

Exhibit No.:  
Issue: Cost-of-Service and Rate  
Design  
Witness: Daniel I. Beck  
Sponsoring Party: MO PSC Staff  
Type of Exhibit: Direct Testimony  
Case No.: GR-99-315

**MISSOURI PUBLIC SERVICE COMMISSION**  
**UTILITY OPERATIONS DIVISION**

**DIRECT TESTIMONY**

**OF**

**DANIEL I. BECK**

**FILED**

**JUL 6 1999**

Missouri Public  
Service Commission

**LACLEDE GAS COMPANY**

**CASE NO. GR-99-315**

Jefferson City, Missouri  
July 1999

**DIRECT TESTIMONY**  
**OF**  
**DANIEL I. BECK**  
**LACLEDE GAS COMPANY**  
**CASE NO. GR-99-315**

Q. Please state your name and business address.

A. My name is Daniel I. Beck and my business address is P. O. Box 360, Jefferson City, Missouri 65102.

Q. Are you the same Daniel I. Beck who has previously filed testimony in this case?

A. Yes, I am.

Q. What is the nature of your testimony as it relates to the rate increase being proposed by Laclede Gas Company (Laclede or Company) in Case No. GR-99-315?

A. I will present testimony in regards to Cost-of-Service (C-O-S) and rate design.

**Cost-of-Service**

Q. Did you develop a C-O-S study in Case No. GR-99-315?

A. Yes. I updated the C-O-S study filed by Staff in Case No. GR-98-374 which was Laclede's previous rate case.

Q. What is the purpose of a C-O-S study?

A. A C-O-S study indicates the revenue responsibilities of the various C-O-S classes and the related customer charges.

Q. What C-O-S classes are used in Staff's C-O-S study?

1           A. Staff's C-O-S includes eight (8) classes. These classes are the Residential, Small  
2 General Service, Liquid Propane, Large Volume, Interruptible, Firm Transportation, Basic  
3 Transportation, and Unmetered Gas Light Classes.

4           Q. Please describe how Staff's C-O-S study in Case No. GR-99-315 was updated.

5           A. First, all costs were adjusted to reflect the values in Staff Accounting Schedules  
6 which were filed in this case on June 28, 1999. Next, all customer numbers, sales, and peak  
7 demands were modified to reflect the values provided by Staff.

8           Q. Did the costs change significantly when compared to the previous case?

9           A. No, there was not a significant change in rate base nor expenses. Almost every  
10 cost component was updated to reflect the current Accounting Schedules.

11          Q. Which cost components are not based upon the current Accounting Schedules?

12          A. I did not include the "Estimated Change for True-up" which is on line 11 of  
13 Accounting Schedule 1. If I were to include this estimate, I would allocate it based on C-O-S  
14 revenues and therefore it would not affect the results of the C-O-S. As this estimate is  
15 quantified, I would propose to update the C-O-S study to reflect this change. In addition, I  
16 developed class revenue estimates (current margin revenues) that approximate the revenue  
17 contribution of the classes. These class revenue estimates are not as precise in total as the  
18 Staff's Total Operating Revenues (Accounting Schedule 9, Line 8) which include gross  
19 receipts tax revenues.

20          Q. Were there changes in customer numbers, sales, and peak demands?

21          A. Yes, but considering that there was approximately one year between these two  
22 cases, the changes are relatively small. Almost every allocator is developed using one or

1 more of these values. However, all of these values, which are used to develop allocators,  
2 were updated to reflect the test year ending December 31, 1998.

3 Q. Could you define an allocator?

4 A. An allocator is the set of numbers used to assign the Company's various cost  
5 components to each C-O-S class. The analyst attempts to choose allocators that are related to  
6 each of the various accounts. The results of Staff's C-O-S study are shown on Schedule 1.

7 **Rate Design**

8 Q. What do you propose regarding revenue shifts between classes?

9 A. After reviewing the results of Staff's C-O-S study, I conclude that most of the  
10 classes are at or near their class revenue responsibility. However, two classes, the Large  
11 Volume and Interruptible Classes, are contributing significantly more than their class revenue  
12 responsibility. (Staff's study also shows that the unmetered gas light class is contributing  
13 significantly more than their class revenue responsibility but this class is extremely small and  
14 very sensitive to the assignment of allocators.) If, as Staff's Accounting Schedules at the  
15 midpoint would indicate, a rate decrease is ordered in this case, I recommend that a portion  
16 of that reduction be used to reduce the Large Volume and Interruptible rates. If on the other  
17 hand, a rate increase is ordered in this case, a portion of that increase should be deflected  
18 from the Large Volume and Interruptible Classes.

19 Q. What recommendations do you have regarding the customer charges?

20 A. Staff's C-O-S study indicates that most classes currently have customer charges  
21 that are above the calculated customer charge, that is the current customer charge is higher  
22 than the study would indicate is needed. However, the current customer charge for the Small

Direct Testimony of  
Daniel I. Beck

1 General Service (SGS) Class is significantly below the study indicated level. The Company  
2 proposed to increase the SGS customer charge from \$13.30 to \$13.80. If an increase is  
3 granted in this case, I recommend that the SGS Classes' customer charge be moved to the  
4 Company's proposed customer charge of \$13.80. This would result in an increase of \$235  
5 thousand dollars in revenue.

6 Q. The current tariffs include the base cost of gas in the commodity portion of the  
7 costs. Do you recommend continuing this practice?

8 A. No. Laclede is the only gas company in the State of Missouri that includes the  
9 base gas costs in the commodity rate. Staff recommends that the commodity portion of rates  
10 not include the base cost of gas. Instead, the cost of gas should be included in the Purchased  
11 Gas Adjustment Clause of Laclede's tariffs.

