Exhibit No.: Issue(s):

Case No.:

Sponsoring Party:

• •

Laclede's Demand Charge Rate Design Proposal Public Counsel GR-99-315

## **REBUTTAL TESTIMONY**

OF

## **RYAN KIND**

FILED AUG 5 1999 Service Commission

Submitted on Behalf of the Office of the Public Counsel

## LACLEDE GAS COMPANY

Case No. GR-99-315

August 5, 1999

···-··

- -----



## 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 RYAN KIND

STATE OF MISSOURI ) ) ss COUNTY OF COLE )

Ryan Kind, of lawful age and being first duly sworn, deposes and states:

1. My name is Ryan Kind. I am a Chief Utility Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony consisting of pages 1 through 10.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Kan Ke

Subscribed and sworn to me this 5th day of August, 1999.

S. Koestin

Notary Public

My commission expires August 20, 2001.

1		REBUTTAL TESTIMONY		
2	OF			
3	RYAN KIND			
ļ				
4	LACLEDE GAS COMPANY			
5	CASE NO. GR-99-315			
6	Q.	PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.		
7		Burn Kind Chief Utility Economist Office of the Public Councel P.O. Poy 7800		
7 8	А.	Ryan Kind, Chief Utility Economist, Office of the Public Counsel, P.O. Box 7800, Jefferson City, Missouri 65102.		
0		Jenerson City, Missouri 03102.		
9	Q.	ARE YOU THE SAME RYAN KIND THAT SUBMITTED DIRECT TESTIMONY IN THIS CASE?		
10	А.	Yes, I am.		
11	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?		
12	А.	I will respond to the proposal that Laclede Gas Company (Laclede or the Company)		
13		made in its direct testimony for a demand charge for all customers in the General Service		
14		Class, including residential customers.		
15	Q.	WHY IS LACLEDE PROPOSING THAT DEMAND CHARGES BE USED TO BILL RESIDENTIAL		
16		CUSTOMERS?		
17	А.	This proposal appears to be part of an ongoing initiative to reduce the amount of revenue		
18		and earnings volatility that Laclede experiences as weather fluctuates from month to		

· · · ·-

. . . .

month and from year to year. Laclede's initial actions to address this volatility was through its efforts to increase its residential customer charge. Laclede has been somewhat successful in these efforts since it now has the highest customer charge in the state of any energy utility and one of the highest in the country.

In its last rate case, GR-98-374, Laclede proposed a new block rate structure for its commodity charge that would have significantly reduced the impact that weather fluctuations have on its earnings. This would have been accomplished by having a very high initial block rate (where most of the usage occurs regardless of weather fluctuations) and a very low tail block rate. It should be noted that Laclede already has a declining block rate structure that helps reduce the volatility of its revenue stream more that the commodity rates of other gas utilities in Missouri do. The settlement of Laclede's last rate case provided for no increase in its revenue requirement and no change in the design of its rates for general service customers.

# Q. DID LACLEDE'S TESTIMONY IN GR-98-374 ADDRESS THE IMPACT OF THE COMPANY'S PROPOSAL ON EARNINGS VOLITILITY?

A. Yes, Laclede's President addressed this subject on page 12 of his direct testimony in that case where he stated that:

...such a rate structure would reduce those variations in the Company's earning which arise simply because actual usage differs from the amount utilized in developing the rates.

Q. DOES LACLEDE'S TESTIMONY IN THIS CASE ADDRESS THE IMPACT THAT THE COMPANY'S DEMAND CHARGE PROPOSAL FOR GENERAL SERVICE CUSTOMERS WILL HAVE ON EARNINGS VOLITILITY?

