Exhibit No.:	
Issues:	Rate Design
Witness:	Anne Ross
Sponsoring Party:	MO PSC Staff
Type of Exhibit:	Direct Testimony
Case No.:	GR-2007-0208
Date Testimony Prepared:	May 18, 2007

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

DIRECT TESTIMONY

OF

ANNE ROSS

LACLEDE GAS COMPANY

CASE NO. GR-2007-0208

Jefferson City, Missouri
May 2007

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-2007-0208

AFFIDAVIT OF ANNE ROSS

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Anne Ross, of lawful age, on her oath states: that she has participated in the preparation of the following Direct Testimony in question and answer form, consisting of 14 pages of Direct Testimony to be presented in the above case, that the answers in the following Direct Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true to the best of her knowledge and belief.

Anne Ross

Anne Ross

Subscribed and sworn to before me this 17th day of May, 2007.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

SUSAN L. SUNDERMEYER
My Commission Expires
September 21, 2010
Callaway County
Commission #06942086

Susan L. Sundermeyer

Notary Public

My commission expires 9-21-10

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LACLEDE GAS COMPANY

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Q. Please state your name and business address.

A. Anne E. Ross, P.O. Box 360, Jefferson City, Missouri 65102.

Q. Are you the same Anne E. Ross who has previously filed Direct Testimony in this case?

A. Yes.

EXECUTIVE SUMMARY

Q. Please summarize your testimony.

A. In this testimony, I will describe the development of the billing determinants and peak-usage estimates for the Large Volume Sales, Interruptible Sales, Basic Transportation and Firm Transportation tariff classes. These numbers were provided to Staff witness Thomas M. Imhoff to use in cost-of-service allocators, and to Staff witness Daniel I. Beck to use in his development of the Distribution Mains allocator.

In the next section, I will propose that the Commission approve a fixed Delivery Charge rate design for Laclede Gas Company's (Laclede or Company) Residential customers, and discuss the reasons why Staff supports the use of this method to collect Residential customers' non-gas cost of service. Next, I will discuss Staff's proposal for the rate design of the C1 tariff class, and present Staff's concurrence with Laclede's recommendation that the

non-Residential customers' rate components be increased by an equal percentage as a result of the revenue requirement ordered in this case.

I will then discuss Staff's rate design recommendations for the rest of Laclede's rate classes.

Finally, I will discuss Laclede's 'Low-Income Energy Affordability' program.

LARGE CUSTOMER BILLING DETERMINANTS AND PEAK USAGE ESTIMATES

Q. What inputs did you provide to Staff Witness Thomas M. Imhoff for use in the Staff class cost-of-service (CCOS) study?

A. I provided monthly therm volumes and number of bills for the Large Volume Sales Service, Interruptible Sales Service, and the Basic and Firm Transportation and Sales Service customer classes. In addition, I calculated coincident (CD) and non-coincident (NCD) peak day demand estimates for these classes.

Q. How did you develop your estimate of CD and NCD for the Large Volume Sales Service, Basic Transportation and Sales Service and Firm Transportation and Sales Service classes which were provided to Staff witnesses Thomas M. Imhoff and Daniel I Beck?

A. Using coefficients from the weather normalization performed to normalize sales volumes for the revenue adjustment, and the test year peak heating degree day value, I calculated the CD and NCD for these customers.

Q. How did you develop the estimate of CD and NCD for the Interruptible Sales Service tariff class?

A. To develop the CD estimate, I took the class' January therm usage and divided it by 30. To develop the NCD, I took the class' therm usage in February, 2006, which was the month that the class actually experienced its peak usage, and divided it by 30.

Q. What are the customer classes that Staff is using in its rate design?

A. I designed rates for the following customer classes:

Residential

C1 General Service – firm sales customers with an annual usage of 5,000 therms or less.

C2 General Service – firm sales customers whose annual usage falls between 5,000-50,000 therms.

C3 General Service – firm sales customers with annual usage greater than or equal to 50,000 therms.

Interruptible Sales Service

Large Volume Sales Service

Basic Transportation Service – transportation customers who do not have the right to purchase sales gas from Laclede, but can if there is excess gas available after all sales customers usage requirements have been satisfied.

Firm Transportation Service – transportation customers whose contract with the Company includes the right to purchase an agreed-upon level of sales gas from the Company if needed.

This grouping is consistent with the way in which Laclede's current rate classes are grouped.

