Exhibit No.	____________
Issue:	Rate of Return
Witness:	David P. Broadwater
Type of Exhibit:	Rebuttal Testimony
Sponsoring Party:	MO PSC Staff
Case No.:	Case No. GR-99-315

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

LACLEDE GAS COMPANY

CASE NO. GR-99-315

REBUTTAL TESTIMONY

OF

DAVID P. BROADWATER

Jefferson City, Missouri

August 1999

REBUTTAL TESTIMONY

OF

DAVID P. BROADWATER

LACLEDE GAS COMPANY

CASE NOS. GR–99–315

Q. Please state your name.

A. My name is David P. Broadwater.

Q. Are you the same David P. Broadwater who filed direct testimony in this *proceeding for the staff of the Missouri Public Service Commission (Staff)?*

A. Yes, I am.

Q. In your direct testimony, did you recommend a fair and reasonable rate of return for the Missouri jurisdictional natural gas distribution rate base for Laclede Gas Company (Laclede or Company)?

A. Yes, I did.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to the direct testimony of Ms. Kathleen C. McShane, Mr. John E. Olson, Mr. Glen W. Buck, and Mr. Mark Burdette. Ms. McShane sponsored rate of return testimony for Laclede. Mr. Olson sponsored return on equity testimony for Laclede. Mr. Buck sponsored capital structure testimony for Laclede. Mr. Burdette sponsored rate of return testimony for the Office of the Public Counsel of the State of Missouri (Public Counsel). I will address the issues of the appropriate capital structure, and return on common equity (ROE) to be applied to Laclede for ratemaking purposes in this proceeding.

Q. Do you have any corrections to make to your direct testimony?

A. Yes. On page 17 line 34 of my direct testimony I state Laclede's net income for the 12 months ended March 31, 1999 to be $6,159,420 but it should state $25,735,167. Secondly Schedule 19 to my direct testimony contained an error in the calculation of the pro forma pre tax interest coverage ratio. A corrected Schedule 19 is attached as Schedule 1 to my rebuttal testimony.

Laclede's Rate of Return for Laclede

Q. Please summarize Ms. McShane's recommended return on common equity for Laclede.

A. On page 3 of Ms. McShane's direct testimony she summarizes her analysis in the following manner:

Comparable Earnings Test	13.0-13.25%
Equity Risk Premium Test	11.25%
Discounted Cash Flow Test	13.6%

These results led me [Ms. McShane] to recommend a return of 12.75% for Laclede.

Q. Before we look at each model Ms. McShane used to arrive at a return on common equity recommendation of 12.75% for Laclede, do you have any general comments on the approach Ms. McShane took to arrive at her recommendation?

A. Yes. Ms. McShane used three models for estimating Laclede's cost of equity (Comparable Earnings, Equity Risk Premium and Discounted Cash Flow (DCF)) and each of those models requires the analyst's expertise and judgment to appropriately apply the models. However, this did not conclude Ms. McShane's analysis she further adjusted the output of each model in order to arrive at her final result. These adjustments were significant ranging anywhere from 50 basis points to 325 basis points.

Q. Could you please discuss Ms. McShane's DCF analysis?

A. Yes. Ms. McShane uses the DCF model on a group of 13 sample LDCs. The DCF model produced an estimated cost of equity of 10.50 percent, which is close to the average ROE I found for my eight comparable companies of 10.24 percent. Ms. McShane then made an adjustment to the output based on the market to book ratio of the average sample LDC. This argument is convenient for the Company to make during this time of relative high stock prices and market to book ratios greater than 1.00. This adjustment has historically been rejected by this Commission, and is not in keeping with what is being measured by the DCF model. A consultant for the Staff made a comparable market to book adjustment in Southwestern Bell Telephone Company Case No TR-83-253, and in that case the Commission rejected Staff's market to book adjustment. It should also be noted that at that time market to book ratios were less than one and had the effect of lowering the recommended required ROE and the companies were not advocating that position at that time as being correct. This argument is merely an attempt by the Company to artificially increase its allowed return. This adjustment increases the output of the DCF model by 310 basis points.

The DCF model is used to determine the investors required return on equity from the Company. Given that a company's stock is currently trading at book value, and the Company earns a 13% return on common equity while investors are only requiring a 10% return on common equity, the result will be that investors will bid up the company's stock price above book value to a point where they are receiving a 10 percent return on their investment. If the Commission accepts the adjustment Ms. McShane is proposing, the effect will be that investors who are currently requiring between 9 and 10 percent return on common equity will be receiving a 12.75 percent return on common equity, which will drive up the company's market to book ratio. This, in turn will support an even greater adjustment to the DCF model in the next case further driving up the company's allowed return on equity. All this would be taking place during a time when investors are actually requiring a return on common equity of between 9 and 10 percent.

