BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

Case No. GR-85-136

In the matter of Great River Gas Company of Hannibal, Missouri, for authority to file tariffs increasing rates for gas service provided to customers in the Missouri service area of the Company.

APPEARANCES: Gary W. Duffy, Attorney at Law, and James C. Swearengen, Attorney at Law, Post Office Box 456, Jefferson City, Missouri 65102, for Great River Gas Company.

Rory Ellinger, Attorney at Law, 206 Center, Hannibal, Missouri 63401, for the City of Hannibal, Missouri.

Daniel L. Maher, Assistant Public Counsel, Office of Public Counsel, Post Office Box 7800, Jefferson City, Missouri 65102, for the Office of Public Counsel and the public.

Douglas C. Walther, Assistant General Counsel, Missouri Public Service Commission, Post Office Box 360, Jefferson City, Missouri 65102, for the Staff of the Missouri Public Service Commission.

REPORT AND ORDER

On December 7, 1984, Great River Gas Company (Company) submitted to this Commission tariffs increasing annual revenues $560,000, an average of 4.5 percent. The Company also proposed to change certain utility-related charges and to waive final bills under $1.00. The Commission initially suspended the tariffs until May 7, 1985. By a second suspension order the Commission suspended the tariffs beyond May 7, 1985, to November 3, 1985. The Commission Staff (Staff), the Office of Public Counsel (Public Counsel), and City of Hannibal, Missouri (City) intervened and were made parties to this case.

The Commission established a procedural schedule and set hearing dates for July 10 through 12, 1985. Testimony was taken on July 11, 1985. The parties filed briefs in accordance with a briefing schedule. A true-up hearing was held September 27, 1985, to update certain expense items.

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 parties to this matter filed a hearing memorandum setting out the unresolved issues and some areas of agreement. The Company has agreed to place in its customer service handbook the statement that a terminated customer may pay a required deposit over a period of time. Company has agreed that its customer representatives will be instructed to inform each customer reapplying for service previously terminated of the customer's right to pay a deposit in installments rather than in one payment.

The parties agreed to a rate design for Company based upon parameters and implementation approaches as set out in the hearing memorandum. This agreement is set out below.

Rate Design Parameters

1. Monthly customer charges shall be $6.75 for Residential customers, $10.00 for Commercial and Commercial-Interruptible, and $50.00 for Industrial and Industrial-Interruptible, regardless of the amount of increase allowed in this proceeding.

2. The Residential commodity rate form shall be a two-step rate with the first step ending at 100 therms.

3. The Commercial and Commercial-Interruptible commodity rate form shall be a two-step rate with the first step ending at 100 therms.

4. The Industrial and Industrial-Interruptible commodity rate form shall be a flat rate.

5. The commodity rates for the interruptible tariffs shall be one cent (1¢) per therm less than their firm counterparts.

6. No commodity rate shall be less than $0.52 per therm, the estimated marginal cost of gas.

7. The Industrial commodity rate shall not exceed $0.54 per therm regardless of the increase allowed in this proceeding.

8. The price differential between commodity rate steps for all classes with a two-step rate shall be $0.027 per therm.

9. The base cost of gas included in the rates on Attachments I.A and I.B is $.4507 per therm which is the amount being used by Staff for all revenue and cost of gas calculations.

Implementation Approach

Because the final allowed revenue levels are not known at this writing, the parties agree to an approach for implementing the rate design parameters agreed to above. The steps in that implementation are:

Step 1: Use Attachments I.A or I.B as a basis for the relative relationships among the rates at the no-increase level. Attachment I.A is to be used if the residential conservation adjustment is disallowed. Attachment I.B shall be used if that adjustment is approved.

Step 2: Adjust billing determinants of Attachment I.A or I.B as appropriate for any final changes upon which the final order is based using the Ogive method proposed by Company's witness Devlin. Calculate revised current revenues and proof to the final order. Determine increase required by subtracting these revised current revenues from allowed revenues.

Step 3: Increase all tail step commodity rates by an equal percentage to recover the additional revenue required while maintaining the $0.027 per therm step rate differential, the limit of $0.54 per therm and $0.53 per therm on the Industrial and Industrial-Interruptible commodity rates, respectively, and the agreed to customer charges.

Step 4: Additional revenues required after the Industrial limits are met are to be spread over the commodity rates of the other classes in accordance with the procedure described in Step 3.

To illustrate the approach, Attachments II.A and II.B show the rate levels that would result from increases at four different levels. The Staff developed a Personal Computer model to perform the four implementation steps described above. The attachments were produced by the model. Once final revenues are determined by the Commission, Staff will run the model to generate rates in accordance with the rate design parameters described above. Public Counsel and Company will be given an opportunity to confirm the proper implementation of the agreed rate design parameters.

(The Commission has only reproduced Attachment I.A, as Appendix A to this order, since that attachment reflects the rate design relationships without the conservation adjustment. The Commission has provided Staff with the decisions in this order and Staff has made the computer run as described in the hearing memorandum.)

The parties agreed that Company may rebase its purchased gas adjustment and roll these costs into base rates after the actual gas costs have been audited by Staff.

The parties agreed that Company shall be allowed to implement its proposed policy to waive final bills of less than $1.00.

The parties agreed that Company shall be allowed to implement the utility-related changes as set forth in Exhibit 10, Jones, Schedule 1.