1

27

28

29

Yes. Laclede witness Kenneth Neises addressed this subject on at line 1 on page 4 of his A. 2 testimony where he stated that: 3 Third, the use of a demand charge will better enable both the commission and the Company to ensure the mitigation of any over or under recovery 4 5 of fixed-demand costs resulting from weather related factors that are 6 beyond the Company's control. This should reduce both bill volatility 7 for the customer as well as earnings volatility for the Company. 8 (emphasis added) Q. YOU MENTIONED THAT LACLEDE'S DEMAND CHARGE PROPOSAL APPEARS TO BE 9 10 PART OF A ONGOING INITIATIVE THAT THE COMPANY HAS BEEN PURSINING. HAVE YOU SEEN ANY DOCUMENTS WHERE LACLEDE HAS EXPRESSED ITS INTENT 11 12 **REGARDING THIS INITIATIVE?** Yes, I have seen one document created for external distribution that spells out Laclede's 13 Α. intent regarding this initiative and another document that was produced solely for internal 14 distribution. The document produced for external distribution is Laclede's most recent 15 Annual Report to Shareholders. On page two of this 1998 Annual Report, Laclede states 16 17 that: To succeed, we have fundamental challenges to address: 18 19 Our revenues remain highly weather sensitive. We intend to seek regulatory approval of certain rate design changes that would lessen the 20 21 sensitivity of our revenues to year-to-year fluctuations in the weather. While the Missouri Public Service Commission and its Staff have 22 23 rejected concepts of full weather normalization, we are hopeful that significant mitigation of this problem can be attained. 24 25 The other Laclede document that addresses this proposal is a document that Laclede appears to have produced prior to filing its current rate case in order to outline the rate 26

document, which was dated January 12, 1999 and titled Rate Design Proposal contained

design objectives and proposals that it would be pursuing in this rate case. This

the following statements:

3 -

## Rebuttal Testimony of

12

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19 20

21

22

23

24

25

26

27

28

29

30

Ryan Kind The major rate design objective of the new rate is to reduce the Company's exposure to earnings losses due to warmer than normal weather without entirely eliminating the potential for earnings increases should the Company experience colder than normal weather. We recommend that we file two alternative rate design proposals in an effort to meet this objective: The first alternative is the revised block rate design proposal we filed in the last case which was difficult to defend on a class cost of service basis. The second alternative is the creation of a demand charge for General Service customers. We estimate that if weather is 10% warmer than normal, total General Service non-gas revenue would increase by \$4 million per year. Even though this represents a significant change to our existing rate design, a similar design has been implemented at Atlanta Gas Light. It appears that Atlanta has come under attack recently because of this type of design but our proposal is distinguishable from Atlanta, in at lease one respect, because Atlanta is recovering none of its costs on a commodity charge basis whereas, as noted above, we would still recover \$30 million on such a basis. Q. DOES LACLEDE'S TESTIMONY IN THIS CASE ADDRESS THE IMPACT THAT THE LESSONED EARNINGS VOLITILITY THAT WOULD RESULT FROM ITS DEMAND CHARGE **PROPOSAL WOULD HAVE ON ITS REQUIRED RATE OF RETURN?** Α. No. However, OPC witness Mark Burdette addresses this topic in his rebuttal testimony in this case. Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF THE DEMAND CHARGE PROPOSAL MADE BY LACLEDE. Α. Currently, the revenue requirement for residential customers is collected from these same customers through the combination of a customer charge and commodity charges.

· 4 ·

Laclede's rates are designed to collect nearly half of its revenue requirement from the customer charge. The remainder of the revenue requirement is collected through commodity charges. With its current rate design, about half of Laclede's margin revenues are to be collected through a fixed monthly charge (the \$12.00 customer charge) and the other half are to be collected through a commodity charge. The revenues that Laclede collects through the commodity charge vary depending on seasonal usage patterns, weather fluctuations and other less significant factors.

Under Laclede's new demand charge proposal, most of the revenue that is currently collected through commodity charges would be collected through a new demand charge. When the new fixed monthly charge for what Laclede characterizes as "demand-related costs" is added to the \$12 customer charge that residential customers currently pay, Laclede's residential customers will be paying fixed monthly charges averaging approximately \$20 per month and the non-gas cost portion of their bill will remain fairly constant from month to month regardless of their actual usage.