Q. Could you please discuss Ms. McShane's Equity Risk Premium analysis?

A. Ms. McShane's Equity Risk Premium Analysis is the Capital Asset Pricing Model (CAPM). Ms. McShane applied the CAPM to her 17 sample LDCs. The CAPM is a single factor model with that single factor being beta. Beta is a measure of the investment risk of a company as compared to the market as a whole. The sample LDCs that were chosen have an average beta of 0.59 as compared to Laclede's current Value Line beta of 0.50 or Laclede's Value Line beta at the time of Staff direct testimony of 0.55, both of which indicate that the investment risk associated with Laclede is less than the sample companies included in Ms. McShane testimony. However, Ms. McShane did not apply an adjustment to lower the output of the CAPM for this difference. Instead she chose to adjust the output of this model upward 50 basis points to account for flotation costs. Staff has allowed Laclede to recover flotation costs on a dollar for dollar basis. In this case Staff has built into its case $266,160 to account for flotation costs associated with its stock issue during May and June of 1995. Therefore, Staff believes that they have properly accounted for flotation costs of the company. It should also be noted that flotation costs should be accounted for, regardless of the method you use to determine a company's cost of equity capital. However, Ms. McShane only chose to make an adjustment for flotation cost to the CAPM.

Q. Could you please discuss Ms. McShane's Comparable Earnings analysis?

A. Yes. Ms McShane's Comparable Earnings analysis is based on what she calls "low risk" industrials. To summarize her analysis she looks at the earned returns of 35 low risk industrials over what she says is an "entire business cycle." I would like to address two points concerning her Comparable Earnings analysis. First, the companies are not comparable, and according to the Bluefield case a fair return is said to be a return achieved by other companies with "corresponding risks and uncertainties." Ms. McShane's made an adjustment to her resulting analysis of 16.1 to 16.6 percent of more than 300 basis points to account for the fact that ". . . the industrials are of somewhat higher risk than LDCs . . ." What this boils down to is the industrials that Ms. McShane uses do not have the same "corresponding risks and uncertainties" as do LDCs.

The second point I want to bring up is that she is measuring earned returns and not returns investors require. It is extremely likely that several of the companies in Ms. McShane's group of 35 low risk industrials earned a return in excess of their required return. In fact over the last 10 – 15 years the concept of economic value added (EVA) has become a very popular measuring stick to measure how effective companies are at increasing shareholder wealth. The concept of EVA is simple. First you determine what investors require as a return for investing in a company, and then you look at what the company actually earned. If the earned return is greater than the required return then the company had a positive EVA. If it is less than required the company had a negative

EVA. Whether these companies earned more than or less than their required return by investors is not the point. The points is that what Ms. McShane used as the basis for her analysis is not correct. She based her analysis of low risk industrials on actual earned returns, not the returns that were required by investors.

Q. Could you please discuss Mr. Olsen's analysis?

A. No. Mr. Olsen did not do an analysis. The essence of Mr. Olsen's testimony is a superficial look at the earned return of the Standard & Poor's 500 versus what he says gas utility stocks have earned. We have already discussed how earned returns differ from required returns and in this setting we are looking at required returns. Therefore, Mr. Olsen's testimony is irrelevant to this proceeding and should be ignored by the Commission.

Q. Could you please discuss Mr. Buck's Capital Structure analysis?

A. Yes. Mr. Buck has looked at the capital structure of Laclede at December 31, 1998, with adjustments based on debt and equity issuance that have been made in May and June of 1999. Staff believes that the adjustments he made to increase debt and equity balances based on the Company's issuances of debt and equity are correct and will be reflected in the Staff's true-up proceeding. However, the Staff does not agree with the Company's downward adjustment it made to its short-term debt balance. In negotiations with the Company, the Staff has agreed to use the Company's method for calculating the monthly balance of short-term debt. This adjustment had the effect of lowering the Staff's short-term debt balance from $83,871,924 to $79,231,000.

Short-term debt balances by their nature are extremely volatile from month to month. The manner that the Company has used to calculate its short-term debt balance is not reflective of either the past levels of short-term debt the Company has had, or the levels of short-term debt the company intends to use. Schedule 2 reflects the short-term debt balances of the Company over the last three years and it clearly shows that the average is trending upwards. Schedule 3 is the Company's pro forma cash flow statement for 1999, 2000 and 2001 which clearly shows that the company is increasing its use of short-term debt. Staff believes that $79,231,000 is the appropriate level to be included in the company's capital structure for short-term debt. Schedule 4 shows the Company's cost of capital with the revised level of short-term debt.