UNRESOLVED ISSUES

The issues left for Commission resolution will be dealt with in the order in which they appear in the hearing memorandum.

A. Rate Base

The parties agreed upon a mutual starting point for jurisdictional rate base of $5,487,203. The parties disagree with respect to the calculation of the cash working capital component of net original cost jurisdictional rate base.

Cash working capital is the money the company needs to pay day to day expenses for the service it provides to its customers, the ratepayers. In determining how much cash working capital is required for a company, a lead/lag study is performed. The lead/lag study determines what portion of cash working capital is provided by ratepayers and what portion by shareholders.

The lead/lag study is performed in two parts. A revenue lag determination is made to establish the length of time between receipt of payment for an item and payment of the cost of the item. Expense lag is determined for items where the company must pay for the item prior to receiving payment from the ratepayers.

These two lag times are then matched. Expense lag is deducted from revenue lag and an overall lag time for the company is obtained. The cash working capital lag is then divided by 365 days to produce an annual cash working capital factor. This factor is then multiplied by the adjusted balance figures in the cash working capital requirement. If the number obtained by this calculation is positive, then the cash working capital is provided by shareholders and is added to the company's rate base to allow shareholders the opportunity to earn a return on that amount. If the number is negative the amount is deducted from rate base, since the ratepayers are providing the cash working capital.

In this case Staff and Company have agreed on all of the calculations of revenue lag and expense lag except for collection lag. Collection lag is the time between the billing date and the date the company receives payment for the services billed. Staff has calculated the collection lag to be 10.52 days and Company has computed the collection lag to be 13.85 days. Staff proposes a negative cash working capital of $351,952 and Company a negative cash working capital of $239,202.

Staff's collection lag figure is based upon a sampling done by Staff in Company's previous rate case, GR-83-363. In GR-83-363 Staff took a random sample of 200 cash receipts posted during February and April 1983. The billing date of these 200 receipts was then determined and the lag between billing and receipt was calculated. This calculation was then multiplied by the dollar amount of the bill to give a weighted amount. The total weighted amount was then divided by the total amount billed to arrive at the 10.52 day collection lag.

Company computed its collection lag figure by dividing the average daily accounts receivable balance for the twelve-month period ending September 30, 1984, by average daily revenues. This computation produced a collection lag figure of 13.85 days. Company's method is an accounts receivable turnover method.

Staff contends Company's method of calculating the collection lag is not proper because it does not evaluate individual customer collection billing data. Company's approach is based upon Company-wide totals for revenues and accounts receivable. Company's method, Staff asserts, is less precise because it relies on when the accounts receivable are set up on the Company's books. There is no certainty Company will credit an account the day the payment is received, thus, Staff contends, creating an artificial extension of the lag time.

Company contends Staff's method does not reflect current data concerning collections. Staff's study is two years old. Company states cash collection patterns have changed since Staff's study because of new winter disconnection rules and increased use of level payment plans. Company also contends Staff's method is not statistically valid, since it used only two months out of a twelve-month period for selecting the random sample.

Neither party was able to state with authority whether Staff's study was statistically valid. The Commission does not decide that point here. The Commission has considered the evidence and has determined that Staff's study does not take into account changed payment patterns for Company. Staff's study was developed for February and April of 1983 to take into account Company's change from a bimonthly to a monthly billing. This change occurred during the test year in Case No. GR-83-363. Thus, Staff's method does not reflect an entire year of monthly billing under the new method.

Staff's study does not take into account the changes in winter disconnection rules and level payment plans that have occurred since April 1983. The Commission finds these failings of Staff's study make it less reliable as an indication of the collection lag than Company's study. Although Company's method takes totals for the test year, its use of more recent data makes it more reflective of current collection time. The Commission does not consider the fact Company holds the deposits overnight or over the weekend before crediting accounts receivable as fatal to Company's study. Company's evidence indicated payments were credited on the day received, in almost all circumstances, if those payments were received before 2:00 p.m. Payments received after 2:00 p.m. were held over and credited the next day. The inclusion of this lag time in collection lag is not unreasonable.

The Commission finds that the more reasonable collection lag figure to be used in this case is 13.85 days. This means cash working capital will be a negative $239,202.

B. Operating Expense

The parties agreed to a mutual starting point of $11,408,657 for jurisdictional operating expense before income taxes. Income taxes will be calculated after other issues are determined in this order. The parties disagree over the calculation of jurisdictional operating expenses as follows.

1. Payroll, Payroll Taxes And Fringe Benefits

The parties stipulated to the percentage of wages charged to operating expenses. That stipulated percentage is 88.8 percent.

Staff proposes Missouri jurisdictional payroll, payroll taxes and employee fringe benefit expenses of $914,036, $69,367 and $159,791, respectively, based upon the test period ending January 31, 1985. Company maintains the appropriate levels for the same categories, respectively, are $948,086, $74,067 and $190,159. This issue was reserved the true-up process.

2. Miscellaneous Disallowed Expenses

Staff disallowed $97 of expenses for employee service pins. Company contends this expense should be allowed. These service pins are given to employees to recognize their years of service with the Company.

Staff proposed this disallowance based upon its witness's assertion the Commission has historically disallowed similar items. The Commission has allowed similar expenses in other cases [24 Mo. P.S.C. (N.S.) 257] and considers reasonable expenses to reward service to the Company's employees as appropriate expenses for utility companies. The $97 will be allowed as an operating expense.

