76 percent, which is within the ranges of return on equity shown above.

The final issue concerns the capital structure to which the rate of return on equity is applied. The Company argues it should be applied to an optimal capital structure. The capital structure recommended as optimal by the Company is 48 percent long term debt, 12 percent preferred stock, and 40 percent common equity. The



Company contends that it is that level of debt, preferred stock and common equity which, when combined with the cost of capital, will result in a rate of return which provides the Company with the proper level of financial health. The Company goes on to state that if it is allowed to earn its actual cost of capital, the optimal capital structure, if achieved, would provide KCPL with the flexibility needed to attract required capital at the lowest cost, maximize its common share price, and thus balance consumer and shareholder interests. The Staff contends that the proposed capital structure has no basis in reality, recent history, or the foreseeable future. DOE witness Dr. Stolnitz went so far as to say, "it is not an optimal anything".

The Commission notes that Staff's trued-up capital structure for the Company is 48.60 percent for long term debt, 13.74 percent for preferred stock, and 37.65 percent for common equity. Based on the record in this case, the Commission is not convinced that a higher rate of return to the Company on the basis that such will allow the Company to achieve its optimal capital structure is a proper adjustment, or would even have the effect asserted by the Company. Therefore the Commission is of the opinion that the Company should be allowed an overall rate of return of 11.91 percent.

#### RATE OF RETURN ADJUSTMENT

While the Commission may raise or lower a company's rate of return to account for management efficiency, or lack thereof (see authorities cited in ER-82-39 and WR-82-50, Re: In the Matter of Missouri Public Service Company, decided June 21, 1982, pp. 58-62), there is not sufficient evidence in this case upon which to base such an adjustment. However, the parties should be aware of the possibility of such an adjustment in the future and should, in future cases, present testimony, when appropriate, upon which the Commission could base such an upward or downward adjustment.

### REVENUE REQUIREMENT

The rate of return found herein to be reasonable and proper results in a total net operating income requirement for Missouri operations in the amount of \$63,436,000, or \$6,352,000 greater than the net operating income for the test year as adjusted. After applying the proper allowance for income tax and the increase for projected fuel prices, the gross revenue deficiency is found to be \$14,413,000.

### FAIR VALUE RATE BASE

The Commission finds the Missouri jurisdictional portion of the Company's fair value rate base to be \$728,049,000 for electric operations. This amount includes all necessary components of rate base required by law. Applying the net operating income requirement of \$63,436,000 for electric operations which has been found reasonable in this case to the electric fair value rate base produces a fair value rate thereon of 8.71 percent, which the Commission finds to be fair and reasonable.

### RATE DESIGN

All of the parties to this proceeding recognize the pendency of EO-78-161, Re: In the Matter of Rate Design of Kansas City Power & Light Company. Consequently, all parties except Public Counsel maintain that the increased revenue requirement in this case should be spread in a manner to maintain the status quo.

Public Counsel argues that the inclusion of the Iatan generating station has significantly changed KCPL's composition of generation and fuel costs. Public Counsel argues that the Iatan station is directly responsible for the Company's reduction in fuel expense. With that argument, Public Counsel asserts that the Company incurred higher capacity costs in building Iatan to receive the benefit of lower fuel expenses. Therefore, Public Counsel believes part of that higher capacity cost should be assigned as a variable cost. While Iatan may be the reason for lower fuel costs, the Commission from the instant record cannot reach the conclusion of Public Counsel respecting the reasons for the building of Iatan and the customer classes it benefits. These questions are more fully and accurately considered in the context of a full class cost of service study.

The Staff and Company propose that the increased rates be distributed to and within the various classes on an equal percentage basis. It should be noted that had the fuel expense portion of this case gone up, the Staff would allocate the increased fuel expense on a per kilowatt hour basis. Armco and GM propose that: (1) the nonfuel portion of this rate case be allocated among the various customer classes on the basis of revenues exclusive of fuel cost, and (2) that the fuel cost portion be allocated in proportion to energy requirements. This methodology is commonly referred to as the zero fuel method.

Armco and GM accuse the Staff of being inconsistent in its treatment of variable and fixed costs. Armco and GM note that had fuel expense been rising the Staff would have allocated the variable cost of fuel expense on a per kilowatt hour basis. As it is, Staff is netting the decrease in fuel expense against the increase in fixed costs that are to be spread on an equal percentage basis, while allocating the increase in coal prices in the stipulation and agreement on a per kilowatt hour basis. This, Armco and GM claim, is discriminatory to industrial users of electricity. The industrials point out that they have not contested allocating variable costs on a per kilowatt hour basis during all of the years fuel expenses were going up, and now contend that it is only fair that fuel costs should go down the same way they went up. The industrials also argue the increased revenue requirement associated with the demand-related costs should be spread on the basis of revenues exclusive of fuel costs, that is, the zero fuel method. The Commission has not adopted this method before and finds no compelling arguments for its adoption now.

The Commission in the past has allocated fuel increases on a per kilowatt hour basis while spreading nonfuel increases on an equal percentage basis. With EO-78-161, Re: In the Matter of Rate Design of Kansas City Power & Light Company, pending, the Commission believes it should spread this rate increase in a manner consistent with past practice. Consequently, the Commission is of the opinion that the decreased fuel expenses in this case should be reflected on a per kilowatt hour

basis, and the increased revenue requirement resulting from nonfuel costs should be spread on an equal percentage basis as defined by Staff herein.