Public Counsel's Rate of Return for Laclede

Q. Please summarize Mr. Burdette's recommended return on common equity for Laclede.

A. On page two of Mr. Burdette's direct testimony, he states: "Laclede should be allowed an overall return of 8.34 percent on its net original–cost rate base." This includes a cost of common equity (ROE) recommendation of 9.70 percent. Mr. Burdette's recommended return on common equity of 9.70 percent is the high end of the range his analysis supports. He has arbitrarily chosen the high end of his range, which is 9.21 to 9.71 percent with a mid-point of 9.46 percent. Mr. Burdette's analysis that was done independently of my analysis supports my proposed range of return on common equity for Laclede of 9.00 to 10.00 percent. Ms. McShane's DCF analysis is 10.50 percent. When the DCF analyses of the three witnesses are put side by side you see the following:

Laclede	10.50%
Public Counsel	9.21% - 9.71%
Staff	9.00% - 10.00%

When you look at the Company's analysis it is 50 basis points above Staff's high end, but you will see that it is based on a group of sample LDCs that are more risky than Laclede. Laclede is less risky than Ms. McShane's sample LDCs as indicated by the average beta of the sample of 0.59 verses 0.55 for Laclede. When looking at the output of the DCF model done by all the witnesses to this case Staff's recommendation of 9.00 to 10.00 percent is reasonable considering the risks and uncertainties of Laclede Gas Company.

Q. Does this conclude your rebuttal testimony?

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the matter of Laclede Gas Company's tariff Sheets to Revise Natural Gas Rates	))	Case No. GR-99-315

AFFIDAVIT OF DAVID P. BROADWATER

STATE OF MISSOURI	)
	) ss
COUNTY OF COLE	)

David P. Broadwater, of lawful age, on his oath states: that he has participated in the preparation of the foregoing written rebuttal testimony in question and answer form, consisting of 8 pages and 4 schedules to be presented in the above case; that the answers in the foregoing written rebuttal testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

D. Broadwater

David P. Broadwater

Subscribed and sworn to before me this 2nd day of August 1999.

J Kay Niemeier

Notary Public

J KAY NIEMEIER
NOTARY PUBLIC STATE OF MISSOURI
COLE COUNTY
MY COMMISSION EXP. FEB. 26,2000

My Commission expires __________________________ .

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Pro Forma Pre-Tax Interest Coverage Ratios for Laclede Gas Company

	9.00%	9.50%	10.00%
1. Common Equity (Schedule 10)	$274,770,663	$274,770,663	$274,770,663
2. Earnings Allowed (ROE * [1])	$24,729,360	$26,103,213	$27,477,066
3. Preferred Dividends (Schedule 13)	$97,259	$97,259	$97,259
4. Net Income Available ([2] + [3])	$24,826,619	$26,200,472	$27,574,325
5. Tax Multiplier (1 / (1 - Tax Rate))	1.6296	1.6296	1.6296
6. Pre-Tax Earnings ([4] * [5])	$40,457,294	$42,696,116	$44,934,939
7. Annual Interest Costs [$13,783,997 + ($83,871,924 * 5.372%)]	$18,289,597	$18,289,597	$18,289,597
8. Avail. for Coverage ([6] + [7])	$58,746,891	$60,985,713	$63,224,536
9. **Pro Forma Pre-Tax Interest Coverage** ([8] / [7])	**3.21 x**	**3.33 x**	**3.46 x**

Utility Financial Ratio Benchmarks - Pretax Interest Coverage (x)

	AA	A
Standard & Poor's Corporation's Utilities Rating Service Financial Statistics September 30, 1998 Avg. Business Position (Mean)	4.12x	3.83x

NOTE: Item 7 = (Total from Column 3 on Schedule 11-1) + (Net Short-term debt from Schedule 12 * Average Interst Rate on ST Debt)