Staff also proposed to amortize the fee paid a consultant over a three-year period. The consultant is not on an annual retainer for Company, but conducts studies on an as-needed basis each year. In the test year, Company paid the consultant $2,188 for reviewing training courses for Company and assisting in writing job descriptions. Company proposes to include the total fee as a test year expense.

Company contends the total fee should be allowed in this test year since it uses the consultant's services each year and the study benefits Company's management. The Company paid the consultant $1,075 in 1981, $1,637 in 1982 and $557 in 1983.

Staff presented no direct testimony on why these expenses were amortized. On cross-examination Staff's witness stated he proposed to amortize the expense over three years because the Company would benefit from the study beyond the test year. Staff looked at the benefits to be received from the study and not the yearly use of the consultant's services. Staff allowed $729 in this test year of the $2,188 total fee.

The Commission in this instance considers Staff's proposal regarding the consultant fee to be the more appropriate. The benefits from the study will accrue to the Company for more than the test year in which the expenses were incurred and the Commission finds that the three-year amortization period is reasonable. The Commission is not in this order finding that a reoccurring consultant's fee cannot be expensed each year even if the studies have different purposes or are of benefit for periods longer than the test year. Here, though, Company would have the Commission allow the consultant fees paid during the test year although upon review the fee for the test year was the highest fee paid the consultant over a four-year period. If this is a reoccurring expense, some type of normalization of this expense should have been presented.

3. Rate Case Expense

Three different proposals were made concerning the inclusion of rate case expense in this case. Company proposes to increase rate case expense by $20,191 to reflect expenses incurred in this rate case. Staff proposes to amortize part of rate case expense associated with the cost of service study over three years. Public

Counsel proposes to decrease rate case expense by $17,409 to reflect a normalized level of rate case expense.

Staff states that the total cost of the cost of service study was $30,353. As part of the study, Company had to develop computer software which Staff asserts will be usable in future cost of service studies and so should be amortized over three years. Staff agrees with Company concerning recovery of other rate case expenses in this case for the cost of service study. Since Company did not separate the cost of the computer software from the total cost of the cost of service study, Staff proposes to amortize the entire $30,353 over the three years.

Public Counsel proposes the Commission only allow one-half of rate case expense in this case. This is based on Public Counsel's comparison of rate case filings of other gas companies regulated by the Commission and a review of the number of months between Company's tariff filings. Public Counsel states that the average gas company rate tariff is in existence for over 24 months. Company's current tariffs will be in effect over 22 months, which is a substantial increase over the time its previous tariffs were in effect. Public Counsel states that if all rate case expenses are allowed in this case, Company will overrecover for those expenses once the new tariffs are in effect more than one year. Company is requesting $75,000 for annual rate case expense. Public Counsel would decrease rate case expense by $17,409.

Although the period between the rate cases for companies has been lengthening, the Company indicated that it would be filing its next rate case in December 1985. This means that the tariffs which go into effect in this case will be in effect approximately twelve months. Any trend toward two-year filings for Company is therefore mitigated by Company's proposal to file in December 1985. The Commission finds the evidence of two-year filings is not sufficient to accept Public Counsel's proposals for normalizing rate case expense. Comparison with other gas companies provides some information concerning the gas industry as a whole, but

Company's history of tariff filings indicates that it does not file in a manner similar to other regulated gas companies.

The Commission also finds that the entire cost of the cost of service study should be included in this rate case. The computer software is an integral part of the cost of service study and the information in the computer must be updated each time a new study is performed. The Commission believes that the Company should be encouraged to keep accurate and updated cost of service information and that the inclusion of the cost of the software in this rate case is reasonable based upon the updating of that information.

The Commission is concerned that Company finds it necessary to file for a rate increase almost immeditely after new rates are approved. The Commission encourages Company to closely examine its operations to try and eliminate the need for annual rate case filings.

4. Training Programs

Company has proposed to increase cost of service expenses by $18,701 for the expense of sending employees to training programs. Staff opposes this adjustment since the costs have not been incurred and therefore are not known and measurable. City proposes the allowance of expenses for safety programs. City proposes safety training programs be required by the Commission and examined by the Commission's Gas Division. The City made no calculation concerning what portion of the training programs proposed by Company was related to safety.

Company's position is that the amount of expenses for training in the test period is abnormal. Training had been curtailed for economic reasons during the test year. Company now proposes what it considers normal training expenses.

Staff contends Company has presented no evidence to justify the amount claimed. The amount proposed is not known and measurable, Staff contends, and further, the burden is on the Company to justify these expenses and it has not done so.

The Commission agrees with Staff on this issue. Company is proposing the Commission allow expenses for training programs that have not been incurred. Company contends this is normalizing training expenses. The Commission does not believe there is sufficient evidence to justify the amount of expense as a normalized amount without more evidence concerning the Company's normal training expenses. The Commission will not allow Company to charge as expense for training which has not occurred and which is not known and measurable. The Commission is also rejecting City's proposals, since no evidence of the cost of safety training programs was presented.

C. Residential Sales Adjustment

Company has proposed an adjustment be made to its jurisdictional operating revenues to reflect a projected decline in residential sales on a per customer basis. Company projects the decrease in revenue per customer to be $234,424 for the year 1985. Company proposes a corresponding decrease in the cost of gas expense during 1985 of $191,300.

