BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

CASE NO. GR-80-117

In the matter of Missouri Public Service Company of Kansas City, Missouri, for authority to file tariffs reflecting increased rates for gas service provided to customers in the Missouri service area of the company.

CASE NO. ER-80-118

In the matter of Missouri Public Service Company of Kansas City, Missouri, for authority to file tariffs reflecting increased rates for electric service provided to customers in the Missouri service area of the company.

APPEARANCES:

W. R. England, III, Attorney at Law, and Robert L. Hawkins, Jr., Attorney at Law, Hawkins, Brydon & Swearengen, P.C., P. O. Box 456, Jefferson City, Missouri 65101, for Applicant, for Missouri Public Service Company.

Steven P. Callahan and James M. Fischer, Assistant Public Counsels, Office of the Public Counsel, P. O. Box 1216, Jefferson City, Missouri 65102, for the Office of Public Counsel and the public.

Kent M. Ragsdale, General Counsel, William C. Harrelson and Thomas R. Parker, Assistants General Counsel, Missouri Public Service Commission, P. O. Box 360, Jefferson City, Missouri 65102, for the Staff of the Missouri Public Service Commission.

REPORT AND ORDER

Missouri Public Service Company (hereinafter the Company) on October 5, 1979, submitted to the Missouri Public Service Commission (hereinafter the

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Commission) revised electric rate schedules designed to increase the Company's billed jurisdictional electric revenues approximately $28,400,000 annually, exclusive of franchise and gross receipts taxes. Also on October 5, 1979, the Company submitted to the Commission revised gas rate schedules designed to increase the Company's billed jurisdictional gas revenues approximately $798,000 annually, exclusive of franchise and gross receipts taxes. The Company gave the revised gas and electric rate schedules an effective date of November 5, 1979.

On October 17, 1979, the Commission suspended the revised gas and electric schedules for 120 days beyond November 5, 1979, to March 4, 1980, and ordered the Company to file its prepared testimony, exhibits and minimum filing requirements. On November 28, 1979, the Commission further suspended the revised schedules for six months from March 4, 1980, to September 4, 1980.

On November 28, 1979, the Commission also set December 28, 1979, as the date for interventions; May 16, 1980, as the date by which the Commission Staff (hereinafter Staff), each intervenor, and the Office of Public Counsel (hereinafter Public Counsel) were to file and serve their prepared testimony and exhibits; June 9, 1980, as the date for the prehearing conference to begin; and June 12, 1980, as the date for the hearing to begin. In addition, in its November 28, 1979, order the Commission consolidated the above cases for hearing.

On February 15, 1980, in response to a request from the Public Counsel, and over the objection of Company, the Commission extended the date by which Public Counsel was to file testimony and exhibits from May 16, 1980, to May 23, 1980.

On March 19, 1980, the Commission ordered local hearings to be held on June 5, 1980, at Raytown, Missouri, and on June 6, 1980, at Liberty, Missouri. Also on March 19, 1980, the Commission ordered the Company to comply with 4 CSR 240-2.110(12).

On May 6, 1980, in response to a request from the Staff, the Commission extended the date by which the Staff was to file its testimony and exhibits from May 16, 1980, to May 30, 1980. Also, on May 6, 1980, in response to a request from the Public Counsel, and over the objection of Company, the Commission extended the date by which Public Counsel was to file testimony and exhibits from May 23, 1980, to June 4, 1980.

On December 13, 1979, the City of Marshall, Missouri (hereinafter Marshall) filed an application to intervene in both cases. On December 21, 1979, the City of Kansas City, Missouri (hereinafter Kansas City) filed an application to intervene in Case No. ER-80-118. On December 27, 1979, Jackson County, Missouri (hereinafter Jackson County) filed an application to intervene in Case No. ER-80-118. The Commission granted those applications.

On December 17, 1979, the Company timely filed and served on all parties of record its testimony and exhibits.

On February 4, 1980, Public Counsel served a data request upon Company. On February 19, 1980, Public Counsel served interrogatories upon Company. On February 28, 1980, Public Counsel served further interrogatories upon Company. Company timely answered all data requests and interrogatories.

On May 30, 1980, Staff filed and served its testimony and exhibits, and on June 4, 1980, Public Counsel timely filed and served testimony and exhibits upon all parties.

Pursuant to the Commission's Order of November 28, 1979, a prehearing conference was convened on June 9, 1980. Representatives of the Staff, Company and Public Counsel attended the prehearing conference. Kansas City, Jackson County and the City of Marshall did not make an appearance.

At the prehearing conference, the parties delineated for the Commission those areas of conflict which, after the prehearing conference, continued to exist (Hearing Memorandum, Exhibit 2).

Hearing in these cases began on June 16, 1980, and continued from day to day until completed on June 25, 1980. The hearing generated approximately 1,426 pages of transcript and 93 exhibits. All parties were afforded an opportunity to file briefs and reply briefs.

Findings of Fact

Test Year

At the prehearing conference the parties agreed to utilize a test year ending December 31, 1979, as adjusted for known and measurable changes through June 30, 1980. The Commission accepts this as a reasonable test year, since it represents economic conditions, as nearly as possible, during the time the rates to be established by this case will be in effect.

Rate Base

As a part of its filed case, the Company claims a net original cost rate base for electric service in the amount of $261,699,539 and a gas rate base of $15,348,087.

The Staff proposes an electric rate base in the amount of $247,475,152, with the corresponding figure for gas service in the amount of $12,927,489. The difference consists of a number of disputed rate base items hereinafter discussed.

1. Jeffrey Energy Center, Common Facilities. Company has an eight percent ownership in Jeffrey Energy Center (JEC), which when completed will consist of four 680 megawatt coal fired generating units. At present only two units are fully operational and used for service (JEC-1 and -2). The remaining

two units will become available for service in 1983 and 1985, respectively. Staff proposes that only 50 percent of the common facilities and indirect costs at JEC be included in rate base. Company contends that 100 percent of those amounts should be included. If Company's position is adopted, Staff's valuation of Company's rate base would be increased by $1,979,746. Public Counsel supports Staff's position.

Staff defines "common facility" as a plant item designed and constructed to be used with all four units at JEC. Common "indirect costs" are either tangible or intangible assets which will be used throughout construction of all four units at JEC, such as engineering design or temporary construction facilities.

Staff proposes that the common facilities and indirect costs be allocated equally among the four units. To attain that end, Staff added the amounts of the items, which, in its opinion, constituted common facilities and indirect costs, and divided by four to arrive at a 25 percent allocation per unit. Staff made an independent analysis of the type of facilities which are required at JEC-1 and -2 versus the other units. All of the disputed items are necessary for the operation of JEC-1 and -2, as well as for JEC-3 and -4.

Company also contends that if 50 percent of the cost is put back into construction work in progress, the additional interest would have to be capitalized at the expense of the ratepayers and that Staff's approach will be more costly to the ratepayers. The Company's Exhibit 65 indicates that if the ratepayers' cost of capital exceeds 9.7 percent, then the Company's approach is more costly. In the Commission's opinion the evidence in this record supports a finding that the ratepayers' cost of capital exceeds 9.7 percent.

This precise issue was presented in Company's last rate Case No. ER-79-60 at a time when only JEC-1 was in service. The Commission adopted a similar Staff allocation and included 25 percent of the common plant in rate base for the purpose of that case. The Commission reaffirms its position and finds that common facilities and indirect costs incurred in the building of a multi-unit power plant should be allocated on the basis of the number of units and placed in rate base in direct proportion to the number of units in service.

The Commission recognizes, that as to some of the facilities in controversy, the entire amount of the common facilities constructed are necessary for the operation of JEC-1 and -2. One such example is the coal handling facilities which were not sized as a result of the number of units to be placed in service. The coal handling facilities were built to meet the railroad specifications that a 110-car coal train must be unloaded within a specified length of time. In the Commission's opinion, the controlling factor is that the common facilities are necessary for the operation of and are designed to be used in conjunction with JEC-4 just as much as with JEC-1. All of the facilities involved in this issue were designed to serve all four units. The Commission finds that the ratepayer should not be burdened with facilities which are not yet used or useful in the operation of Units 3 and 4.