LACLEDE GAS COMPANY
CASE NO. GR-99-315

	Average Daily Short-Term Debt Balance	Construction Work In Progress	Net Short-Term Debt Balance	
Oct-95	$ 70,048	$ 4,222	$ 65,826	$ 65,826
Nov-95	$ 74,800	$ 4,240	$ 70,560	$ 70,560
Dec-95	$ 62,065	$ 3,770	$ 58,295	$ 58,295
Jan-96	$ 71,716	$ 2,828	$ 68,888	$ 68,888
Feb-96	$ 53,328	$ 3,035	$ 50,293	$ 50,293
Mar-96	$ 33,016	$ 3,319	$ 29,697	$ 29,697
Apr-96	$ 14,333	$ 4,026	$ 10,307	$ 10,307
May-96	$ 2,339	$ 4,563	$ (2,224)	$ -
Jun-96	$ 3,183	$ 4,470	$ (1,287)	$ -
Jul-96	$ 21,016	$ 4,405	$ 16,611	$ 16,611
Aug-96	$ 29,097	$ 3,370	$ 25,727	$ 25,727
Sep-96	$ 43,697	$ 2,768	$ 40,929	$ 40,929
Oct-96	$ 66,281	$ 3,698	$ 62,583	$ 62,583
Nov-96	$ 73,817	$ 3,581	$ 70,236	$ 70,236
Dec-96	$ 74,450	$ 4,047	$ 70,403	$ 70,403
Jan-97	$ 89,676	$ 4,090	$ 85,586	$ 85,586
Feb-97	$ 75,036	$ 3,820	$ 71,216	$ 71,216
Mar-97	$ 59,177	$ 3,650	$ 55,527	$ 55,527
Apr-97	$ 47,950	$ 4,076	$ 43,874	$ 43,874
May-97	$ 32,903	$ 4,065	$ 28,838	$ 28,838
Jun-97	$ 29,000	$ 5,473	$ 23,527	$ 23,527
Jul-97	$ 39,145	$ 5,845	$ 33,300	$ 33,300
Aug-97	$ 45,516	$ 6,460	$ 39,056	$ 39,056
Sep-97	$ 58,933	$ 4,895	$ 54,038	$ 54,038
Oct-97	$ 74,239	$ 6,590	$ 67,649	$ 67,649
Nov-97	$ 76,384	$ 6,339	$ 70,045	$ 70,045
Dec-97	$ 88,661	$ 7,365	$ 81,296	$ 81,296
Jan-98	$ 91,852	$ 7,266	$ 84,586	$ 84,586
Feb-98	$ 65,750	$ 7,197	$ 58,553	$ 58,553
Mar-98	$ 44,855	$ 7,337	$ 37,518	$ 37,518
Apr-98	$ 30,900	$ 10,581	$ 20,319	$ 20,319
May-98	$ 48,210	$ 8,482	$ 39,728	$ 39,728
Jun-98	$ 61,917	$ 8,074	$ 53,843	$ 53,843
Jul-98	$ 73,913	$ 9,872	$ 64,041	$ 64,041
Aug-98	$ 82,097	$ 11,076	$ 71,021	$ 71,021
Sep-98	$ 90,167	$ 10,529	$ 79,638	$ 79,638
Oct-98	$ 103,403	$ 11,790	$ 91,613	$ 91,613
Nov-98	$ 127,733	$ 11,020	$ 116,713	$ 116,713
Dec-98	$ 124,327	$ 11,341	$ 112,986	$ 112,986
Jan-99	$ 136,836	$ 12,131	$ 124,705	$ 124,705
Feb-99	$ 109,554	$ 12,601	$ 96,953	$ 96,953
Mar-99	$ 91,153	$ 11,947	$ 79,206	$ 79,206
	Average Oct 95 through Mar 99			$ 57,755
	Average Apr 97 through Mar 99			$ 65,544
	Average Apr 98 through Mar 99			$ 79,231

Laclede Gas Company
Response to Data Request No. 3811
Projected Cash Flow Analysis
Millions of Dollars

	1999	2000	2001
Operating Activities			
Net Income	27	39	41
Depreciation	22	25	26
Other	-11	-2	0
	38	62	67
Investing Activities			
Construction Expenditures	-44	-40	-41
Other	-6	-7	-7
	-50	-47	-48
Financing Activities			
Issuance of First Mortgage Bonds	25		
Issuance of Short-Term Debt	8	14	11
Redemption of Long Term Debt			
Redemption of Short-Term Debt	-21		
Issuance of Common Equity	24		
Dividends Paid	-24	-26	-26
	12	-12	-15
Net Increase (Decrease)	0	3	4
Cash at Beginning of Year	4	4	7
Cash at End of Year	4	7	11

Assumes rate relief as requested in Case No. GR-99-315.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Weighted Cost of Capital as of March 31, 1999
for Laclede Gas Company

Capital Component		Capital Dollars	Percentage of Capital	Embedded Cost	Weighted Cost of Capital Using Common Equity Return of: 9.00%	9.50%	10.00%
Common Stock Equity	$	274,770,663	51.52%	—	4.64%	4.89%	5.15%
Preferred Stock	$	1,959,500	0.37%	4.96%	0.02%	0.02%	0.02%
Long-Term Debt	$	177,421,759	33.26%	7.77%	2.58%	2.58%	2.58%
Short-Term Debt	$	79,231,000	14.85%	5.37%	0.80%	0.80%	0.80%
Total	$	533,382,922	100.00%		**8.04%**	**8.29%**	**8.55%**

Laclede's Embedded Cost of Short-Term Debt is the average Short-Term Debt Interest Rate Paid for the 12 month Period Ended March 31, 1999, and was taken from the Company's Response to Staff's Data Information Request No. 3803.