Q. What is the source of class revenue requirements used for Staff's rate design?

A. I used the class revenue requirements determined in the CCOS study performed by Mr. Imhoff.

STAFF RESIDENTIAL RATE DESIGN PROPOSAL

Q. What is Laclede's current Residential rate design?

A. To recover its non-gas costs, Laclede has a Residential rate design consisting of a monthly customer charge, which does not vary with use, and a volumetric rate in which the remainder of Laclede's non-gas costs for this class are recovered in the first 65 therms of customer usage.

Q. Has this rate design been successful in reducing Laclede's weather-related risk of undercollecting its Commission-approved revenue requirement?

A. Yes, this design has been successful.

Q. Are you recommending a change in the way in which Laclede collects non-gas costs?

A. Yes, I recommend a rate design that I believe to be fair to customers, which has the added benefit of aligning the Company's and the customers' interests in natural gas conservation.

Q. What is Staff's proposal for the Residential class' rate design in this case?

A. Staff proposes that the Residential class' costs be collected using a flat monthly Delivery Charge, rather than a Customer Charge and volumetric rate. The Delivery Charge is calculated using the Staff's annualized customer numbers, and the Residential class' cost-of-service.

Q, Why is Staff recommending that Laclede collect all margin costs in a single monthly charge?

A. Staff believes that the Delivery Charge rate design has the following advantages:

- It is a fair way to insure that each Residential customer pays the appropriate cost to serve them, regardless of that customer's end-use.
- It more closely aligns Laclede's interests with those of its customers by totally removing any disincentive for Laclede to encourage and assist customers in making conservation and efficiency investments.
- It reduces the effect of weather on customer bills and utility revenues. This will provide Laclede the opportunity to collect its cost to serve Residential customers, and will insure that an individual Residential customer will pay Laclede the price of providing its service – no more or no less.

Q. Why do you say that the Delivery Charge rate structure "…is a fair way to insure that each Residential customer pays the appropriate cost to serve them, regardless of that customer's end-use"?

A. Laclede's cost to serve every Residential customer is essentially the same, regardless of the amount of gas a customer uses. When a Residential customer begins taking natural gas service, Laclede's investment to serve that customer will not vary because of differences in the customer's expected end use.

Q. Why won't the Residential customer's end use be taken into account when making Laclede's investment decisions?

A. Residential customers have the ability to change their end use quickly, while utility assets tend to be long-lived investments. Residential customer may be using gas only for cooking today, but might decide tomorrow to immediately install a gas furnace and water

heater. It would be impractical (and expensive) if the utility made its investment decisions based on a customer's specific end-use at the point in time when the decision is being made, so it is my understanding that utilities make a standard investment for a Residential customer that reflects the range of end-use decisions that the customer could make in the future.

Q. What about the utility's expenses? Do they vary according to the end use of the customer?

A. No. While it is true that a utility's expenses associated with customer billing, customer assistance, and meter-reading will change if the number of customers changes, that is not true if customers' usage changes. Regardless of the amount of gas used by individual Residential customers, the same number of bills must be mailed, meters read, and customers assisted. This is true of the utility's other expense items, such as Operation and Maintenance expense, since they are tied to Laclede's plant investment.

Q. Please explain your statement that the Delivery Charge rate design "…more closely aligns Laclede's interests with those of its customers by totally removing any disincentive for Laclede to encourage and assist customers in making conservation and efficiency investments."

A. Under the Company's current Residential rate design, increased gas sales to Residential customers can increase Laclede's profit; therefore, Laclede still has an incentive to sell more gas to Residential customers.

Q. If the cost of the gas used by the customer is directly passed through, and Laclede has a rate design which collects all of its non-gas winter revenues in the first 65 therms during the winter months, how can Laclede increase profits by selling more gas to its Residential customers?

A. Under Laclede's current Weather Mitigation Rate Design, it is true that all of Laclede's non-gas winter revenues are collected in the first block, which is set at 65 therms. That does not mean that, however, that the rate was set assuming that all customers use 65 therms in each of the six winter months. Using the billing determinants in Attachment 1 of the Stipulation and Agreement in Case No. GR-2005-0284, I divided the revenue collected in the winter months by the number of normalized therms in the first block (winter), and determined that the resulting average first block usage is 56.75 therms per bill. Therefore, under the current rate design parameters, if Laclede takes an action that results in that average first block usage per customer falling below that level, Laclede will collect less than the Commission-approved revenue level; the converse is true if the actual average usage per customer in the first block turns out to be greater than 56.75 therms. Another way to look at it is that if a customer already uses more than 65 therms/month in the winter, increasing sales to that customer will not increase Laclede's profit, but increasing the sales of a customer who normally uses less than 65 therms will.