Fifty percent of the JEC common plant should be included in the electric rate base and the Company should be allowed to continue to accrue an allowance for funds used during construction on the disallowed portion to permit the Company a return on that investment.

2. Fuel Inventories. The Staff proposes to include in rate base a level of oil inventory at the Greenwood and Nevada generating stations based on the annual average consumption for 1978 and 1979 and the Staff's annualized burn rate used in its test year. The Staff does not propose an allowance in rate

base for inventory at the KCI generating station since that unit has not used any significant amounts of oil recently.

The Company contends that its oil inventories at Greenwood, Nevada and KCI should be based upon a thirteen-month average and that the rate base as proposed by the Staff should be increased by $2,898,675.

The Staff's proposal to include approximately 2,033,682 barrels of oil in fuel inventory is based upon a simple average of the actual burn during 1978 and 1979 and the Staff's annualized burn used in its test year to determine the annual level of normal use. During 1978 there was a high level of oil consumption due to a lengthy nationwide coal strike. The Company's level of oil generation used during that strike necessitated a request for a surcharge to cover those extraordinary fuel costs. The use of 1979 in the Staff's average utilized the year of low oil generation due to cool summer weather. The third component of Staff's computation was its annualized burn which is based upon normal conditions.

Staff does not propose to include any KCI oil inventory because that unit is primarily designed to be gas fired and only under the combination of unusual circumstances would it use oil. Those circumstances would have to include a high winter demand in the area, two transmission lines being out of service, and the unavailability of gas. Since Company is a summer peaking utility, it is unlikely that the KCI unit would use oil at that time of year since during the summer natural gas is generally available.

The Company claims that the Staff's level of fuel inventory would be insufficient at Greenwood and Nevada. The claim is based in part upon the fact that there is a two-week delay between the ordering of fuel and its delivery. The Company contends that during emergency conditions this two-week delivery lag would preclude the Company from providing safe and adequate service if it maintained the fuel oil inventory recommended by Staff.

The Commission is unable to accept Company's proposal to allow an inventory equal to a thirteen-month average. The carrying costs on such an inventory would far outweigh the benefit thereof, and the historical burn data, as well as any foreseeable future occurrences make the prospect for that amount of oil use rather unlikely. The Company's requested fuel oil inventory at Greenwood and Nevada exceeds the 1978 oil consumption at those two stations by 1,304,641 gallons.

The goal of ratemaking is to arrive at rates based upon anticipated normal conditions and it is unlikely that the oil consumption during the lengthy coal strike of 1978 will be duplicated during the time these rates will be in effect. The Commission adopts the fuel oil inventory at Greenwood and Nevada proposed by the Staff. The Commission is of the opinion that it is improper to place any fuel oil inventory of KCI into the rate base due to the remote possibility of use of oil at that station.

The Commission has also taken into consideration the fact that the Company earns a profit on its fuel oil inventory. The fuel oil inventory allowed in rate base is priced at replacement cost which is presently approximately 97.22 cents per gallon at Greenwood. The actual average cost of the fuel at Greenwood as of December 31, 1979, was 47.49 cents. It can be seen that it is to the Company's advantage to maintain a high fuel inventory since a rate of return would be allowed based on replacement costs rather than actual cost; therefore, the Company would earn a profit on money never spent.

3. Cash Working Capital. All parties agreed that an amount of cash working capital is an appropriate rate base item. Any operating business needs cash to conduct its day-to-day operations during the period of time between the

provision of a service and the receipt for payment. In this case, both the Staff and the Company have performed lead/lag studies to determine both revenue and expense lags. A revenue lag is that period of time between the provision of a service and a receipt of payment. An expense lag is the period of time between the incurrence of an expense and the payment for that expense. The issue of cash working capital is divided into several subissues which will be discussed separately.

A. Procedural Issue. At the hearing, Staff objected to Company's putting on evidence as to this issue as it had not prefiled testimony. It was Staff's position that the proffered testimony was additional direct testimony rather than being in the nature of rebuttal to Staff's evidence. The objection was sustained by the hearing examiner and the testimony preserved pursuant to Section 536.070, RSMo.

This intertwined semantic and procedural problem has arisen with increasing frequency, and the Commission has attempted to deal with it by strictly enforcing the requirement of prefiled testimony. This is, of course, not always possible in the case of true rebuttal evidence.

Basically the same problem had arisen earlier in this case (see Tr. 899 ff.) and the Commission ruled in favor of accepting the evidence. As the testimony herein objected to has been preserved in the record, and all parties had adequate opportunity to cross-examine, the Commission feels that it should consider the issue on its merits and so decide it.

B. Revenue Lag. In its study, the Staff determined the revenue lag for central billing to be 38.15 days, composed of 15 days' consumption, six days to process the bill and 17.15 days from the mailing date of the bill to the date the payment is received.

Company on the other hand arrived at a revenue lag of 47.73 days, using the same methods as the Staff with the exception of a 26.73 day time lapse from billing to receipt of payment rather than 17.15 days. The difference of 9.58 days results from the difference in the computation of the number of days from the mailing of the bill to the receipt of payment.

The Company used an accounts receivable turnover calculation which measures the average length of time that an account is outstanding. In Company's calculation, total revenues are divided by an average accounts receivable balance. This results in an accounts receivable turnover ratio which is applied to 365 days to equal the total number of days of accounts receivable turnover, which can be equated to the time to collect a bill after it is mailed. The Company's method is merely an estimation of the average time between billing and receipt of payment and does not examine actual customer payment records. This approach may be highly inaccurate since Company maintains only monthly accounts receivable balances as opposed to daily balances. The assumption inherent in such an analysis is that the balance on thirteen days of the year is representative of the balance on the other 352 days of the year.

The Staff's study was based on the selection of six locations consisting of Warrensburg, Concordia, Lee's Summit, Raytown-Kansas City, Sedalia and Cole Camp. The towns were chosen in an attempt to select three rural areas and three suburban areas. Within the towns selected, a meter reading route was chosen at random and every fourth bill on that meter reading route was included in the study.

The Company questions the soundness of the Staff's study since it fails to consider nonpayments. This claimed deficiency would appear to be invalid since a nonpayment, by its very nature would be improper to include in a study to determine the interval between receipt of service and payment for the service.

In addition the Company has a deduction for bad debts as an expense in the case.

The Company also criticizes the Staff's method as not being a statistically sound sample and suggests that it is nonrepresentative and biased. In the Commission's opinion, merely because a sample utilizes judgment it is not rendered invalid, and the Staff's approach is superior to that of the Company as it utilized the actual source documents to determine the length of time between bill rendition and payment. The Staff's calculation of revenue lag is based on an acceptable method and should be utilized for the purpose of this case.

C. Payroll Expenses. A number of specific expense lags have been examined, one of which is payroll expense. Although the Company and the Staff utilized different methods, both have arrived at a 14.75 day lag in the payment of the Company's payroll taxes. Although the Company opposes the Staff's approach as being theoretical, the Staff calculates the time of payment of payroll taxes by looking to the last day that such taxes may legally be paid without being delinquent. Staff's proposed lag takes into consideration that the Company is allowed three banking days, excluding Saturday and Sunday and any legal holiday after the withholding of payroll taxes to remit them to a Federal depository. In the Commission's opinion the Staff's approach is sound in that computing a cash working capital requirement should not include an allowance for paying obligations earlier than legally required to do so.

D. Expense Lag For Jeffrey Coal and Greenwood and Nevada Oil. As a factor in computing cash working capital, Staff proposes to include the lag between actual delivery of coal and oil and the time the fuel is paid for. It has been agreed between Staff and Company that a 90-day inventory of coal will be allowed in rate base priced at replacement cost. The same agreement extends to fuel expense.

