

Exhibit No.:	
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Witness:	Glenn W. Buck
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Sponsoring Party:	Laclede Gas Company
Case No.:	GR-99-315

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LACLEDE GAS COMPANY

GR-99-315

REBUTTAL TESTIMONY

OF

GLENN W. BUCK

Rebuttal Testimony of Glenn W. Buck

Table Of Contents

<u>Issue</u>	<u>Page</u>
General Information	1
Cash Working Capital - Revenue Lag	1
Capital Structure - True-Up	8

REBUTTAL TESTIMONY OF GLENN W. BUCK

1 Q. Please state your name and business address.

2 A. My name is Glenn W. Buck, and my business address is 720 Olive St., St. Louis,  
3 Missouri, 63101.

4 Q. What is your present position?

5 A. I am the Manager of Financial Services.

6 Q. Have you previously filed direct testimony in this proceeding?

7 A. Yes, I have.

8 Q. What is the purpose of your testimony?

9 A. The purpose of my testimony is to respond to direct testimony from the Missouri Public  
10 Service Commission Staff ("Staff") on the following issues:

- 11 1. The appropriate calculation of a revenue lag for use in determining the level of  
12 cash working capital for inclusion in the determination of rate base;
- 13 2. The appropriate level of short-term debt to include in the Company's capital  
14 structure.

15 Please note that on the capital structure issue, the Office of Public Counsel ("OPC") has  
16 taken a similar position as the Staff.

17 Cash Working Capital – Revenue Lag

18 Q. What is "cash working capital"?

19 A. Cash working capital ("CWC") is the average amount of capital that must be provided by  
20 investors in the Company for the payment of bills, payrolls, and other items before the  
21 time corresponding revenues are received from our customers. Cash working capital is

1 included in rate base in order to provide a return allowance for this investment  
2 requirement, which is just as essential to the operation of a utility as are the more tangible  
3 physical plant components of rate base.

4 Q. Please briefly explain the positions of the Company and Staff as they relate to Cash  
5 Working Capital.

6 A. In this proceeding, the Company and Staff have agreed to utilize the Staff's expense lags,  
7 which were in many cases substantially similar to the Company's calculated lags, and  
8 flow any normalized expense levels, either agreed to or adjudicated in this proceeding,  
9 through the CWC calculation with the following exception: the calculation will not  
10 include any expense level or lag attributed to what Staff has characterized as "Pension  
11 Fund Contributions". The only remaining CWC issue between the parties relates to the  
12 appropriate revenue lag to use in CWC determination.

13 Q. What methodology did each party use in determining the appropriate revenue lag?

14 A. The Company utilized an accounts receivable turnover analysis to determine the revenue  
15 lag for its sales customers. The Staff calculated its revenue lag based on a sample of  
16 Laclede's customers. The Company's resultant revenue lag, utilizing the accounts  
17 receivable turnover analysis, was 34.8 days, while the Staff's lag, based on the customer  
18 sample, was 25.4 days.

19 Q. Could you please describe the term "accounts receivable turnover analysis" and explain  
20 how the revenue lag was calculated by the Company?

21 A. An accounts receivable turnover analysis, as I use the term here, compares the average  
22 daily accounts receivable balance for all of our sales customers to the associated billed  
23 revenues for all of our sales customers to determine how many days those revenues remain

1 unpaid. For a more detailed explanation, please see my direct testimony beginning on  
2 page 6, line 12.

3 Q. How was the Staff's revenue lag calculated?

4 A. The Staff's lag was based on a sample of customers, first pulled and calculated in the  
5 Company's last rate proceeding, GR-98-374. In that proceeding, the Staff's calculation  
6 resulted in a 21.07 day revenue lag.

7 Q. Why is the Staff now supporting a 25.4 day lag while utilizing the same set of customers  
8 and sampling time-frames?

9 A. During the course of reviewing the Staff's workpapers in GR-98-374, the Company  
10 discovered that the Staff was not calculating these lags correctly. The Company then  
11 supplied the Staff with corrected calculations that resulted in the 25.4 day lag. Please  
12 note that the Company only reviewed and corrected the calculations, and **does not** agree  
13 with the Staff's sample or methodology.