Q. How does a fixed Delivery Charge rate design affect that disincentive?

A. By breaking the link between sales and profits, the Laclede will not increase profit when its customers use more gas, nor will it lose revenue when customers use less.

Q. Please explain your statement that a Delivery Charge rate structure "…reduces the effect of weather on customer bills and utility revenues. This will provide Laclede the opportunity to collect its cost to serve Residential customers, and will insure that an individual Residential customer will pay Laclede the price of providing its service – no more or no less."

A. As I discussed above, the average usage per month per customer used to set the first-block winter rate was 56.75 therms. If we get a cold winter, and average natural gas first block usage per customer increases above that level, Laclede will collect more from the class than the normalized revenue that the rates were designed to collect.

When considering this from the Customer's perspective, you need to look at the effect on an individual customer, since your goal is to set a rate that results in an average customer paying the cost incurred to serve that customer. From this viewpoint, , since the average usage per customer used to set the rate was 56.75 therms, a customer with higher usage will be overpaying their cost-of-service; one using less will underpay their cost-of-service.

Q. Under a traditional rate design, with non-gas revenues being collected through a customer charge and volumetric rate, or Laclede's WMRD, will the revenues received from two customers be the same?

A. No, not unless the two customers use the same amount of gas.

Q. Are you saying that it is conceivable that the revenue received from one customer could be less than the utility's cost to serve that customer, and the revenue received from a similar customer could be greater than the utility's cost to serve that customer?

A. Yes. It is happening with Laclede's current rate structure to real, not hypothetical, Residential customers. As I pointed out earlier, rates are set based on an average customer's normalized usage, so a customer that uses less than this level will pay less than the cost required to serve it, and a customer using more will pay more than the cost required to serve it.

Low-usage customers are underpaying their cost of service under Laclede's WMRD both in terms of non-gas costs, and are also underpaying the commodity cost of the gas that

they use. The underpayment will be made up by all customers in the next rate case, when the WMRD is recalculated, and in the ACA, when gas cost over and under-recoveries are considered.

The table below shows the monthly average therms associated with various Residential end uses:

END USE	AVERAGE MONTHLY THERMS
Space-heating (Primary fuel)	53
Water-Heating (4 persons)	27
Gas Fireplace	7
Stove (Cooking – 4 people)	2

Note that these are estimated figures, and will be affected by usage, efficiency, age of equipment, weather, and other factors.

Q. Do you have any suggestions for actions that can be taken to minimize customer objection to this change in rate design?

A. Intensive consumer education will be needed so that customers understand Laclede's role in providing natural gas to their household, as well as the nature of distribution costs. Currently, I believe that most Residential customers do not understand that they are paying Laclede for the delivery service it provides, rather than the gas that the customer is consuming, and the practice of collecting margin rates in a volumetric charge does nothing to reduce that confusion. Customers may, therefore, believe that it is unfair that part of their bill does not decrease when their usage decreases, whether it's due to conservation or warm weather. Staff notes that customers are used to this type of payment structure for other goods and services. Basic cable television, local phone service, and trash pickup have a similar type of charge, and many consumers accept this. In fact, one advantage of this form of rate is that, unlike Laclede's current rate structure, it is easy to explain to customers.

Q. Won't paying a fixed charge remove the customer incentive for conservation?

A. No. The actual cost of natural gas is such a high percentage of a customer's bill that customers will still see a significant decrease in gas bills if household usage is lowered through conservation or efficiency measures.

Q. Do you have any comments on actions that could be taken to assist customers' conservation efforts?

A. I do. Along with education, Laclede, the Staff, Office of Public Counsel (OPC), and Department of Natural Resources (DNR) should actively promote and support customer conservation efforts – with access to funds, information, and advocacy.

Q. What types of programs would help low-income customers implement conservation measures?

A. Low-income households, which often live in inefficient or substandard housing, would benefit from assistance in making energy conservation investments, such as window or furnace replacement.

Q. Is there an existing program of this type for low-income Missouri households?

A. Yes. Households with income at 150% or less of the Federal Policy Guideline are eligible for the Low Income Weatherization Assistance Program, which is administered by the DNR using federal and state funding, and performed by weatherization personnel at each of Missouri's Community Action Agencies. In addition, most of the natural gas utilities in Missouri provide funds for this purpose. Laclede gas division currently contributes $155,000 to be used in this manner.