The Company claims no lag in fuel expense on the ground that it had been paid prior to the time the expense is booked. The Company's contention appears to be erronenous in that a lag study is to determine the length of time after products are delivered before the payment must actually be made. It has no relation to the time that the fuel is taken out of inventory and booked as an expense.

Since fuel inventory is included in rate base at replacement cost, it is logical for cash working capital to reflect the actual passage of time before payment is due as an offset to cash working capital. The Staff's proposed offset should be adopted.

E. Health and Life Insurance Vouchers. This issue has been resolved since the Company's testimony indicates that the difference between the Staff and Company method calculating the effect of health and life insurance vouchers will not have a material effect on the composite expense lag.

F. Transportation Expense. The Company has calculated a negative lag for transportation expenses as a result of the expense being booked prior to its payment and even prior to the receipt of the service. Such calculations would appear to be erroneously included in an expense lag study since the time of the booking of an expense may have little relationship to the actual time of the cash outlay and payment for the services involved. The Staff's examination indicates that there is a 31-day period between the receipt of the involved service and the cash payment by the Company for that service. The Staff's approach appears to be more realistic and should be adopted for the purpose of calculating cash working capital in this case.

G. Other Cash Vouchers. In addition to the examination of the major items of payroll, fuel and transportation expense in the lead/lag study, the Staff examined all other cash vouchers in the amount of $1,000 or more for the five-month period November, 1979 through March, 1980. The Company criticizes the Staff's method contending that the sample was not statistically valid and that there exists a different method of paying local vendors not properly reflected in the Staff's study.

In the Commission's opinion the Staff's approach is not defective by virtue of its selection of vouchers since it was designed to account for the largest expenditures. The Staff's method would appear to be at least as valid as the Company's sample of vouchers which were exmained during a twelve-month period ending September, 1978, completely out of the test year.

The Company introduced no evidence to show how any early payment policy for local vendors would have distorted the Staff's study. No information was furnished as to what percentage of bills due local vendors would have been under the $1,000 floor of the vouchers selected by the Staff. In the Commission's opinion the Staff's survey of cash vouchers was appropriate and should be accepted as a factor in calculating the composite revenue and expense lag.

H. <u>Property Taxes</u>. During the course of the hearing the Staff and the Company have agreed that the expense lag associated with property taxes should be 107.65 days.

I. <u>Current Income Tax Expense</u>. During the course of the hearing the Staff and the Company have agreed that the revenue and expense lag associated with current income tax expense should be included in the calculation of cash working capital.

J. <u>Interest Expense</u>. Staff proposes to include interest expense on long-term debt as an offset to cash working capital. Company opposes this offset because of the contemplated issue of long-term debt. The Company contends that should an issue of long-term debt occur after the rates are set in this case, there is no provision for recovery of the interest on the new issue and to the extent that any interest payment becomes due prior to such effective date, the Company has prepaid the interest expense.

The Company's position appears to be in conflict with the concept of a test year. Although the test year's level of revenues and expenses are adjusted for known and measurable changes, the evidence established that there is only a chance that the proposed $25,000,000 term loan would be issued by September 1, 1980. Since interest expenses have already been annualized in this case, the level of interest expense has been projected for known and measurable changes.

The Company's position also appears faulty in that any new debt would more than likely be used to refund short-term debt incurred for construction of the Jeffery Energy Center. In that event, it is probable that any new issue of long-term debt would replace short-term debt at a lower interest rate. In that event the Company's interest expense will be decreased rather than increased presenting a potential for higher return to the common shareholder.

It has long been recognized that some tax amounts are a proper offset to cash working capital. The tax amount is a separate component of the rate structure and is in the rate for the sole purpose of being collected from the ratepayer and passed on to the appropriate taxing authority.

Interest on long-term debt is in the same category and while in the hands of the Company is a free source of cash provided by the ratepayer. Neither the Company nor its shareholders have any ownership rights in those funds, but the Company does have the use of them for some period of time prior to passing them on to the Company's creditors.

The Commission, on a number of occasions, has stated that amounts collected as part of rates to pay the interest on long-term debt should be treated in a similar manner to offset rate base. The obligation to pay the interest on debt is a known and certain obligation, and the amount is precollected throughout the year from the ratepayers for the sole purpose of passing it on to the bondholders.

The Commission reiterates its position that the use of accrued interest on long-term debt as an offset to cash working capital allowance is proper and that the Staff's proposal in this respect should be accepted.

K. Depreciation Expense, Net Operating Income and Deferred Taxes. The Company proposes to include depreciation expense, net operating income, and deferred taxes as a positive addition to cash working capital funds which it contends are supplied in advance by the investor. Depreciation expense and deferred taxes require no cash outlay by the Company although they are booked as expenses. It is improper to attempt to include in a cash working capital allowance items that do not contemplate a cash outlay.

The Company associated a zero day expense lag with net operating income. Net operating income is also inappropriate as a positive addition to an allowance for cash working capital since it also does not require a cash outlay by the Company. Any cash expenditure associated with net operating income would be the payment of dividends to common and preferred shareholders. Since those payments are quarterly, an expense lag would be associated with that payment since the expense is recovered throughout the year through rates.

Since it is inappropriate to include in cash working capital any amount not involving actual cash outlay, the Company's proposed positive addition to cash working capital for depreciation expense, net operating income and deferred taxes is improper and should be disallowed.

L. Injuries and Damages Reserve. The Staff has agreed with the Company that the injuries and damages reserve should not be used as an offset to a cash working capital requirement.

As a result of the treatment for the various issues concerning cash working capital, the Commission finds that the Company has a negative cash working capital component in its jurisdictional rate base in the amount of $4,493,770 for electric service and a negative working capital requirement of $200,388 for gas service.

The Commission finds that the net origial cost jurisdictional electric rate base for the purpose of this case is $247,475,152. The corresponding gas rate base is $12,927,489..

Rate of Return

1. Capital Structure. The parties hereto have agreed that the capital structure of Company is as follows:

Type	Ratio	Cost	Weighted Cost
Long-Term Debt	50.0%	7.41%	3.71%
Intermediate Debt	9.1		
Preferred and Preference Stock	13.5	8.63	1.17
Common Equity	27.4		
Total	100.0%		

While capital ratios are not an issue in this case, the question as to cost of intermediate-term debt and common equity are contested.

2. Intermediate Debt. Company asserts that the existence of intermediate-term debt in its capital structure is the result of its financial condition which will not allow it to engage in long-term financing in the near future. The debt in question consists of $25 million in intermediate-term (6 1/2 years) loans from three banks. The interest rate for the loans is determined at the prime rate plus four percent.

Company, assuming that its interest coverage ratios will not permit it to enter into long-term debt, assumes that the full $25 million will be outstanding throughout the period during which these rates will be effective. This being so it assumes a cost for this intermediate debt of 14.4 percent. Staff, on the other hand, assumes that the $25 million will not be outstanding for the entire period but that instead, $20 million of the $25 million will be refinanced with $10 million of long-term debt, $7 million of preference stock and $3 million of common stock by the end of 1980. This leads Staff to the conclusion that the cost of this intermediate debt should be 11.1 percent.

The basic question as to this issue is whether or not Company's coverage ratios will be sufficient to allow it to finance long-term debt by the end of this calendar year. It should be noted that Company prefers to see the problem stated in connection with a total financing package which would include $7 million worth of preference stock and $3 million of common stock in addition to the $10 million of long-term debt. Company's indenture requires it to maintain a 2.0 interest coverage ratio in order to issue new debt. It is Staff's position that by the end of this year, Company's interest coverage will be 2.36 times interest which is obviously sufficient to allow the financing noted above to go forward. Company, however, asserts that its coverage ratio will only be 1.74 times.