14 Q. Is the Company disputing the randomness of the Staff's sample?

15 A. The Company does not dispute the fact that the Staff sample was based on a computer  
16 generated process that is designed to produce a random sample of numbers. However,  
17 because of subsequent decisions Staff made regarding various aspects of the sampling  
18 methodology, the Company nevertheless has serious concerns with the sample and the  
19 conclusions of the Staff study. These include the following items:

- 20 • No examination was done by Staff to determine the number of customers required to  
21 establish the statistical significance or degree of confidence for the sample
- 22 • The demographics of the resulting customer sample are not representative of  
23 Laclede's diverse customer base
- 24 • The Staff sampling assumptions, requiring each customer in the sample to have 12  
25 months of billed data, eliminated a significant portion of our relevant customer base  
26 as candidates for inclusion in the customer sample.

1 Q. How many customers were in the customer sample used by the Staff?

2 A. The Staff originally requested billing information associated with 300 customers for its  
3 sample, and requested that, should a customer with the requested account number not fit  
4 their criteria (that a customer must have 12 months of billing data in the sample period),  
5 the Company work backward from that point to find the next nearest valid customer. In  
6 six cases, the Company went back approximately 15 - 30 account numbers and could not  
7 find a valid account number, while in 19 others, the accounts were merchandise-only  
8 accounts, and, therefore, invalid for an analysis of utility payment habits. It is interesting  
9 to note that, while merchandise-only accounts make up less than 1/10 of one percent of  
10 our customer base, the Staff sample included approximately 6% merchandise-only  
11 accounts, a magnitude of error of nearly 10,000%.

12 Q. Did the Staff perform any analysis to check the sample for statistical significance or  
13 confidence levels?

14 A. No. In response to Company Data Request No. 47, the Staff stated, "Staff has not  
15 performed tests for statistical significance." With a customer base that, over the period in  
16 question, averaged 620,586 customers, I have some concerns that 275 accounts, or  
17 4/100<sup>th</sup> of 1 percent of our total average customer base during the period, may not be  
18 enough accounts to represent accurately Laclede's customer base, especially without the  
19 benefit of a check to determine the statistical validity of such a sample. Further, other  
20 Staff witnesses, in this and other proceedings, seem to share my concerns. While doing a  
21 check of billing calculations, Staff member Tom Imhoff (Direct Testimony, Page 8, lines  
22 1-3), increased his sample size from 97 (as recommended by Staff member James Gray)  
23 to 375 in order to determine greater assurance, an increase over the Staff's sample in this

1 case of 25%. In other instances, Mr. Imhoff had requested sample sizes of 1,465 and  
2 24,700, respectively.

3 Q. Does the Staff revenue lag sample accurately reflect Laclede's customer base?

4 A. No. My review of the Staff sample indicates that there are several distinct problems with  
5 the sample even assuming the sampling assumptions were correct: (1) whereas  
6 approximately 6% of our customer base during the sampling period were commercial  
7 and industrial customers, approximately 12% of the customers used in the Staff sample  
8 were commercial and industrial, a 100% magnitude of error; and (2) budget billing  
9 customers for the Staff sample numbered 79, according to the Staff, or 29.5% of the total  
10 customers used in the sample, while actual budget billing customers make up only 23.5%  
11 of the total population, a magnitude of error of 25%. Additionally, although the total  
12 number of Cold Weather Rule customers appears to be approximately correct, the mix of  
13 customers between those who receive heat grants versus those who do not appears to be  
14 inconsistent with the facts of our customer base. At this time, I have not done a thorough  
15 review of the locational demographics (i.e. St. Louis City and County versus St. Charles  
16 versus Midwest versus Missouri Natural customers) of the study, but they could  
17 introduce further bias. I suspect that each of these areas could exhibit different overall  
18 payment tendencies and usage patterns.