To support its proposed reduction in operating revenue Company presented a linear regression graph (Exhibit 2, Schedule 8). This graph shows a projected decline in residential heating degree day usage based upon the data for residential heating degree day usage from 1977 through 1984. Company deducted base gas usage (nonweather-sensitive) from total sales and then computed customer usage per degree day from the weather-sensitive usage. Based upon these results, Company's witness developed a linear regression analysis which projects a decrease in residential degree day usage in 1985.

Company asserts that in 1985 residential degree day usage will continue to decrease as customers take more conservation actions and replace less efficient gas furnaces with more efficient gas furnaces. This reduction in usage, Company contends, makes the historical test year data not accurate for predicting gas sales to residential heating customers in the future.

Company presented the same type of analysis in its last rate case, GR-83-363. In that case Company presented its analysis which indicated that from 1982 to 1983 Company projected a decrease in sales of 42,092 DTH (decatherms). The actual sales decrease was 63,450 DTH. Company has compared its projections for 1985 with actual sales through May of 1985 and its projection was within 40 DTH of the actual sales decrease for that period.

Company presented other data collected by its witness to indicate the patterns of conservation by its customers. Company did a survey of area residents concerning conservation attitudes and made a telephone survey of gas furnace dealers concerning sales of more efficient gas furnaces.

Staff and Public Counsel objected to Exhibit 9, which contains the telephone survey of gas furnace dealers. The objections were that Exhibit 9 contained testimony which was not surrebuttal but supplemental direct testimony and as such should be stricken. A review of Exhibit 9 indicates that there are some portions which could be considered direct testimony. The Commission, though, has determined the inclusion of this testimony will not prejudice other parties, and the objections are overruled. Exhibit 9 will be received into evidence.

Public Counsel opposes the residential revenue adjustment based upon an evaluation of Company's trend analysis by Public Counsel's witness. Public Counsel's position is that Company's analysis is defective because it failed to take into account factors other than time. Public Counsel asserts many factors, especially price, influence gas usage and the use of time as the only variable makes Company's projections unreliable.

Company's witness testified time was used to reflect all of the other factors which might impact the usage of gas by residential customers. Public Counsel's witness presented an analysis of gas usage with price as a variable. This analysis, Public Counsel states, reduces time as a statistically significant variable. Public Counsel contends price is a more statistically significant factor than time and prices are stabilizing, thus removing any need for an adjustment to operating revenues. Public Counsel attacks Company's telephone survey of gas furnace dealers as being neither complete nor reliable. The telephone survey did not reach all the dealers in the service area and no data was gathered concerning the number of high-efficiency furnaces which had been installed.

Staff supports Public Counsel's analysis of Company's study. Staff contends further that the downward trend evidenced by Company's analysis has reversed, based upon the increase in residential degree day usage from 1983 to 1984.

City opposes any operating adjustment of declining residential sales. City contends Company's telephone survey of local gas furnace dealers is inaccurate. City also contends Company's conclusions about customers switching to high-efficiency furnaces did not take into account the income levels of the customers in Company's Missouri service area. City in its brief requested the Commission to order Staff and Company to study the feasibility of tying a residential conservation program with a future conservation adjustment.

The Commission is always reluctant to allow projected expenses or reductions because of the uncertainty inherent in forecasting the future. In certain cases where no historical data is available or where there are unusual circumstances, the Commission has allowed projected costs. The Commission does not believe the evidence in this case warrants adoption of Company's proposed decrease in the operating revenues.

The evidence indicates that Company's analysis, while accurate for the first few months of 1985, is not reliable for forecasting further into the future. Public Counsel's arguments are well taken that price and other factors will impact residential customer usage. The upswing in usage from 1983 to 1984 indicates the downward trend is not continuous.

The Commission also has considered Company's net temperature-sensitive sales for the years 1977 through 1984. Even though degree day usage decreased each year except for 1984, net temperature sensitive sales DTH per year decreased from 1980 to 1981, increased from 1981 to 1982, decreased from 1982 to 1983, and increased again from 1983 to 1984 (Exhibit 2, Schedule 4). These sales figures indicate customers' total heating sales are not following the same trend as individual customer degree day usage.

The Commission further finds that Company's customer survey and gas furnace dealer survey did not support the conclusions drawn by Company from the data collected. Customers' questions were not specific enough to ensure answers as to the customers' decisions with regard to conservation and the use of gas; and the dealer survey did not collect information concerning the number of units installed, nor did it include questions to determine how many high-efficiency furnaces would be installed in Company's service area.

The evidence presented by the Company is not sufficient to allow a projected revenue reduction. The Commission therefore rejects Company's proposal to make an adjustment to jurisdictional operating revenues to reflect a projected decline in residential sales.

E. Rate of Return

The parties in this case have agreed to a total capital structure at January 31, 1985, of $9,964,458. This capital structure consists of:

	Amount	Ratio
Long Term Debt	$7,088,472	71.14%
Short Term Debt	$ 615,000	6.17%
Common Equity	$2,260,986	22.69%
Total	$9,964,458	100.00%

The parties have agreed that the cost of long term debt for Company at January 31, 1985, is 12.52 percent. The parties have agreed that the cost of Company's short term debt at January 31, 1985, is 11.79 percent. Company has no preferred stock and so the remaining portion of the rate of return to be determined is the cost of common equity. Company has proposed an 18 to 20 percent cost of common equity while Staff recommends a 15.6 to 16.1 percent cost of common equity. City supports Staff's recommendation, while Public Counsel supports Staff's evidence but believes the return on common equity should be 15.6 percent or lower. Company supports an overall rate of return of 13.72 percent, while Staff supports an overall rate of return of from 13.18 percent to 13.29 percent.