The Commission recognizes that both the Staff's and the Company's positions are based on projected numbers. However, based on the evidence presented in the case, the Commission finds that Staff's computation of interest coverage as set out in Exhibit 88 has the most merit. With the possibility of thus rolling $10 million of the intermediate debt into long-term debt by the end of the year, we find that the proper cost to be assigned the intermediate debt is 11.1 percent. This leads to a weighted cost of 1.01.

3. <u>Common Equity</u>. In arriving at their respective positions concerning the proper cost of common equity, both Company and Staff used a similar methodology. Each primarily relied upon a discounted cash flow (DCF) analysis. They each arrived at widely differing conclusions, however.

We have previously expressed approval of the use of the discounted cash flow methodology as an appropriate tool to aid us in arriving at an appropriate cost of common equity. The analysis assumes that the price of a share of common stock should equal the discounted present value of the stream of future earnings expected to be received from that share. The analysis is expressed by the formula: $k = \frac{d}{p} + g$ where: d equals dividend per share, p equals price of the stock and g is the expected growth factor. Restated to accommodate flotation costs, which are the costs involved in marketing a new issue of common stock, the formula appears: $k = \frac{d/p}{(1-f)} + g$ where: f equals flotation costs.

As noted, the parties reached widely divergent results by using this apparently simple formula. The divergence in their results is explained simply by the fact that in each case they used quite different dividend yield figures and growth rates. Staff utilized dividend yields in the range of 7.2 to 8.1 percent and a growth component of 5.7 percent. Staff used a flotation adjustment of 5.5 percent. Applying these values to the formula noted above, one reaches a range of cost of equity from 13.32 percent to 14.27.

Staff's witness arrived at the dividend yield by considering historic yields for the period 1974 through 1979. Over that period the yield ranged from 5.3 to 10.7 percent with the average at 7.7 percent. Considering various factors, Staff's witness determined that a range of yield from 7.2 to 8.1 percent was appropriate in his consideration. He reached the 5.7 growth factor by analyzing the dividends per share of this Company adjusted for its stock dividend and, secondly, assuming the four percent stock dividend to remain in effect and determining a reasonable growth expectation for the cash portion of the dividend. Using these two approaches he arrived at the 5.7 percent growth factor used.

Company's witness on the other hand used a dividend yield based solely on the cash dividend ranging from 8.3 percent to 9.1 percent. This range is determined by using the market price of the stock through the year 1979, ranging from $11 to $12 per share and the current $1 per share dividend. The Company used a growth factor of 6.13 percent representing the latest growth information available. Applying a flotation factor of 7.5 percent, the range of cost of common equity arrived at by Company is 15.0 percent to 15.8 percent.

Additionally, both Staff and Company performed a second analysis to corroborate their findings from the DCF analysis. Staff's witness performed a multiple regression analysis which is an attempt to determine those characteristics of utilities which investors consider most important when they value utility stocks. Specifically, the analysis attempts to determine those characteristics which are most significant in explaining a Company's market to book ratio. This is significant because common stock must sell above book value sufficiently that the net proceeds exceed the book value. If not, each sale of an additional share of stock results in a dilution of the present shareholders' equity. Using the values arrived at in the multiple regression analysis one solves for the book yield. Applying an appropriate payout ratio, the return on common equity is then determined. Using this procedure Staff's witness testified to required returns on equity ranging from 13.70 to 14.25 percent. It is immediately noted that this range falls within the range of returns resulting from the DCF approach. Because of the difference in the low required returns from both models, Staff averaged the two to get a low return of 13.51 percent. Accordingly, Staff's range is from 13.51 percent to 14.26 percent.

As his second approach, Company witness used a comparative earnings analysis. This analysis was based on data for a sample group of electric utilities for the period 1972 through 1978. This analysis requires the combination of the market to book ratio of the companies in the sample and the realized return on equity, which results in an expression of investor response to those income patterns by way of the earnings price ratio. From this information, Company witness concluded that fifteen percent return on equity is the bare minimum required for this Company. This figure may be compared to the range arrived at by the witness in the course of his discounted cash flow analysis.

As earlier noted, both parties approached the question from another point of view in order to corroborate their DCF findings. We have noted those separate analyses performed and note their corroborative value for the separate positions of the parties. As with all such studies, the methodologies employed by both parties suffer from the infusion of subjectivity and lack of precision.

Staff's analysis of the range of historic yields provides a reliable measure for the yield to be utilized in the DCF analysis, and the Commission finds that 7.2 percent is the proper dividend yield. The Commission also finds that Staff's flotation adjustment of 5.5 percent is proper in this case. In that Company's expected growth factor of 6.13 percent utilizes the most recent information respecting growth, we feel that it is the proper figure to be used in this analysis.

Based upon the foregoing, the Commission finds that an appropriate return on common equity for this Company at this time is 13.75 percent. This results in a weighted cost of 3.77.

Applying this value and that previously determined for intermediate debt to the capital ratios agreed to in this case provides the following:

Type	Ratio	Cost	Weighted Cost
Long-Term Debt	50.0%	7.41%	3.71%
Intermediate Debt	9.1	11.1	1.01
Preferred and Preference Stock	13.5	8.63	1.17
Common Equity	27.4	13.75	3.77
Total	100.0%		9.66

We find that the rate of return of 9.66 is a reasonable and proper return for Company.

4. Attrition. Company proposes to increase the rate of return authorized herein by an amount which, it asserts, will allow it to actually earn the return authorized herein. A comparison of its authorized returns and actual returns during the period 1974 through 1979 indicates a shortfall of approximately twenty percent. This would indicate an additive of twenty percent of the weighted cost of the common equity which would fall within a range of .82 percent to .88 percent. Staff has some disagreement with Company over the figures, but we find it unnecessary to determine to the correct figure as we do not feel it appropriate to grant an attrition allowance to Company.

This Commission has consistently refused to allow an attrition factor, either as an additive to rate of return or simply as a gross amount of dollars. By allowing the update of the data before us following the hearing, by allowing known and measurable changes in the future to be considered and by other such means of deciding rate cases with the future in mind, we believe that we deal with this problem as effectively as possible. To go further injects pure speculation into the case and we continue our opposition to the concept of setting rates by speculation.

Financing Plan

In the Stipulation that was approved by this Commission in Case No. ER-80-231, the interim rate case involving this Company, the parties agreed, among other things, "That Company shall submit in its permanent rate proceeding, Case No. ER-80-118, for the Commission's consideration a financing plan, which is designed to increase its common equity ratio to thirty (30%) percent, over the two (2) year period ending June 30, 1982." In essence, Company's evidence in this regard was to the effect that it could not embark upon such a financing plan unless it received substantial rate relief in this permanent proceeding. (See discussion under Rate of Return, Intermediate Debt, supra.)

Staff's position, on the contrary, is that Company should be forced to sell 500,000 shares of common equity which, it is asserted, will increase the equity ratio to the point that Company would then be able to proceed to long-term debt financing. Staff proposes that the inducement for Company to sell such new stock be a Commission-imposed "moratorium" on any additional rate relief for a two-year period unless such a step is taken. Staff admits that such a sale of new equity on the part of the Company would cause substantial dilution of the equity of present shareholders.

The Commission recognizes that the Company has complied with the terms of Case No. ER-80-118 by submitting the financing plan in evidence in this proceeding. Company and Staff are not in disagreement about the Plan as proposed, but they do disagree as to its implementation. The Commission has concluded that the Staff's position which presumes coverage ratios will permit additional financing by the end of the year is more accurate than Company's position.

The Commission finds, however, that it cannot accept the Staff's position that any sort of moratorium on the filing of rate cases should be contingent on implementation of the financing plan proposed and accepted in this proceeding. However, the Commission will expect the Company to implement the financing plan if coverage ratios permit.

Electric Operating Revenues.