19 Q. Why is it important that the customer sample accurately represent the overall customer  
20 population?

21 A. These classes of customers have discrete payments patterns and usage histories, and  
22 unless a sample matches the population as a whole, skewed results are likely to occur.  
23 For example, commercial customers have generally larger bills and a shorter period of

1 time to pay these bills before late payment charges are incurred as compared to  
2 residential customers. Similarly, budget billing customers, who pay one set monthly  
3 amount, as periodically adjusted, have completely different payment lag histories than  
4 non-budget billing customers. Without matching our population demographics, a sample  
5 would be misrepresentative at best, and, in my view, practically worthless as a  
6 measurement tool.

7 Q. Are there any other issues with the Staff's sampling methodology that you would like to  
8 present to the Commission?

9 A. Yes. Perhaps the most grievous error involving the use of the Staff sample relates to its  
10 most basic sampling assumption – that for a customer to be eligible for the sample, the  
11 customer must have 12 months worth of billing data. This requirement alone eliminates a  
12 huge portion of our population from consideration for this sample, and has the effect of  
13 not including any inactive, final billed, or charge-off customers in the sample.

14 Q. Was this an intentional result of the Staff's sampling assumption?

15 A. Apparently, this was done intentionally. In response to Company Data Request No. 49,  
16 the Staff states, "As such, no inactive, final billed, or charge-off customers were included.  
17 Staff does not believe the inclusion of such customers is appropriate because inactive,  
18 final billed, and charge-off customers are not reflective of the ongoing payment habits of  
19 customers." This assumption has the effect of removing from consideration not only  
20 accounts which may one day become bad debts, but also customers who moved from  
21 location to location. It further ignores any customer who was removed from service due  
22 to non-payment and who later made arrangements to be reconnected. The Staff's  
23 requirement that each customer have twelve months of billing data has the effect of



1 excluding some of our worst pay practice customers (i.e. customers who pay very late or,  
2 in some instances, not at all).

3 Q. What percentage of the overall customer population was affected by this assumption?

4 A. In the period in question, there were 177,908 turn-ons and cut-offs performed at customer  
5 premises. Assuming no overlap between turn-ons and cut-offs, a full 29% of our  
6 population base was not even eligible for the Staff sample. Even assuming complete  
7 overlap, over 22% of our customer base is being completely ignored.

8 Q. Has the Company done any other studies on payment patterns for particular segments of  
9 its customer population?

10 A. In Case No. GR-98-374, the Company submitted a study to support a tariff change that  
11 would require new renters to place a deposit with Laclede, and a form of this tariff was  
12 approved in that case. The study showed that almost 80% of our bad debts were from  
13 customers who were renters rather than owners. This inherently more mobile customer  
14 base, with late or non-payment characteristics, is underrepresented in the Staff sample  
15 due to the 12 month billing assumption.

16 Q. Please summarize your concerns with the Staff's revenue lag calculation.

17 A. The Staff's sample suffers from three fatal flaws: (1) the sample has not been proven to  
18 be statistically sound; (2) the sample does not match our diverse customer base  
19 demographics; and, (3) the Staff's sampling assumption, requiring 12 months of billing  
20 data, excludes a large portion of our customer base, including many renters, who have  
21 demonstrated some of the worst payment habits, as recognized by this Commission,  
22 generated on our system.

Capital Structure – True-Up

Q. Please briefly explain the parties positions concerning capital structure.

A. The Company filed based on its pro-forma permanent capital structure period ended December 31, 1998 as adjusted for proposed long-term debt and common equity issuances expected to occur in the spring, and included the twelve months ended December average daily level of short-term debt offset by construction work in progress and adjusted for the pro-forma effect of the aforementioned proposed long-term debt and common equity issuances. Both the Staff and OPC filed based on the capital structure for the period ended March 31, 1999 (the update period) and included the 12 month March ended average level of short-term debt adjusted for construction work in progress. Neither Staff or OPC has adjusted for the aforementioned proposed issuances. After discussions between the parties, both Staff and OPC have agreed to make a further adjustment to reflect average daily balances in their calculations of the short-term debt balances.

Q. Has a true-up request been made in this proceeding?

A. Yes. The parties in this proceeding have jointly recommended that certain items in cost of service, including all elements of capital structure, be “true-up” through July 31, 1999.