Q. LACLEDE WITNESS KENNETH NEISES STATES AT LINE 16 ON PAGE 5 OF HIS TESTIMONY THAT THE PROPOSED DEMAND CHARGE "WOULD ACTUALLY BILL EACH CUSTOMER FOR HIS OR HER SHARE OF THE COMPANY'S PEAK DEMAND RELATED COSTS BASED ON THE CUSTOMER'S ACTUAL CONTRIBUTION TO THOSE PEAK CONDITIONS." DO YOU AGREE WITH THIS STATEMENT?

A. No. This statement would only be correct if Laclede had the capability of measuring the peak usage of its general service customers. Laclede would need to have a remote metering system installed that had the ability to measure peak demands in order for Mr. Neises' statement to be correct. What Laclede would actually do under its proposal is to bill each customer for his or her share of the Company's peak demand related costs based on the Company's estimate of the customer's contribution to those peak conditions.

- 5 -

۰.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

## Q. HOW DOES LACLEDE INTEND TO ESTIMATE THE CONTRIBUTION THAT EACH CUSTOMER MAKES TO THE COMPANY'S OVERALL PEAK DEMANDS?

A. The methodology for accomplishing this is described in the testimony of Laclede witness Michael Cline on pages 14 through 19 of that testimony. The basic methodology is to first isolate the weather normalized demand related costs for each season. This is accomplished by assuming that the current commodity charge is already accurately collecting the appropriate amount of demand-related costs in each season. Next, Laclede proposes to estimate each customer's peak demands by finding the month where the customer's usage was the highest and then dividing the total number of therms consumed in that month by the number of days in that billing period.

## Q. ARE THERE SOME CIRCUMSTANCES UNDER WHICH A CUSTOMER'S CONTRIBUTION TO PEAK DEMAND WILL NOT BE ACCURATELY REFLECTED BY THE DEMAND THERM ESTIMATE THAT RESULTS FROM LACLEDE'S PROPOSED METHODOLOGY?

A. Certainly. Laclede's method assumes that all general service customers will have the same load factor in the month when their usage is highest. However, the load factor of individual customers will vary depending on many factors including: the efficiency of their spacing heating equipment, the amount of gas usage that customers have for non-space heating uses relative to space heating uses and the load factor of the gas that is consumed for non-spaceheating uses, the number of occupants in a household and the amount of time spent at home during the different parts of the day by each occupant, whether gas or electricity is the primary heat source, and whether the customer uses a set-back (programmable) thermostat.

This proposal appears to affect the competitive balance between gas and electricity for space heating loads. Those customers who elect to use electricity for space heating

- 6

would generally have good load factors for gas, even in peak heating months, but their demand therms estimates would assume that they have the same monthly load factor as those customers who use gas for space heating purposes. Therefore, it appears that electric space heating customers would end up overpaying demand charges since the Laclede' estimates would not take into account the higher load factor associated with non-spaceheating loads (e.g. water heating). Of course, this particular detriment associated with Laclede's proposal would be averted if Laclede had a remote metering system in place that could be used as the basis for calculating the **actual** demands of Laclede's customers.



. .

1

2

3

4

5

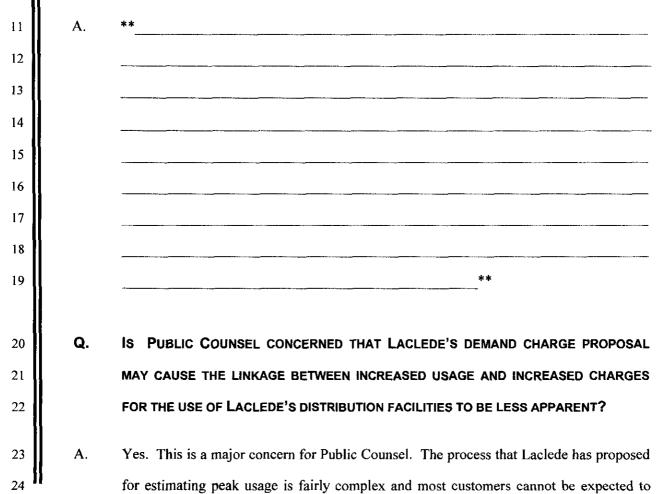
6

7

8

9

### Q. IS LACLEDE CONSIDERING DEPLOYING A REMOTE METERING SYSTEM?



- 7 -

comprehend it. Today, it is fairly simple for Laclede's residential customers to see the impact that increased usage has on their monthly bill. OPC is concerned that this price signal will be diluted by Laclede's proposal.