1. Revenue Annualization. The Company contends that revenues resulting from annualized electric sales, including adjustment for unbilled revenues, for the test year should be $114,775,509. The Staff contends that those revenues should be $121,831,210 or $7,055,701 in addition to the amount claimed by the Company. If the Company's annualized revenue figure is correct, it would be necessary to reduce the amount of fuel expense and ad valorem taxes calculated by the Staff. It would also be necessary to reduce the level of fuel inventories as calculated by the Staff.

The Company annualized revenues by taking actual sales and revenues in 1979 and adjusting for: 1) customer classification changes; 2) eliminated non-jurisidictional revenues; 3) eliminated fuel adjustment revenues; 4) eliminated franchise taxes; 5) all rate increases in fuel adjustment roll in; and 6) annualized revenues for increased number of customers in each class to December 31, 1979, which was updated for the estimated number of customer additions at June 30, 1980.

Staff's approach was to adjust for megawatt hour sales related to the Company's projected peak demand of 680-681 megawatts for 1980. The following formula was used: PEAK DEMAND X LOAD FACTOR X 8760 HOURS = ENERGY SALES. The Staff took the Company's actual load factor in 1979 of 46.2 and applied it to the peak of 680 megawatts to obtain annualized sales of 2,752,042 mwh excluding interchange sales. Staff's rationale is that using the 680 megawatt peak to calculate sales is consistent with putting JEC-2 in rate base since that unit was built to meet the anticipated peak of 680 megawatts in 1980.

The Company contends that the use of the anticipated 680 peak is inappropriate because it will occur outside of the test year used in this matter. It should be recognized, however, that the Company has used out-of-period expenses in calculating its load research expense and has used the 680 peak to calculate its fuel expense. Fuel expense is the largest expense in the Company's case and must be taken into consideration in determining the Company's revenue requirement.

The Company also objects to the Staff's method of revenue annualization contending that its load factors are declining. The evidence in this matter establishes that the Company's load factor has increased from 1976 to 1979 and the Company's estimates of its load factors sent to the Federal Energy Regulatory Commission indicates the load factor will increase to 47.4 in 1983.

The Staff attacks the reasonableness of the Company's revenue annualization since it uses actual consumption per customer in 1979 and adjusted only for additional customers. The Company claims that the low usage in 1979 can be attributed to conservation on the part of its customers, efficient appliances and fewer all-electric customers. The Company has not performed any study to quantify the effect of the foregoing items. The Staff contends that low customer usage in 1979 was due to the weather. The record reflects that 1979 was an abnormally mild year as compared to 1977 and 1978. The cooling degree days were approximately ten percent below the customary level.

The Commission is of the opinion that the Staff's revenue annualization is proper and should be adopted for the purpose of this case. Since the Company's projected peak has been utilized in this case for the calculation of plant to be included in rate base and fuel expense it is proper to use the same peak in the calculation of the Company's anticipated revenues.

2. <u>Contributions to Electric Power Research Institute (EPRI)</u>. The Staff and the Public Counsel propose an exclusion of the Company's annual assessment to EPRI in the amount of $384,881 from the test year. Not only does the Company oppose this adjustment but proposes to include, for the purposes of this case, its 1980 estimated EPRI assessment in the amount of $489,698.

The Company only proposes to pay its 1980 EPRI assessment if it is included as a cost of service. In addition, the Company usually waits until the third or fourth quarter of the year to pay its EPRI assessment to determine whether or not it has sufficient funds to so do. In the instant case the Company concedes that even if the amounts were allowed as an expense they may not be paid to EPRI at the end of the year if the cash is unavailable.

In addition, the Company indicated it would only pay EPRI dues if the ratepayers were required to cover these costs rather than the stockholders. In contrast, the Company has continued to pay EEI dues even though the Commission has disallowed these dues as a ratepayer expense. This action suggests to the Commission that the Company itself places very little value in its EPRI membership. In the Commission's opinion the EPRI assessment appears to be purely a discretionary expense and may be paid only if the cash condition of the Company justifies and if the ratepayers rather than the shareholders are expected to furnish the money. This opinion is further bolstered by the fact that only approximately 57 percent of the electric utilities pay assessments to EPRI.

In this Company's most recent rate Case No. ER-79-60, the Commission has indicated that the Company was expected to monitor the programs and expenditures of EPRI and to provide justification in future cases that expenditures for research and development in the form of contributions to EPRI are justified. In the Commission's opinion the justification offered, in this case, is inadequate and that benefits from the EPRI program are speculative. Since the Company has not yet made its 1980 contribution, the Commission is of the opinion that the shareholders will suffer no detriment from the disallowance and the ratepayers would receive little benefit from its inclusion.

3. Contributions to Edison Electric Institute (EEI). The Public Counsel proposes an additional adjustment, to exclude the Company's dues to EEI in the amount of $29,415 from the test year cost of service. In the Company's last permanent rate case the Commission disallowed the contribution to EEI as an operating expense due to the fact that the organization was extensively engaged in lobbying. Since the last rate case EEI has merged with another organization and is now, more than ever, engaged in lobbying activities.

The Commission is still of the opinion that the expenditure of funds primarily for the purposes of lobbying are not properly included as an expense for ratemaking purpose. In the Commission's opinion, although the benefit to the ratepayers may be slight, the benefit to the shareholders may be sufficient to justify that group to providing the funds for such expenses.

4. Load Research Expense. The Company initially proposed to include in its cost of service approximately $546,667 as anticipated costs to be incurred in the performance of a load research study ordered by the Commission in Case No. EO-80-65. At the time of the hearing the Company had revised its cost estimate to $414,572, which excludes labor expenses associated with the hiring of additional personnel for the study. The Company has revised its load research expense adjustment since the Commission Staff has allowed the labor costs in its proposed test year cost of service.

The net figure claimed by the Company represents consultant fees of approximately $225,000, consultant out-of-pocket expenses in the amount of

$20,000, transportation and miscellaneous expenses in the amount of $12,902 and meter and translator costs in the amount of $156,667.

The Staff's opposition to the inclusion of the load research expense is based partly on possibility of the violation of Section 393.135, RSMo 1978, which prohibits charges based on any electric property before it is fully operational and used for service. In addition, the Staff opposes the adjustment because the Company has failed to adhere to its own timetable relating to the commencement of the project. The Staff advocates disallowance of the claimed expenses and a dismissal of Case No. EO-80-65.

In the Commission's opinion the Staff's suggestion to dismiss Case No. EO-80-65 should be acted upon; however, it is unreasonable to deny the Company the right to recover the expenses incurred in response to a Commission Order.

It is not possible, from this record, to ascertain with any exact certainty the amount of expense actually incurred in preparation for the load research program. Although the consultants had not yet billed the Company for work to date, the Commission believes that it is reasonably likely that the Company has either incurred or has obligated itself to pay for all of the proposed expenses other than the meters and translators which had not been purchased at the time of the hearing. Excluding the meter costs, which have not been expended, the Commission is of the opinion that the remaining $257,905 should be included as cost of service for the purposes of this case. Almost all of those costs will be incurred prior to the end of 1980 and in the Commission's opinion the Company, at this point, has little opportunity to eliminate any of the costs.

The Commission is of the opinion that the presently docketed load research study should be terminated thereby eliminating the expenditure for meters, the cost of which the Company proposed to amortize over a three-year period. However, the Staff proposes that a new docket should be established to investigate the Company's generation expansion program, including an examination of the possibility of adapting load management to the Company's system. The Commission finds the Staff's proposal meritorious and believes that part of the expenditures approved in this proceeding may be more beneficially expended on such a proceeding. Therefore, the Commission finds that the Staff should initiate a new proceeding which examines the generation expansion plans of the Company and the possible implementation of load management techniques.