Q. Do you anticipate that the parties will agree on how to “true-up” each of these capital structure items?

A. I believe that all parties have agreed to use the actual balances for Common Equity, Preferred Stock, and Long-Term Debt as of July 31, 1999. However, there apparently is an issue between the parties as to the appropriate level of short-term debt to be included.

1 Q. What level of short-term debt are you recommending in this proceeding?

2 A. I am recommending that the actual twelve month ended July 31, 1999 average daily  
3 balance of short-term debt, offset by the level of construction work in progress, be used  
4 as the starting point. This average balance then needs to be adjusted on a pro-forma basis  
5 for the full year effect of the approximate \$25 million common equity offering that  
6 occurred in May of 1999 and the \$25 million debt issuance that closed at the beginning of  
7 June, 1999. On a pro-forma basis, this average balance is estimated to be approximately  
8 \$40 million in short-term debt.

9 Q. Is it appropriate to include short-term debt in capital structure?

10 A. Although there is some Commission precedent in the past for excluding short-term debt  
11 in capital structure, the Company has opted to include short-term debt in our ratemaking  
12 capital structure because it supports the seasonal portion of our natural gas inventory  
13 balances as well as being used in paying day-to-day operating expense in advance of  
14 receipt of payments by our customers related to those expenses. Please see my  
15 discussion of this phenomenon earlier in my testimony on revenue lag for cash working  
16 capital.

17 Q. Why is it appropriate to adjust the short-term debt balances for the new permanent equity  
18 and long-term debt issuances?

19 A. As stated in my direct testimony on page 11, lines 9 – 10, short-term financing is used as  
20 a “bridge” to permanent financing. As has been consistent with past practice, that  
21 “bridge” has been crossed.

22 Q. Why did the Company feel the need to issue common equity and long-term debt to  
23 replace the short-term debt in its capital structure?

1 A. The Company did this for several reasons: (1) we issued new equity to keep our capital  
2 structure balanced and to help maintain our "AA-" credit rating with Standard and Poors  
3 and Moody's Investor Service; (2) long-term financing was available at historically  
4 favorable rates, allowing us to issue 30-year debt at an effective rate of 7.04%; (3) it is  
5 appropriate as well as being Company policy to fund long-term assets with permanent  
6 capital; and (4) enough permanent investment requirement was needed to market both  
7 issuances on a cost effective basis.

8 Q. Why does the Company issue permanent financings in such large increments?

9 A. Although \$25 million may seem large and, in fact, is quite large for a company of  
10 Laclede's size, it is difficult, in this era of multi-billion dollar deals, to draw a great deal  
11 of investment banker interest with issues of any smaller size. Additionally, marketing  
12 and issuance costs as a percentage of the total issuance decrease proportionately in  
13 relation to the relatively greater size of an issuance. It should be noted, however, that the  
14 Company does raise equity on an incremental basis through its Dividend Reinvestment  
15 Plan. Such additional investments, which come without many of the marketing costs,  
16 amount to approximately \$4 million per year.

17 Q. Were each of these issuances, both equity and long-term debt, used to repay short-term  
18 debt?

19 A. Yes.

20 Q. How were these permanent financings reflected in filings with the Securities and  
21 Exchange Commission ("SEC") and marketed to investors?

22 A. Attached as Schedule 1, pages 1 and 2, to this testimony, are the appropriate pages from  
23 the respective prospectus supplements for both our recent common equity offering and

1 the debt offering. As is clearly demonstrated by these documents, which are also on file  
2 with the SEC, the issues were marketed and proceeds were used to pay down short-term  
3 debt.

4 Q. What level of short-term debt, on a percentage basis, was included in both the Staff and  
5 OPC direct filings?

6 A. The Staff filing included approximately 15.59% short-term debt, while the OPC included  
7 an approximate 15.88% layer.

8 Q. Do you disagree with the inclusion of such a high level of non-permanent debt in the  
9 Company's overall ratemaking capital structure?