In determining what should be the proper rate of return for a publicly regulated utility, the Commission is required to balance the interests of the Company and the interests of the ratepayers. The factors to take into account in this balancing process are established in Bluefield Water Works and Improvement Company v. Public Service Commission of West Virginia, 262 U.S. 679, 692-93 (1923) and Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1944). The Commission, as a substitute for competition, must allow a public utility company an opportunity to earn a return on investment that protects the financial integrity of the company. The Commission, though, is not required to allow for excessive profits which could be incurred in highly speculative investments. The balance is to ensure the company can provide adequate service at the lowest equitable cost.

The dispute in this case, as in most rate cases, is over the proper cost of common equity to the utility. Both Staff and Company have presented a discounted cash flow (DCF) model to establish the required return on equity for Company. As Staff witness Cook states: "The DCF model is based on the theory that the price which the investor is willing to pay for a stock is the discounted value or present worth of what the investor expects to receive as a result of purchasing that stock. The return to the investor consists of dividends plus capital gains." The DCF formula in effect states that the cost of equity capital is equal to the dividend yield the next year plus the growth rate in dividends per share.

Since Company is a privately-held corporation and not publicly traded, both Staff and Company used a group of similar gas distribution companies to arrive at the components necessary for the DCF model. Staff used twelve similar companies, while

Company used ten. Staff and Company used nine of the same companies for their comparisons.

Staff determined that for the twelve companies it studied the average current dividend yield was 8.08 percent for the first three months of 1985. Staff established a range for the dividend yield because of volatility of current money markets. Staff's dividend yield range is 8.0 percent to 8.8 percent. Staff rounded the lower end of the range to 8.0 percent. Staff based the upper limit of its range upon the average 1984 dividend yield for the sampled gas companies.

Company's witness performed similar calculations and determined the dividend yield to be 8.32 percent or 9.42 percent for the ten companies he sampled. Company developed its dividend yields from the Wall Street Journal and Value Line Investment Survey. Company used five-year growth patterns for the sample gas companies and arrived at a 7.0 percent growth rate. Staff used a similar five-year analysis and arrived at a growth rate range of 6.8 percent to 7.3 percent.

Staff's and Company's DCF formula-calculated returns on common equity are as follows:

	Yield Percentage		Growth Rate		Return on Equity Percentage
Staff	8.0	+	6.8	=	14.8
	8.0	+	7.3	=	15.3
	8.8	+	6.8	=	15.6
	8.8	+	7.3	=	16.1
Company	8.32	+	7.0	=	15.32
	9.42	+	7.0	=	16.42

Staff supports a range of 15.6 to 16.1 percent return on equity because of the risk it perceives in Company's low equity ratio. This range exceeds the 15.45 percent of the sampled companies (agreed to in the hearing memorandum). Since Staff's range exceeds the average, Staff made no further adjustment to its range for the greater risk it perceives in Company's operations. Staff does not perceive these risks as increasing, and in fact stated they should recede as Company accumulates equity. Staff tested its required return rates to ensure the Company could maintain its financial integrity. Based upon a midrange return of 15.85 percent, Staff concluded that Company would be able to meet its debts and if necessary obtain additional debt financing.

Company performed a comparative earnings analysis as well as a DCF analysis to determine the required return on equity. The comparative earnings analysis compares the market-to-book ratio of the sampled gas distribution companies. These market-to-book ratios have increased since 1981 from 74.5 to 95 percent in 1984. Based upon its calculations Company found that a 16 percent return on equity was required by this analysis.

Company states that the DCF analysis is the best indication of the cost of common equity. Company's DCF analysis established a required return on equity of 15.32 and 16.42 percent. Company's comparative earnings analysis indicates a required return of 16 percent. Company asserts it has more risk than the sampled companies because of its lower equity ratio, size, volatility of earnings, and because it is a nontraded stock and no cash dividends are paid. These factors, Company contends, increase the risk of holding Company's stock. To compensate for this risk, Company's witness testified, two to four percentage points should be added to the return on equity calculated.

Public Counsel takes issue with Company's position concerning the additional risks of Company's stockholders. Public Counsel accepts the DCF model as an appropriate method of calculating the required return on equity. Public Counsel contends, though, that Company's return should be limited by several factors.

Public Counsel argues that since Company is a closely-held corporation and the owners of the corporation vote themselves as directors and as salaried officers of the Company, that they make the decisions concerning the Company's operation. Public Counsel points out that these self-elected officials have chosen to borrow money instead of issue common stock to finance Company operations; therefore, Company's low equity ratio has been self-imposed and should not be viewed as an added risk factor. Public Counsel contends that adding a risk factor for the low equity ratio would allow the stockholders/officers to receive a higher rate of return and also maintain their control and preserve their earnings per share. Public Counsel recommends the Commission set a return on equity within the lower half of Staff's range of 14.8 percent to 15.6 percent.