5. Current Income Taxes-Interest Expense. Staff and Company differ as to the amount of interest expense deduction which is to be utilized to determine annualized income tax expense. Company bases its calculation on the annualization of the actual interest paid or accrued on the Company's actual debt securities outstanding during the test year. The Staff calculated annualized interest expense by multiplying the jurisdictional rate base by the debt ratio of the Company's capital structure, then multiplying that product by the embedded cost of debt. The Staff's method, resulting in a larger interest deduction, reduces the Company's income tax expense, thus reducing the operating income requirement. The Staff's method would reduce the revenue requirement in the electric case by $229,277, and in the gas case, $120,467.

Company claims that Staff's method is inappropriate for the following reasons:

(1) It ignores the fact that rate base is supported by the investment tax credit;

(2) It has no bearing in reality upon actual interest expense incurred; and,

(3) It violates Internal Revenue Code regulations, Section 1.46-6(D)(4) which would cause the Company to lose its investment tax credit.

Under the Revenue Act of 1971, utilities, in order to use the investment tax credit, were required to make an election under Section 46 of the Internal Revenue Code (IRC). The code provides for three options and for the denial by the regulatory authority of the option chosen by a utility which would result in the loss of the investment tax credit. Under Option II, chosen by the Company, the credit may not be amortized more rapidly than ratably over the life of the property and the credit may not be deducted from the rate base. The investment tax credit is amortized ratably through the cost of service and the utility earns a return on the unamortized portion.

The IRS published regulations pertaining to Secton 46 of the code on March 23, 1979. The regulations provided that the credit must be treated as shareholder capital to which a cost of capital rate is assigned that is no less than the overall cost of capital rate. The regulations further provide that the overall cost of capital rate may be an average or weighted average of the cost of capital provided by the common shareholders, preferred shareholders and creditors. Under the regulations the cost of capital rate must not be less than the overall cost of capital. The overall cost of capital depends on the practice of the regulatory body. Company took the position that Staff, by applying the weighted cost of the debt to the rate base, is attributing hypothetical interest to the Company, since the rate base is supported by the investment tax credit upon which no interest is paid.

Staff took the position that the "overall cost of capital" is a weighted cost of capital calculated net of tax rather than gross of tax. Since interest is paid by the ratepayer based on the Company's capital structure and the cost of the components of the capital structure, the ratepayer should get the benefit of the tax deduction regardless of whether or not the Company deducts such interest on its tax return. Staff argues that this accomplished an appropriate matching of the amount of interest expense the ratepayer pays through rates with the amount of interest expense utilized to determine the appropriate tax deductions and revenues on an annualized basis. Staff contends that its methods were merely another method of annualization which is more appropriate than the Company's for the above-stated reason.

Staff's Exhibit 74 showed that the Company calculated its AFUDC rate, net of tax, during the time it was receiving normalization treatment of its AFUDC, which results in the same allowed return on the investment tax credit supporting construction work in progress as is allowed by the Staff's method on the investment tax credit supporting rate base. In effect, the Company imputed interest to investment tax credit supporting construction work in progress in calculating its AFUDC. Staff concluded that if it has violated the IRC by allowing the investment tax credit supporting rate base less than the overall cost of capital, then Company similarly violated the code in calculating the interest component of its AFUDC. Staff contends that no violation occurred in either case.

With regard to Company's assertion that the method of annualizing interest expense used by the Staff had no relation in reality to actual interest expense, Staff pointed out through Company's witness that its own method was also no more than an estimation of actual interest expense to be incurred during the period that rates are to be in effect, and that the Company could not with great confidence predict which annualization would in fact be more accurate. Since neither method is based totally on fact, in that no interest expense has yet been incurred for the period during which rates established by this case will be in effect, Staff proposes that its method is superior for ratemaking purposes in that it is based on at least one certainty about the future period, that is, the interest deduction allowed will exactly equal the amount of interest the ratepayer must pay to the Company through rates to be established in this case. Staff contends that Company's allegation that the Staff's method violates the IRC is somewhat vague. The Company's argument is that any amount of income or deductions which reduce Federal income tax for the Company below the true liability represents an indirect flow-through to the ratepayers, which is prohibited by IRC regulation 1.46-6(D)(4).

Staff indicates that it does not understand the meaning by the Company of "true liability" for Federal income taxes. It is the Staff's opinion that that argument literally would require annualization of revenues and expenses that would have a Federal income tax effect with exact accuracy to avoid a violation of the IRC.

It is the Staff's contention that its method is no more than an annualization of interest expense which does not accomplish any treatment of investment tax credit prohibited by the IRC.

After a full consideration of all the evidence presented on this issue, the Commission is of the opinion that the Staff's method is simply an annualization of interest expense which accomplishes a proper matching of annualized interest expense to the amount of interest the ratepayer is required to pay through rates to be established in this proceeding. The Commission is of the opinion that the investment tax credit supporting rate base is allowed a return reflecting the "overall cost of capital" as requested by the IRC. As to the Company's assertion that any amount of income or deduction which reduced Federal income tax for the Company below its true liability constitutes a violation of IRC regulation 1.46-6(D)(4), the Commission is of the opinion that such an interpretation of the code and the regulations is overly broad and would severely restrict this Commission in the application of ratemaking principles. The Commission is of the opinion that no IRC violation will occur because of the use of the Staff's method.

The Commission notes that the decision in this case, in this regard, is consistent with a similar determination in Kansas City Power & Light Company rate Case No. ER-80-48. The Commission reasserts its opinion that it cannot be limited in its decisions by assertions of potential violations when attempting to apply proper regulatory principles.

The Commission is of the opinion that the Staff's proposed annualized level of interest expense in this case is reasonable and proper and should be adopted.

6. Income Tax Normalization. The Staff has proposed that certain benefits arising from income tax timing differences should be flowed through to the ratepayers. Staff's position is consistent with the decision of the Commission rendered in the last two rate cases involving the Company. The Company proposes to be allowed to return to a fully normalized basis as it was prior to the last two rate cases. The tax timing differences which the Staff proposes to flow through and their respective increase to the Company's net operating income are as follows:

	Electric	Gas
Capitalized Interest	$ 86,189	$ 655
Pension and Taxes Capitalized	322,152	16,327
Removal Costs	327,394	29,335
Unbilled Revenue	531,878	107,016
Booked to Guideline Depreciation Lives	295,430	14,765
JEC Trust Deduction	866,389	---

The Commission has fairly consistently, in recent years, determined that cash flow interest coverage, and internally generated funds analysis will determine the need of a given company for normalization of tax timing differences. This has been the test used in the Company's last two rate cases and will continue to be the test utilized for the purposes of this case.

In the Commission's opinion the Company's cash flow and interest coverage do not justify or require a return to full normalization treatment by the Company. The Staff's evidence establishes the amount of internally generated funds for 1979 to be 67 percent. This is well above the industry average of 35 percent to 45 percent.

The Company's actual interest coverage for 1979 was 2.35 including interest on its Series U Bonds and 2.50 excluding interest on Series U Bonds. The Series U Bonds have been issued, but are not outstanding, that is, not sold to investors. The Series U Bonds represent $10,000,000 in face value that could be sold to investors upon Commission approval. Since the Commission has previously recognized that the Company could raise additional capital by calling in these bonds, it is just as appropriate to look at interest coverage figures excluding interest on Series U Bonds as it is to look at those figures including interest.

Staff's evidence shows that without revising Company's original budget for the year 1980, interest coverage, excluding Series U Bonds, is projected for the year 1980 to be at least 2.20.

Much conflicting evidence was introduced as to projected interest coverages using a revised budget for the year 1980. The evidence on projected interest coverage under the revised budget resulted in interest coverage figures ranging from a Company low of 1.66 to a Staff high of 2.36 excluding Series U Bonds. Since past projections of the Company have proven to be overly pessimistic, the Commission is reluctant to accept any revised budget interest cover figure and therefore, concludes that there is sufficient evidence that interest coverage will be adequate to allow the Company to meet its indenture test in the near future. In the Commission's opinion the Company's cash flow, interest coverage and internally generated funds have not been shown to be inadequate to the extent that flow-through treatment should ont be afforded the six items at issue here.