4

5

6

7

8

9

10

11

12

Q.

1

2

3

۰.

## DOES PUBLIC COUNSEL BELIEVE THAT EASE OF CUSTOMER COMPREHENSION ABOUT HOW MONTHLY BILLS ARE CALCULATED IS AN IMPORTANT RATE DESIGN GOAL?

A. Yes. Laclede's proposal will interfere with the achievement of this goal since the mechanics of calculating bills for residential customers will be much less transparent once a demand charge is included. This transparency would be mitigated to some extent if the customer knew that she had a gas meter that was measuring their peak usage and that by minimizing the amount of gas used on peak days, a customer could have a positive impact on demand charges. Unfortunately, this would not occur unless Laclede installed a remote metering system with the capability of measuring daily peak demands.

Q. YOU HAVE CITED PROBLEMS WITH THE MANNER IN WHICH DEMAND CHARGES ARE 13 ESTIMATED BY LACLEDE, CUSTOMER BILL COMPRHENSIBILITY PROBLEMS, 14 15 DETRIMENTS ASSOCIATED WITH A DILUTED PRICE SIGNAL ASSOCIATED WITH INCREASED ENERGY USAGE, AND THE NEED TO TAKE REDUCTIONS IN EARNINGS 16 VOLITILITY INTO ACCOUNT WHEN DETERMINING THE APPROPRIATE RATE OF RETURN 17 18 FOR LACLEDE. DO YOU HAVE ANY ADDITIONAL PROBLEMS WITH THE COMPANY'S DEMAND CHARGE PROPOSAL THAT YOU HAVE NOT YET ADDRESSED IN THIS 19 **TESTIMONY?** 20

A. Yes. Public Counsel believes that even if it were appropriate to collect demand-related costs through a demand charge, Laclede's proposal should be rejected because it has improperly classified many costs as being demand related so that the Company's proposed demand charge collects a much greater proportion of Laclede's revenue

- 8

J' .

1

2

3

4

5

6

7

8

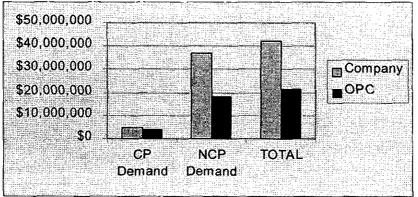
9

10

requirement than it should. Public Counsel has performed an analysis of Laclede's class cost of service study in this case where we removed cost categories that Laclede has improperly classified as demand-related. These categories include: meters and regulators, uncollectible expenses, and administrative and general (A & G) expenses. OPC also believes Laclede's cost of service study improperly categorizes meter costs as demand-related, but our analysis did not remove these costs because of the complexity involved in doing so.

The results of our analysis which re-categorizes the most of the improperly categorized "demand" costs in Laclede's study are shown below:

	CP Demand	NCP Demand	TOTAL
Company	\$4,877,404.99	\$37,156,299.48	\$42,033,704.47
OPC	\$3,745,888.31	\$17,963,521.51	\$21,709,409.82



11

12

Q. DO YOU HAVE ANY FINAL REMARKS REGARDING LACLEDE'S DEMAND CHARGE PROPOSAL?

σ.

A. Yes. When Laclede's witness, Mr. Suess in Union Electric's most recent rate design case (Case No. EO-96-15) was asked in the hearing about why he had not included demand charges in the rate design proposal that Laclede had made for UE's residential rates he responded by stating:
Typically, demand charges for residential classes are not collected through a demand charge. Generally, from my knowledge of operation of utility systems, demand meters for residential classes are cost prohibitive. Companies generally don't have demand meters that would record demand for that particular type of customer. And they roll all of the charges into a single energy charge to recover it on a kilowatt hour usage basis. (EO-96-15 hearing transcript, page 230, line 13)

#### Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.