City supports Staff's position on rate of return and return on common equity. City indicates its concern for having a viable utility providing service to its citizens, but does not believe the risk factor proposed by Company is reasonable.

The Commission has reviewed the evidence on this issue in light of its responsibility to balance the interests of the Company and the ratepayers. The Commission would note that Staff's and Company's evidence on the return on common equity is very similar. Both analyzed almost a similar group of gas distribution companies to provide the necessary components for the DCF formula. Company's growth rate falls almost exactly in the middle of Staff's range for the growth rate. Company's growth rate is 7.0 percent while Staff's range is 6.8 percent of 7.3 percent. Company's two dividend yield rates of 8.32 percent and 9.42 percent are very close to Staff's range of 8.0 percent to 8.8 percent. The major difference between the final positions of Staff and Company on the return on common equity is the risk factor which Company proposes to add above these calculations.

Based upon the similarity in the two growth rate projections, the Commission has determined that Company's growth rate of 7.0 percent is reasonable and should be utilized in determining the return on common equity for Company. The Commission has determined Staff's dividend yield rate of 8.08 percent, which is based upon the sampled companies' dividend yield experience in 1985, is the proper dividend yield rate to be used. This yield rate is the average of the sampled companies for the first quarter of 1985. The Commission believes this is the most reasonable calculation for determining Company's yield rate. The Commission finds Staff's sample of companies is more reflective of the average performance of similar gas companies because it samples a greater number of companies. The Commission does not believe an adjustment needs to be made for market volatility as Staff proposes.

Making the calculation required by the DCF formula, the Commission has determined the appropriate rate of return on common equity for Company is 15.08 percent. The Commission finds this to be a reasonable rate of return and, based upon Staff's evidence, finds it will ensure the financial integrity of Company.

The Commission has considered Company's evidence concerning the added risk to Company's stockholders. The Commission is not convinced that this risk is as great as Company has presented or whether it should be compensated for by the ratepayers. The Commission has determined that 15.08 percent is a reasonable rate of return on common equity for the Company. The Commission believes this rate provides sufficient risk protection to Company. The evidence is that Company's risk will lessen as it collects equity, and this supports a return lower than that proposed by Company and supports a rate at the lower end of Staff's range.

The Commission is in agreement with certain of Public Counsel's arguments concerning the close relationship between stockholders and officers of Company. This relationship enables Company's stockholders to receive a return on their investment through means other than dividends, thus reducing the actual risk to the stockholders.

Based on the Commission's determination regarding the return on common equity, the Commission finds the required rate of return for Company is 13.06 percent. This is determined using the 15.08 percent return on common equity and the agreed-upon debt ratio, the cost of long term debt of 12.52 percent and the cost of short term debt of 11.79 percent.

<u>TRUE-UP</u>

The Commission conducted a hearing on September 27, 1985, to true up certain amounts as agreed to by the parties in the hearing memorandum. The true-up hearing involved a true-up audit done by Staff which included plant, related depreciation and amortization expenses, operating revenues, payroll expenses and payroll-related items, including the continuing fringe benefits related to the early retirement program, gas cost, outside services and income taxes. The true-up audit covered the period from the end of Staff's test year until July 31, 1985.

Staff presented a jurisdictional revenue requirement range based upon its true-up audit of $457,829 to $469,426, with a midpoint of $464,154, exclusive of the dollar effect of the issues tried in the main case on July 11, 1985, and exclusive of the issues to be considered in the true-up proceeding. Company, Staff and Public Counsel agreed that Staff's range was based upon a jurisdictional net original cost rate base figure of $5,535,530. This rate base figure is appropriate for all issues except cash working capital. The parties also agreed that the jurisdictional operating expense figure before income taxes is $11,478,305. This figure does not include the issues tried on July 11, 1985, or at the true-up hearing.

At the true-up hearing the parties stipulated to the depreciation of additional equipment of Company. The rates stipulated to are 12.5 percent for Account 396, which relates to a backhoe and air compressor, and 8.33 percent for Account 393, which relates to shelving.

A. <u>M.K. Wrench</u>

Company proposed to include the salary of M.K. Wrench as a payroll expense item. The jurisdictional amount is $7,868. Staff filed a <u>Motion To Limit Scope Of Proceedings</u> opposing the taking of evidence on this issue. Staff asserted in its motion that the issue of M.K. Wrench's salary is an isolated adjustment and Company is precluded from presenting that adjustment by the Commission's suspension order. Staff states the hearing memorandum set out all areas of disagreement and it is improper for Company to now submit M.K. Wrench's salary as an issue. Staff argues Company should have presented M.K. Wrench's salary at the July 11, 1985, hearing and by not doing so it is precluded from presenting it at the true-up hearing.

Company contends that the hearing memorandum includes payroll expenses as an item to be trued up and the inclusion of M.K. Wrench's salary is appropriate as a payroll expense item. The Commission heard argument on the motion, allowed the testimony and evidence concerning this issue, and took the motion with the record.

The Commission's second suspension order states: "The Commission will not consider isolated adjustments [at the true-up hearing], but will, at a proper time, examine only a 'package' of adjustments designed to maintain the proper revenue-expense-rate base match." This section precludes the parties from trying issues unrelated to a true-up of historical data at the true-up hearing.