12 Q. Did Staff use the same billing units as the Company?

13 A. No. Staff developed normalized billing units that correspond to the Commission  
14 ordered test year while the Company used actual billing units from the period ending  
15 September 1998.

16 Q. If one were to assume that Residential revenues were to be reduced by \$100,000  
17 and that the reduction was to be reflected in the Residential commodity rates, would Staff  
18 and the Company's billing units result in the same commodity charges?

19 A. No. Both Staff and the Company agree that a positive weather adjustment should  
20 be made to the actual weather. The differences in weather and the test period will result in  
21 two different rates even though the revenue increase is supposed to be the same (\$100,000 in  
22 this example). I propose that all parties work toward developing a single set of billing units

Direct Testimony of  
Daniel I. Beck

1 | for the test year so that any Commission ordered change in revenue can be implemented.

2 | Q. Does this conclude your testimony?

3 | A. Yes. However, as my Direct Testimony on Large Customer Revenue  
4 | Adjustments and Peak Demands indicated, revisions in the weather calculations will affect  
5 | revenue requirement and Cost-of-Service calculations.

**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 OF DANIEL I. BECK**

STATE OF MISSOURI     )  
                                   )     ss.  
COUNTY OF COLE     )

Daniel I. Beck, is of lawful age, on his oath states: that he has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of 5 pages to be presented in the above case; that the answers in the foregoing Direct 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.

Daniel I. Beck  
DANIEL I. BECK

Subscribed and sworn to before me this 6th day of July 1999.

Sharon S. Wiles  
SHARON S. WILES  
NOTARY PUBLIC STATE OF MISSOURI  
COLE COUNTY  
MY COMMISSION EXP. AUG. 23, 2002

My Commission Expires: \_\_\_\_\_

LACLEDE GAS COMPANY  
CASE NO. GR-99-315  
CLASS COST-OF-SERVICE SUMMARY  
TEST YEAR ENDED DECEMBER 31, 1998

	TOTAL	RESIDENTIAL	SMALL GENERAL SERVICE	LIQUID PROPANE	LARGE VOLUME	INTERRUPT	FIRM TRANSPORT	BASIC TRANSPORT	UNMETERED GAS LIGHTS
RATE BASE	\$512,139,000	\$390,692,792	\$88,205,904	\$30,111	\$7,258,692	\$855,351	\$9,679,697	\$15,389,534	\$26,919
REQUESTED RETURN	8.2700%	8.2700%	8.2700%	8.2700%	8.2700%	8.2700%	8.2700%	8.2700%	8.2700%
RETURN ON RATE BASE	\$42,353,895	\$32,310,294	\$7,294,628	\$2,490	\$600,294	\$70,738	\$800,511	\$1,272,714	\$2,226
O & M EXPENSES	\$103,634,000	\$83,610,680	\$14,765,815	\$30,310	\$1,145,619	\$145,427	\$1,505,241	\$2,427,076	\$3,833
DEPRECIATION EXPENSE	\$21,280,000	\$16,755,214	\$3,290,592	\$6,364	\$248,454	\$34,241	\$360,827	\$583,107	\$1,201
AMORTIZATION EXPENSE	\$1,018,000	\$804,099	\$156,717	\$232	\$12,331	\$1,545	\$16,524	\$26,508	\$46
EXPLORATION/DEVELOPMENT	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
LACLEDE PIPELINE/OTHER	(\$415,000)	(\$273,627)	(\$93,968)	(\$22)	(\$9,626)	(\$1,391)	(\$14,150)	(\$22,198)	(\$17)
TAXES OTHER THAN INCOME	\$17,205,000	\$13,421,385	\$2,779,974	\$5,468	\$211,160	\$27,825	\$291,690	\$466,635	\$863
INCOME TAXES	\$16,293,000	\$12,429,355	\$2,806,150	\$958	\$230,925	\$27,212	\$307,946	\$489,597	\$856
TOTAL EXPENSES	\$159,015,000	\$126,747,106	\$23,705,280	\$43,309	\$1,838,863	\$234,859	\$2,468,078	\$3,970,724	\$6,782
TOTAL C-O-S	\$201,368,895	\$159,057,399	\$30,999,908	\$45,799	\$2,439,157	\$305,597	\$3,268,589	\$5,243,439	\$9,008
OTHER REVENUES	\$2,074,000	\$1,638,213	\$319,284	\$472	\$25,122	\$3,147	\$33,665	\$54,005	\$93
REQUIRED MARGIN REVENUE	\$199,294,895	\$157,419,187	\$30,680,624	\$45,327	\$2,414,035	\$302,449	\$3,234,924	\$5,189,434	\$8,915
CURRENT MARGIN REVENUES	\$204,904,735	\$159,375,198	\$32,847,457	\$48,467	\$2,994,218	\$469,203	\$3,548,148	\$5,597,047	\$24,996
AVERAGE GAS REVENUES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ZERO REVENUE INCREASE PLUG	\$5,609,840	\$4,431,104	\$863,612	\$1,276	\$67,951	\$8,513	\$91,058	\$146,074	\$251
C-O-S MARGIN REVENUES @ 0%	\$204,904,735	\$161,850,291	\$31,544,236	\$46,603	\$2,481,986	\$310,963	\$3,325,982	\$5,335,508	\$9,166
AVERAGE GAS COSTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
REVENUE INCREASE AT	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
REVENUE ABOVE (BELOW) COS	\$0	(\$2,475,093)	\$1,303,221	\$1,864	\$512,232	\$158,240	\$222,166	\$261,539	\$15,830
% INCREASE WITHOUT GAS COSTS	0.00%	1.55%	-3.97%	-3.85%	-17.11%	-33.73%	-6.26%	-4.67%	-63.33%