10 A. Yes. In addition, as OPC witness Burdette has testified, Standard and Poors, which  
11 currently rates Laclede's bonds as "AA-", states, "As a rule of thumb, a level of short-  
12 term debt that exceeds 10% of total capital is cause for concern [S&P Corporate Ratings  
13 Criteria, 1996]" (Direct Testimony of Mark Burdette, Page 5, Lines 28 – 30).

14 Q. Is the estimated short-term debt amount, as updated, supportive of the seasonal  
15 fluctuations in natural gas storage inventory balances and cash working capital included  
16 in the Company's direct filing?

17 A. Yes. In fact, the seasonal portion of the gas storage inventory balances included in the  
18 Company's direct filing is substantially the same as the estimated \$40 million balance  
19 included in the Company's July 31, 1999 pro-forma short-term debt estimate.

20 Q. Do you have any other remarks concerning the level of short-term debt included in  
21 capital structure?

22 A. Yes. The amount of short-term debt, based on the pro-forma 12 month average balance  
23 at July 31, 1999, is based on actual gas storage inventory balances. In its direct filing, the

1 Staff supported a pro-forma average level of natural gas inventories based on a 5-year  
2 average of storage inventory levels that is below the level actually supported by the  
3 Company's short-term debt during the updated test period. The Company has accepted  
4 this amount, for ratemaking purposes, with minor adjustments, as settled between the  
5 parties, to the lower storage inventory levels. Given this fact, it is only appropriate, on a  
6 going forward basis, to recognize that the Company will not require as high a level of  
7 short-term debt in the future. It is, therefore, appropriate to adjust the short-term debt  
8 levels downward by the dollar difference between the actual storage inventory balances  
9 and the pro-forma balances agreed to by the Company and included in the Staff's current  
10 EMS run.

11 Q. Why are you associating this storage balance adjustment with an adjustment to the short-  
12 term debt level in this proceeding?

13 A. Staff witness Broadwater stated in his direct testimony, "In this specific case, the Staff's  
14 capital structure includes short-term debt because these funds are supporting certain rate  
15 base items. The rate base items supported by short-term debt include natural gas and  
16 propane inventories and cash working capital." (Page 22, Lines 7 – 10). Please note that  
17 the Company does not agree with Mr. Broadwater's assertion that the total balance of  
18 these inventories is supported, nor should they be supported, by short-term debt. Rather,  
19 only the seasonal portion of such balances are appropriately supported by short-term  
20 debt. There is a certain level of propane inventory that generally does not seasonally  
21 liquidate but instead is used for extreme weather conditions, and, thus, is more  
22 appropriately financed with permanent capital. Additionally, the balances of natural gas  
23 storage inventory include a certain "base" level of gas that is not seasonally liquidated.

1 Q. Please summarize your position on Capital Structure.

2 A. It is appropriate to include the actual capital structure as of July 31, 1999 in determining  
3 going-forward rates. This level of capital structure includes the 12 months ended July,  
4 1999 level of short-term debt as adjusted for the pro-forma full year effect of the common  
5 equity and long-term debt issuances that occurred in May and June of 1999, respectively.

6 Q. Does this complete your testimony?

7 A. Yes.

### Use of Proceeds

The net proceeds from the sale of the shares, excluding the over-allotment option, will be approximately \$21 million. We will use the net proceeds to repay short-term debt.

At March 31, 1999, we had outstanding short-term debt of approximately \$86 million at an average interest rate of 4.926%. During the past year, we used the proceeds of short-term debt to:

- redeem \$25 million of 9½% first mortgage bonds
- pay gas supply costs and
- pay capital expenditures for assets acquired in the ordinary course of business, including construction and office equipment

### Laclede Gas Company

#### General

We are a public utility that distributes and transports natural gas. We are subject to the jurisdiction of the Missouri Public Service Commission and serve the following Missouri areas:

- City of St. Louis
- St. Louis County
- City of St. Charles and
- parts of the following counties:
  - St. Charles
  - Franklin
  - Jefferson
  - St. Francois
  - Ste. Genevieve
  - Iron
  - Madison and
  - Butler

In addition, we operate underground natural gas storage fields and transport and store liquid propane. We have also invested in other minor, non-utility businesses.