The parties agreed in the hearing memorandum to true up certain issues. One of these issues was "payroll expenses and payroll related items". The hearing memorandum states Staff will true up payroll and payroll-related expenses for three vacant positions. There is no mention these are the only payroll items to be trued up. M.K. Wrench's salary is a payroll item. There is no limitation placed in the hearing memorandum on what payroll items will be trued up. The Commission finds the hearing memorandum does not preclude the presentation of this issue. The Commission finds further that its suspension order does not preclude presentation of the issue, since it is arguably a part of the package of payroll and payroll-related expense items. Staff's motion is therefore denied.

The evidence presented by Company in support of M.K. Wrench's salary is not convincing. M.K. Wrench is a shareholder and member of the Board of Directors of Company. He retired from employment with the Company in 1964. According to the Board minutes of April 29, 1985, M.K. Wrench resumed his duties as head of the engineering staff after that meeting. Those duties, according to M.K. Wrench, were to review the logs of the two engineers employed by Company and keep the engineers in line. Although all employees who worked for Company, including the president, kept some form of time sheet, M.K. Wrench kept none. M.K. Wrench has his permanent residence in Michigan and lives there several months during the year. M.K. Wrench was not required to appear for work every day. Although M.K. Wrench had met with the two Company engineers, he had provided them with no supervision.

The Commission does not believe M.K. Wrench is in fact performing any work as an employee for Company. This resumption of duties and attendant salary appear to be a method of distributing profits to a shareholder and should be charged to the shareholders. The Commission therefore finds that M.K. Wrench's salary is not a reasonable expense and should not be included in payroll expense items.

B. Jurisdictional Payroll Allocation

At the hearing on July 11, 1985, Staff opposed the jurisdictional allocation of the salaries of certain of Company's employees. At the true-up hearing only one employee was left in dispute. That employee is D.L. Dixon. Staff proposed a 50/50 allocation of Dixon's salary between Iowa and Missouri. Company proposed a 75 percent Missouri/25 percent Iowa allocation.

Staff opposes Company's allocation because it is based upon Dixon's own judgment of the time he spends on Missouri matters and not on a time sheet kept by Dixon. Staff contends there is insufficient documentation to support the 75/25 allocation. Staff based its 50/50 allocation on a printout of payroll distribution dated July 16, 1985.

Company contends that the 75/25 allocation is proper. Company used Dixon's own judgment for the allocation since it felt he was the person in the best position to know how his time was allocated. Company introduced into evidence a payroll distribution printout dated August 1, 1985. This payroll distribution printout showed an allocation for Dixon of 75 percent Missouri/25 percent Iowa. The Company indicated the allocations in the printouts were for the previous month's allocations: the August 1 printout showed Company's July allocations.

From July 1983 until July 1, 1985, Dixon's salary was allocated 50/50 by Company. In January Dixon became administrative manager for Missouri. In February

Dixon took over as acting manager of Company's credit and collection department. On July 1, 1985, Dixon became the permanent manager of the collection department.

Dixon divided his duties 50 percent to his administrative manager position and 50 percent to his collection manager position. The administrative manager position is for the Hannibal, Missouri, office and so Dixon allocated the entire 50 percent to Missouri. The collection manager position has responsibility for the entire Company's credit and collections, so Dixon split the 50 percent associated with the collection manager position 25 percent to Missouri and 25 percent to Iowa.

The Commission has considered this issue and has determined the 75/25 allocation proposed by Company is reasonable. Dixon's testimony concerning his job responsibilities indicates his time is spent approximately as Company has allocated. The Commission finds this evidence is sufficient to support the allocation. Although the Commission would prefer an allocation based upon the time sheets of an employee, the Commission in this instance finds that Dixon's duties support the 75/25 allocation.

C. Pension Expense

Company proposes that $14,811 should be added to its cost of service based upon the increased pension costs of the employees who took early retirement in July 1985. Staff opposes this additional expense item because the $14,811 in costs will not be paid until after the operation of law date in this case. Public Counsel support's Staff's position.

In May 1985 Company developed a special early retirement program for its employees to go into effect in July 1985. Seven employees took advantage of the program. Because of the program Company had to revise its actuarial tables. Since Company accrues payments for its pension program on a monthly basis, it had its actuary recompute the monthly accrual amount. Company accrues the payments on its books monthly but does not make actual payment to the pension trust fund until the end of the year.

Company stated this additional expense was not part of its prefiled case because it had not occurred as of January 1, 1985, and so did not relate to that test year. Company contends now that the seven employees have retired, its monthly accrual rate has changed. The increased accrual will give effect to the early retirements. The $14,811 is the Missouri jurisdictional amount associated with these early retirements. Since the early retirements were part of a special program implemented after January 1, 1985, they were not taken into account by the actuary in determining the 1985 rate. Company asserts that since these accruals are liabilities of Company, they should be included in this case.

Staff opposes the inclusion of the new amount because the Company will not pay for the expense until January 1986. Staff contends this is after the operation of law date in this case and so should not be recovered in this rate case.

In Case No. ER-81-79 involving Citizens Electric Corporation [24 Mo. P.S.C. (N.S.) 451, 456] the Commission stated it normally would confine adjustments to a test year to those which match revenues and expenses; but where known and measurable increases and expenses occur, it is more equitable to allow the company to recover for those expenses even though they are paid after the operation of law date.