7. Federal Income Tax Change. Public Counsel proposes to return, over a two-year period, the tax difference created in the accumulated deferred income tax reserve when the Federal Corporate Income Tax rate was reduced from 48 percent to 46 percent. The effect of the adjustment is to reduce the Company's Missouri jurisdictional electric cost of service by $286,788. The Company opposes this adjustment, stating that it ignores generally accepted accounting principles. More specifically, the Company cites Accounting Principles Board Opinion No. 11, where it states in part:

> "The deferred taxes are determined on the basis of the tax rates in effect at the time the timing differences originate and are not adjusted for subsequent changes in tax rates or to reflect the imposition of new taxes."

The Company contends that tax rates may either increase or decrease and an assumed permanent tax saving as a result of the change in the tax rate is speculative. The Company is also fearful that such a proposal would jeopardize certain tax benefits derived from previously normalized tax deductions. The Internal Revenue Code provides that the election of accelerated depreciation for 1970 and subsequent years must be normalized for ratemaking and book purposes. Code provisions concerning adjustments to reserves do not provide for adjustments arising from changes in statutory income tax rates.

The Commission is of the opinion that the Public Counsel's proposal to return the deferred tax reserves more rapidly than ratably over the life of the asset is equivalent to retroactive ratemaking. Since these reserves were accumulated through the collection of lawful rates previously authorized by this Commission, to require a refund of those monies other than in a manner consistent with the collection, violates the prohibition against retroactive ratemaking.

8. Summary. Giving effect to all of the adjustments discussed herein, the Commission finds, for the purposes of this case, that the Company's proper level of jurisdictional net operating income resulting from electric operations is $24,569,436. The corresponding net operating income resulting from gas operations is found to be $1,334,247.

Rate Design

1. Electric. With minor exceptions, the Company filed its tariffs in this matter applying increased revenues on a constant percentage basis. One exception was the Company's electric heating rates which would be increased only by additional fuel costs. Staff on the other hand suggests that any change in the revenue not related to fuel be spread among the rate classifications on an equal percentage basis and fuel costs on a per unit basis within each rate classification.

All parties agreed to the Staff's proposal that the Company's water heating rate be eliminated. Staff further proposed that any increase granted should be offset in the residential class by the additional revenues generated by the elimination of the water heating rates. Staff's proposal would flatten the Company's declining block structure thereby increasing the rates to tail block users by a greater amount than would be the case with an equal percentage increase.

The Public Counsel proposed that any rate increase, after considering the elimination of the water heating rate, be allocated on a uniform per kwh percentage basis. This proposal would flatten rates more than the Staff's approach.

The Commission, in recent cases, has made minor adjustments in the Company's rate design to accomplish some leveling of the declining block rates. The Staff's proposal in this case carries forward the rate restructuring previously initiated. The Staff's proposal is consistent with present goals of conservation. Staff's approach also attempts to assign increased fuel costs directly on a usage basis and should be adopted as the rate design implemented as a result of this case.

2. Gas. The Company's filed tariffs propose to apply any increased revenues on a uniform cents per MCF basis. The Staff has proposed that the Company's rates be broken into two parts consisting of a fixed monthly customer charge for all classes of customers and a flat unit rate per MCF for firm and interruptible customers. The Company has agreed to support the Staff's gas rate design proposal.

The Public Counsel generally supports the concept of flat rates recommended by the Staff, but advocates a reduction of the customer service charge to $1.12 per month. The $1.12 charge would recover the monthly cost of rendering the bill and reading the meter.

The Staff's proposed customer charges are based upon the cost of providing service to the customer without the customer using any gas. The proposed charge includes the capital cost of the meter and service line in addition to the cost of reading the meter and sending the bills. The Commission is of the opinion that the Staff's gas rate design recommendation should be adopted since the proposed customer charge reflects the cost that the Company incurs independent of use. In the Commission's opinion those costs which are incurred regardless of consumption should be recovered in the flat monthly customer charge.

Fair Value Rate Base. Company contends that the fair value of its plant in service should be determined as outlined in the testimony of witness Owen. None of the other parties offered any evidence on fair value and the testimony of Owen was incorporated into the record without cross-examination.

In the Commission's opinion the Company's determination of fair value which consists of weighing net original cost and net trended original cost by debt and equity ratios lends a result most similar to the methods traditionally used by the Staff in similar calculations. We, therefore, find the Missouri jurisdictional portion of the Company's fair value electric rate base to be $367,178,062 and the corresponding gas rate base to be $22,206,075. Applying the net operating income for electric service which we have found reasonable in this case to the electric fair value rate base produces a fair rate thereon of 6.53 percent. The same computation applied to gas derives a fair return of 5.64 percent.

Wage and Price Control Guidelines. It is the Commission's practice to limit rate relief given to any utility to the voluntary price standards prescribed by the President as part of his anti-inflation program, absent extraordinary circumstances. The Commission has a legal obligation to set utility rates at a level which affords the Company a reasonable opportunity to earn a fair return on its investment. Rates which do not afford such an opportunity are confiscatory, and in violation of the due process provisions of the Constitutions of the United States and the State of Missouri.

In the instant case the Commission is of the opinion that the rate relief found herein to be fair and reasonable meets both the price deceleration test and the profit margin test.

Revenue Level in Case No. ER-80-231. The Report and Order issued in Case No. ER-80-231 approved a Stipulation which provided for an interim annual increase in electric rates in the amount of $10,250,000 subject to refund to the extent those rates may exceed the aggregate permanent revenue to be authorized in the instant case. Any refund was to include interest compounded semi-annually, at the overall rate of return allowed on net original cost rate base. The interim increase was divided equally between a KWH basis and a uniform percentage basis.

Since we have found the proper level of permanent rates to be $1,160,293 less than the interim rates, on an annual basis, the Company should refund that amount representing the excess charge between the time the interim tariffs became effective and the proposed effective date of the tariffs to be filed pursuant to this Order. The Company should file, concurrently with the tariffs to be filed herein, a proposed method of refund and calculation of the amount.

Conclusions

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

The Company is a public utility subject to the jurisdiction of this Commission pursuant to Chapters 386 and 393, RSMo 1978.

The tariffs which are the subject matter of this proceeding, were suspended pursuant to authority vested in this Commission by virtue of Section 393.150, RSMo 1978.

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

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

In determining just and reasonable rates and charges for the Company to observe, 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 return on the value of the property actually used in the public service, and to the necessity of making reservations out of income for surplus and contingencies.

When the Commission finds that the Company's level of operations results in a rate of return exceeding that found to be fair and reasonable, the proposed tariffs which would result in an increase in rates should be disallowed and the Company should be ordered to file new tariffs reducing its rates to a level consistent with the rate of return on the value of its property found to be reasonable. Since the Commission has determined that the Company's level of interim rates, now in effect, is excessive and yield unreasonable compensation for electric service rendered, the Company shall refund to its customers any amount of improper overcharge under the interim rates.

The rates resulting from the authorized revisions will be fair, just, reasonable and sufficient and will not be unduly discriminatory or unduly preferential.

All late-filed exhibits are hereby admitted into evidence including the reconciliation representing the final dollar difference related to items still in dispute between Staff and Company which was furnished to the Commission on August 11, 1980. The reconciliation shall be marked and received into evidence in this matter as Exhibit 94.

All motions not heretofore ruled on are denied and all objections not heretofore ruled on are overruled.

It is, therefore,

ORDERED: 1. That the proposed revised gas tariffs filed by Missouri Public Service Company in Case No. GR-80-117 are hereby disapproved and the Company is directed to file in lieu thereof, for approval by this Commission, tariffs designed to decrease gross revenues by approximately $158,876, on an annual basis, exclusive of gross receipts and franchise taxes.