Generally, we sell gas for househeating, certain other household uses, and commercial and industrial space heating. Our gas prices are generally lower than those charged for competitive fuels and other energy forms. While coal is competitive as a fuel source for very large boiler plant loads, environmental concerns have restrained any significant market inroads. Oil and propane can be used to fuel boiler loads and certain direct-fired process applications, but these fuels vary widely in price throughout the year, thus limiting the competitiveness of these fuels. In certain cases, steam has been competitive with gas for downtown area heating users. In the past five years, we have made a net conversion of 27 steam customers to natural gas service.



community that it is contacting (and will continue to contact) third-party vendors from whom DTC acquires services to: (1) impress upon them the importance of those services being Year 2000 compliant; and (2) determine the extent of their efforts for Year 2000 remediation (and, as appropriate, testing) of their services. In addition, DTC is in the process of developing contingency plans as it deems appropriate.

According to DTC, the foregoing information with respect to Year 2000 has been provided to the financial community for informational purposes only and is not intended to serve as a representation, warranty or contract modification of any kind.

The information in this section concerning DTC and DTC's book-entry only system has been obtained from sources that we believe to be reliable, including DTC, but we take no responsibility for the accuracy of any of this information.

#### Use of Proceeds

We will use the net proceeds from the sale of the bonds to repay short-term debt.

At March 31, 1999, we had outstanding short-term debt of approximately \$86.0 million at an average annual interest rate of 4.926%. During the past year, we used the proceeds of short-term debt to:

- redeem \$25 million of our 9% first mortgage bonds due May 15, 2013
- pay gas supply costs and
- pay capital expenditures for assets acquired in the ordinary course of business, including construction and office equipment.

#### Ratios of Earnings to Fixed Charges

Our ratio of earnings to fixed charges for each of the last five fiscal years ended September 30, 1998 was as follows:

1994:	3.1
1995:	2.6
1996:	3.8
1997:	3.6
1998:	2.9

Our ratio of earnings to fixed charges for the twelve months ended March 31, 1999 was 2.9. In computing these ratios, "earnings" consist of income before income taxes and fixed charges. "Fixed charges" consist of all interest expense and the portion of rentals representing interest. We currently estimate the portion of rentals representing interest to be one-third.

#### Underwriters

We will provide information about the underwriters and the terms for the distribution of the bonds in a subsequent prospectus supplement. This subsequent prospectus supplement will be dated on or about the date of bidding and will include the names of underwriters, any applicable commissions or discounts and the net proceeds to us from the sale of the bonds.

#### Legal Matters

Opinions as to the legality of the bonds will be delivered by Mary C. Kullman, our Secretary and Associate Counsel, and by Winthrop, Stimson, Putnam & Roberts, New York, New York, counsel for the underwriters.

#### Experts

The financial statements and the related financial statement schedule incorporated in the accompanying prospectus by reference from our Annual Report on Form 10-K for the year ended September 30, 1998 have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report, which is incorporated herein by reference and has been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's     )  
Tariff to Revise Natural Gas Rate Schedules.)

Case No. GR-99-315

AFFIDAVIT

STATE OF MISSOURI     )  
                                      )  
CITY OF ST. LOUIS     )     SS.

Glenn W. Buck, of lawful age, being first duly sworn, deposes and states:

1. My name is Glenn W. Buck. My business address is 720 Olive Street, St. Louis, Missouri 63101; and I am Manager of Financial Services for Laclede Gas Company.
2. Attached hereto and made part hereof for all purposes is my rebuttal testimony, consisting of pages 1 to 13, inclusive; and Schedule 1.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded and the information contained in the attached schedules are true and correct to the best of my knowledge and belief.



Glenn W. Buck

Subscribed and sworn to before me this 4<sup>th</sup> day of August, 1999.

PATRICIA P. HICKS  
Notary Public — Notary Seal  
STATE OF MISSOURI  
City of St. Louis  
My Commission Expires: June 27, 2002