#### Conclusions of Law

The Missouri Public Service Commission has arrived at the following conclusions of law:

The Company is a public utility subject to the jurisdiction of this Commission pursuant to Chapters 386 and 393, R.S.Mo. 1978. The Company's tariff sheets which are the subject matter of this proceeding were suspended pursuant to the authority vested in this Commission by Section 393.150, R.S.Mo. 1978.

The burden of proof to show that the proposed increased rates are just and reasonable is upon the Company.

Orders of this Commission must be based upon competent and substantial evidence upon the whole record.

The Commission, after notice and hearing, may order a change in the rate, charge or rental, in any regulation or practice affecting the rate, charge or rental, and it may determine and prescribe the lawful rate, charge or rental and the lawful regulation or practice affecting said rate, charge or rental thereafter to be observed.

The Commission may consider all facts which, in its judgment, have any bearing upon a proper determination of the price to be charged with due regard, among other things, to a reasonable average return upon the capital actually expended, and to the necessity of making reservations out of income for surplus and contingencies.

Any evidence received without objection which has probative value shall be considered along with other evidence in the case. Evidence which is not of such quantity to be persuasive of the fact to be established may be rejected even if not objected to or controverted.

When the Company's existing rates and charges are insufficient to yield reasonable compensation for electric service rendered by it in this state and, accordingly, revisions in the Company's applicable tariff charges, as herein

authorized, are proper and appropriate and will yield the Company a fair return on the net original cost rate base or the fair value rate base found proper herein, new rates resulting from the authorized revisions that will be fair, just, reasonable and sufficient and not unduly discriminatory or unduly preferential should be authorized.

Although there is no requirement that a test year, or any other specific procedure, be used, a test year is commonly utilized in an attempt to measure a period of normal operations, to which reasonable adjustments may be made to permit the establishment of a reasonable estimate of conditions during the period of time in which the new rates will be in effect.

Under ordinary circumstances, adjustments to a test year are confined to those permitting a matching of revenues and expenses. When known increases in expenses will occur, the inequity in disallowances for a lack of precise measurement may outweigh the potential for unfairness in the allowance of the expense for which the precise corresponding revenues cannot be established.

For ratemaking purposes, the Commission may accept a stipulated settlement on any contested matter submitted by the parties. The Commission is of the opinion that the matters of agreement between the parties in this case are reasonable and proper and should be accepted.

No individual allowance is improper if it has not contributed to an ultimate rate level that is in excess of that which is fair and reasonable.

On July 8, 1982, the Staff filed a Motion For Leave of Staff to File, Subsequent to the Commission's Report and Order in Case No. ER-82-66, Explanation of Proposed Accounting Treatment of Kansas City Power & Light Company's Nuclear Fuel Lease Transaction. The Commission is of the opinion that this motion should be granted.

Any motion not previously ruled on should be considered denied, and any objection not previously ruled on should be considered overruled.

It is, therefore,

ORDERED: 1. That the proposed revised electric tariffs filed by Kansas City Power & Light Company in Case No. ER-82-66 are hereby disapproved, and the Company is authorized to file in lieu thereof, for approval by this Commission, permanent tariffs designed to increase gross revenues by approximately \$14,413,000 on an annual basis, exclusive of gross receipts and franchise taxes.

ORDERED: 2. That Case No. EO-83-9 be, and hereby is, established pursuant to the stipulation and agreement on forecasted fuel costs approved herein, to be styled "Investigation and Audit of Forecasted Fuel Expense of Kansas City Power & Light Company"; and that the entire record of Case No. ER-82-66 shall be incorporated by reference as evidence in said Case No. EO-83-9.

ORDERED: 3. That Staff's Motion For Leave of Staff to File, Subsequent to the Commission's Report and Order in Case No. ER-82-66, Explanation of Proposed Accounting Treatment of Kansas City Power & Light Company's Nuclear Fuel Lease Transaction, be, and hereby is, granted.

ORDERED: 4. That the Kansas City Power & Light Company conduct a detailed study to support all contentions by KCPL that two units at Hawthorn station units 1 through 4 should be on line at all times, and file said study with the Commission Staff on or before October 14, 1982, unless otherwise ordered.

ORDERED: 5. That Kansas City Power & Light Company shall conduct a study to establish detailed policies and procedures that direct what costs should be directly charged to construction. The study shall also establish detailed policies and procedures to account for those construction-related administrative and general salaries and expenses that cannot be charged to a specific project and assign those amounts ratably among the various construction projects. The study and its results are to be filed with the Commission Staff on or before October 14, 1982, unless otherwise ordered.

ORDERED: 6. That Kansas City Power & Light Company shall file the tariffs in compliance with this report and order on or before July 20, 1982, using the rate design as set out by the Commission in this report and order.

ORDERED: 7. That the rates established in the tariffs may be effective for service rendered on and after July 24, 1982.

ORDERED: 8. That this report and order shall become effective on the 24th day of July, 1982.

BY THE COMMISSION

*Harvey G. Hubbs*  
Harvey G. Hubbs  
Secretary

(S E A L)

Fraas, Chm., Dority, Shapleigh and  
Musgrave, CC., Concur and certify  
compliance with the provisions  
of Section 536.080, R.S.Mo. 1978.  
McCartney, C., Absent.

Dated at Jefferson City, Missouri,  
on this 14th day of July, 1982.