In Case No. GR-81-155 involving The Gas Service Company [24 Mo. P.S.C. (N.S.) 553, 570] the Commission allowed a wage increase where it was known and measurable, even though the increase would occur after the operation of law date in the case. The Commission stated that since the wage increase was known and reasonably measurable and would occur approximately 18 days after the operation of law date, the additional expense should be included.

The Commission considers the two cases cited to be the proper approach to this situation. Here, the actuary has developed the new monthly accruals and the amounts are reasonably known and measurable. Company is obligated to pay this amount into the pension trust fund. There are only approximately two months between the operation of law date in this case and the date the payment will be due the pension trust. The Commission considers it to be equitable and reasonable to include these expenses in this case.

Conclusions

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

Great River Gas Company is a public utility subject to the jurisdiction of the Commission pursuant to Chapters 386 and 393, R.S.Mo. 1978. Company's tariffs, which are the subject matter of this proceeding, were suspended by the Commission pursuant to Section 393.150, R.S.Mo. 1978. The burden of proof to show that the increased rates are just and reasonable is on Company.

The Commission may consider all facts which in its judgment have any bearing upon the proper determination of the setting of fair and reasonable rates. The Commission may accept stipulations and agreements of the parties which resolve issues in a rate proceeding when it appears that the proposed agreements are fair and equitable to all concerned.

Based upon the evidence and the findings made above, the Commission has determined that Company should be authorized to increase its gross revenues, exclusive of gross receipts and franchise taxes, by $484,785. The Commission concludes that this increase of revenues exclusive of gross receipts and franchise taxes is reasonable and justified, and Company shall be allowed to file tariffs in conformance with the rate design adopted herein which will produce the increase in revenues.

It is, therefore,

ORDERED: 1. That pursuant to the findings and conclusions in this Report And Order, the proposed revised tariffs filed by Great River Gas Company in this case are hereby disapproved and Great River Gas Company is authorized to file in lieu thereof, for approval of this Commission, tariffs designed to increase gross revenues, exclusive of gross receipts and franchise taxes, as approved in this order.

ORDERED: 2. That the tariffs filed shall be in conformity with the rate design approved in this order.

ORDERED: 3. That any objections not heretofore ruled upon are overruled and any outstanding motions denied.

ORDERED: 4. That Exhibit 9 is received into the record.

ORDERED: 5. That this Report And Order shall become effective on the 3rd day of November, 1985.

BY THE COMMISSION

Harvey G. Hubbs

Harvey G. Hubbs
Secretary

Steinmeier, Chm., Musgrave, Mueller, and Fischer, CC., Concur and certify compliance with the provisions of Section 536.080, R.S.Mo. 1978.
Hendren, C., Absent.

Dated at Jefferson City, Missouri, on this 24th day of October, 1985.

APPENDIX A

[HEARING MEMORANDUM] ATTACHMENT I.A

GREAT RIVER GAS COMPANY
RATE DESIGN SETTLEMENT

NO RESIDENTIAL CONSERVATION ADJUSTMENT

	BILLING DETERMINANTS	PROPOSED RATES	($) RATE REVENUES	CURRENT RATES	($) CURRENT REVENUES	CHANGE IN REVENUES ($)	CHANGE IN REVENUES (%)
RESIDENTIAL							
# BILLS	127,597	6.75	$861,280	5.20	$663,504	$197,775	29.81%
0 - 100 THERMS	7,534,707	0.5572	$4,198,339	0.5523	$4,161,419	$36,920	0.89%
ABOVE 100 THERMS	4,636,303	0.5302	$2,458,168	0.5523	$2,560,630	($102,462)	-4.00%
TOTAL THERMS	12,171,010		$7,517,786		$7,385,553	$132,233	1.79%
COMMERCIAL							
# BILLS	15,433	10.00	$154,330	7.38	$113,896	$40,434	35.50%
0 - 100 THERMS	843,520	0.5572	$470,009	0.5523	$465,876	$4,133	0.89%
ABOVE 100 THERMS	3,109,430	0.5302	$1,648,620	0.5523	$1,717,338	($68,718)	-4.00%
TOTAL THERMS	3,952,950		$2,272,959		$2,297,110	($24,151)	-1.05%
COMMERCIAL INTERRUPTIBLE							
# BILLS	876	10.00	$8,760	7.38	$6,465	$2,295	35.50%
0 - 100 THERMS	70,348	0.5472	$38,494	0.5504	$38,720	($225)	-0.58%
ABOVE 100 THERMS	2,104,922	0.5202	$1,094,980	0.5504	$1,158,549	($63,569)	-5.49%
TOTAL THERMS	2,175,270		$1,142,235		$1,203,733	($61,499)	-5.11%
INDUSTRIAL							
# BILLS	60	50.00	$3,000	46.42	$2,785	$215	7.71%
ALL THERMS	748,460	0.5302	$396,833	0.5523	$413,374	($16,541)	-4.00%
TOTAL THERMS			$399,833		$416,160	($16,326)	-3.92%
INDUSTRIAL INTERRUPTIBLE							
# BILLS	108	50.00	$5,400	46.42	$5,013	$387	7.71%
ALL THERMS	1,009,490	0.5202	$525,137	0.5504	$555,623	($30,487)	-5.49%
			$530,537		$560,637	($30,100)	-5.37%
TOTAL MISSOURI			$11,863,351		$11,863,193	$158	.00%