ORDERED: 2. That the proposed revised electric tariffs filed by Missouri Public Service Company in Case No. ER-80-118 are hereby disapproved and the Company is authorized to file in lieu thereof, for approval by this Commission, tariffs designed to increase gross revenues by approximately $9,089,707, on an annual basis above the level of permanent rates now in effect, exclusive of gross receipts and franchise taxes.

ORDERED: 3. That the Missouri Public Service Company shall file its tariffs in compliance with this Report and Order on or before September 4, 1980, using the rate design as set out in this Report and Order.

ORDERED: 4. That the rates established in the tariffs herein authorized may become effective for service rendered on and after September 4, 1980.

ORDERED: 5. That simultaneously with the filing of the tariffs herein authorized, the Company shall submit to the Commission its calculation of the amount of the refund herein found fair and reasonable, together with the proposed method of refund.

ORDERED: 6. That this Report and Order shall become effective on the 4th day of September, 1980.

BY THE COMMISSION

D. Michael Hearst

D. Michael Hearst
Secretary

(S E A L)

Slavin, Chm., McCartney, Dority, and Bryant, CC., Concur. Fraas, C., Dissents.

Dated at Jefferson City, Missouri, on this 25th day of August, 1980.

DISSENTING OPINION OF COMMISSIONER CHARLES J. FRAAS, JR.

CASES NOS. GR-80-117 AND ER-80-118

I dissent from the foregoing Report and Order. Several issues require some explanation:

Cash Working Capital

The majority herein has again chosen to offset accrued interest on long-term debt from Company's cash working capital requirement. The theory asserted in support of this position is that those accruals are ratepayer-supplied funds. Regardless of the original source of the funds (we must remember that almost all of the flow of income of Company originates with its ratepayers), accrued interest on long-term debt is money accumulated by the Company to pay its legal obligations to its creditors. The debt is that of the Company (i.e. the shareholders) and the funds to pay the debt must come from that source. Accrued interest on long-term debt is the property of the shareholders until such time as it is dispersed and the action of the majority herein is quite simply a confiscation of shareholder property.

This Commission has, on more than one occasion, expressed its approval of the use of lead/lag studies in determining the cash working capital requirement. While there is no question that such studies can be more accurate and fair to all concerned than the use of a so-called "rule of thumb" method, the creativity of the parties in this and other recent cases is beginning to transform this issue into a hydra-headed monster that defies all efforts of the Commission to deal with it in an efficient and reasonable manner. The result is that in each succeeding rate case the issue becomes more complex and less subject to an objective and fair resolution.

It is not suggested that the Commission depart from the use of such studies totally. Rather, the Commission should set down specific guidelines, through a rulemaking proceeding if necessary, so that all litigants before this Commission will know what is required in a lead/lag study and some uniformity of treatment can be achieved.

Capital Structure

The majority has chosen to accept Staff's position as to the cost of intermediate debt in the capital structure of this Company. As is noted in the majority order, the answer to the question is provided by a consideration of Company's coverage ratios in the near future. If those ratios remain insufficient to allow Company to engage in long-term financing, then Company's position as to the cost of intermediate debt must be accepted. This is so because the intermediate debt will remain in the capital structure for lack of an alternative. Should coverages improve sufficiently to allow Company to engage in economical long-term financing, Staff's position becomes more reasonable.

The majority has accepted Staff's assertion that coverage will be sufficient by the end of this calendar year for the Company to engage in an ambitious plan of long-term financing. Company's present rates are insufficient to provide adequate coverage. Company cannot at this time engage in long-term financing because of inadequate coverages. Yet the majority would have it that reducing these presently inadequate rates will somehow improve the coverage ratios. The very statement of the propositon provides its own refutation.

The Company's position as to the cost of intermediate debt appears at this time to be the most reasonable to expect over the period of time during which these rates will be in effect and thus should be incorporated in the capital structure.

Attrition

The majority has determined and found that a return of 9.66 is fair and reasonable for Company. Even as the majority makes such finding, however, they know with reasonable certainty that Company will never achieve that return. While there may well be more than one cause for the failure to achieve a given return, it is certain that, in each instance, the erosive effects of inflation are always present and contributing to that failure. It is this problem that is addressed by the use of an attrition allowance.

It is no answer to point to such Commission practices as considering known and measurable changes and allowing data to be updated after the close of the hearing. Serious consideration would be required if such procedures were being proposed for the first time in this case. The fact is, however, that we have followed such procedures for several years and they have not worked. Attrition continues to occur and it has now become obvious that further remedies are required.

Staff has suggested that, if the Commission wishes to recognize the need for an attrition allowance, that it do so by granting Company a gross amount of money as an additive to its revenue requirement. Company on the other hand proposes a percentage addition to rate of return based upon historical rates of attrition. The method proposed by Staff appears to call for an indefensible amount of speculation in arriving at a figure. Certainly no figure could be reached without speculation in view of the record in this case. Company's methodology, on the other hand, has a logical and reasonable basis.

The Commission should recognize the necessity of dealing with the attrition caused by a steadily deteriorating economy and make an allowance for such attrition as suggested by Company.

Electric Power Research Institute (EPRI)

The position as to Company's contribution to EPRI taken by the majority is woefully shortsighted and unrealistic. Shortsighted because it fails to appreciate the need for continuing research and development in order to provide the ratepayers with the best, safest and most reliable service in future years. Unreasonable because this Company, only one among many similar companies supporting the work of EPRI, cannot be expected to control or direct the research activities of the Institute. By its membership on various committees, the Company obviously has input into the direction and control of those activites and nothing more should be expected.

Unless the majority is ready to state that all research and development expenditures are unnecessary and are to be disallowed in a rate case, they have an obligation to provide this Company as well as others under our jurisdiction with some reasonable guidelines for accomplishing the research necessary to remain current with advancing technology.

Interest Expense

In calculating its income tax expense, the Company used the actual interest paid or accrued on its outstanding debt securities in the test year. In other words, Company claims as an expense the amount it actually spent. Staff found it necessary to calculate a hypothetical figure bearing no necessary relationship to reality. Such hypothetical figure arrived at by Staff does however, have one outstanding virtue, it serves to lower the revenue requirement in this case.

It is not our purpose to artificially lower or inflate the amount of revenue required by Company. Our purpose is to set reasonable rates for the future which requires that we consider real facts and real expenses.

An additional factor militates against the wisdom of taking Staff's position in this matter. There is a possibility, and it is emphasized that it is only a possibility, that the methodology for figuring interest expense for tax purposes as proposed by Staff may violate the Internal Revenue Code and result in the Company losing its investment tax credit. Such a loss would be extremely costly to the ratepayers, a cost totally out of proportion to the minimal savings to be effected in this case.

Until such time as it is clear one way or another whether Staff's procedure violates the Internal Revenue Code and if so what the consequences will be, prudence would dictate that we recognize the actual amount expended in a given year as the proper level of interest expense.

Normalization

The majority takes the position that Company should continue flow-through treatment of tax timing differences because its cash flow and interest coverages are sufficient, and thus it does not require normalized accounting. The plain facts as shown by the evidence in this case are that Company's cash flow and coverages are woefully deficient. They are not going to get any better as the result of this Order reducing the amount of income to the Company. This Company was allowed normalization prior to the last two rate cases and it is noted that both prior to its last rate case and prior to this rate case its financial condition became so serious that this Commission was forced to grant emergency interim rate relief. Taking steps to improve its cash flow at this point would be a reasonable step toward preventing that type of emergency situation from arising in the future.

Respectfully submitted,

Charles J. Fraas, Jr.

STATE OF MISSOURI

OFFICE OF THE PUBLIC SERVICE COMMISSION

I have compared the preceding copy with the original on file in this office and I do hereby certify the same to be a true copy therefrom and the whole thereof.

WITNESS my hand and seal of the Public Service Commission, at Jefferson City, this 25th day of August 1980

D. Michael Hearst

D. Michael Hearst
Secretary