Q. Do you have any final comments regarding the Staff's proposed Residential Delivery Charge rate design?

A. Yes. Once the utility's concern regarding revenue loss due to lowered sales has been addressed, the utility should be a creative, active and knowledgeable leader in this effort. Laclede is in a unique position to identify customers who could benefit from conservation efforts, for example, households with higher than normal usage that are having trouble paying their utility bills. By assisting and educating these customers, the utility will likely benefit its entire customer base.

Q. Are you proposing a specific amount for Laclede to use for energy efficiency programs, as well as a cost-recovery mechanism for these costs?

A. No, I am not. Staff witness Lesa Jenkins will comment on Laclede's energy efficiency programs in her direct testimony.

C1 CLASS RATE DESIGN RECOMMENDATION

Q. What is Staff's rate design recommendation for Laclede's C1 tariff class?

A. Staff recommends that the class be divided into two classes, according to annual usage, and that customers using less than 1,600 therms/year pay a fixed monthly charge for their service. Staff also recommends that this charge be set at the same level as the Residential customers' Delivery Charge.

Q. Has a specific Delivery Charge been determined at this point?

A. No. Staff has been working with the Company on this proposal but does not yet have a specific number.

Q. What is Staff's proposal for the rate design for the remainder of Laclede's non-Residential customers?

A. Staff agrees with the Company's proposal to increase these customers' rates by a fixed percentage; however, rather than using the overall system percentage increase,

Staff proposes that the percentage increase/decrease used be derived from the Staff's cost-of-service results, however, Staff recommends that no class receives a decrease so long as any class receives an increase.

Q. Can those percentages be determined using the Staff class cost-or-service that is being filed today.

A. No. While Staff believes that the methodology used to allocate the costs in its cost study is appropriate, we are studying the revenues attributable to the non-Residential classes, and may adjust those at some point in the future. That would affect the percentage increase or decrease for each non-Residential class.

STAFF'S COMMENTS ON LACLEDE'S LOW-INCOME ENERGY AFFORDABILITY PROGRAM

Q. What types of programs have been undertaken in Missouri to address low-income households' inability to pay their utility bills?

A. Several experimental programs, aimed at bridging the gap between the amount a household can afford to pay for heating, and the amount of utility service costs, have been tried. These have all been bill credit programs, in which a portion of low-income customers' bills were paid.

Q. Has Staff participated in the design of these programs?

A. Yes. Staff has supported these experimental programs, and has been involved in designing them.

Q. Does Staff believe that it is appropriate to fund programs that address low-income customers' inability to pay by including the costs of these programs in the revenue requirement calculation?

A. Yes, it can be. Staff policy concerning these experimental programs is that there must be a reasonable expectation that the program will benefit both the households receiving the funds, the ratepayers who are contributing the funds and the utility, it is appropriate to include the costs a program in customer rates.

Q. Has the Laclede program been shown to provide benefits to participants, the other ratepayers and Laclede?

A. Staff has not seen any evidence that this program has provided sustainable benefits to the participant households, nor is there any evidence showing benefits to the rate-payers who are paying for the program. However, Laclede is benefiting from the program because it is collecting additional revenue from its ratepayers who do pay their bills. As a result, Staff cannot support continuing this program given the conflicting information that we have received about the program in both verbal discussions with the Company and Office of Public Counsel, and in data request responses and other information recently received from the Company. In addition, Staff is concerned that the parties involved in monitoring this program have very different ideas regarding program objectives on a going-forward basis.

Q. Does Staff believe that any similar programs tried with other Missouri utilities have been successful?

A. No. Each of these programs have been unsuccessful in attracting and/or retaining participants; furthermore, it has not yet been shown that those participants who were able to pay their utility bills while on the program continued to be able to pay them once the program ended.

Q. Then should the Commission conclude that utility companies should not recover costs of such programs in utilities' revenue requirements?

A. Staff believes that the utilities should carefully design and implement such programs as pilot programs. However, once a pilot program, such as the current Laclede program, has been shown to not be effective, it should not continue to be funded by ratepayers. If a pilot program is shown to be effective for the participants, ratepayers and the utility, it should be implemented on a full scale with appropriate funding sources.

Q. Does this conclude your direct rate design testimony?

A. Yes, it does.

Laclede Gas Company
Case No. GR-2007-0208
Large Customer Billing Determinants and Peak Demands

LARGE VOLUME SALES

	Block 1	NORM Block 2	Total Therms	Annualized Bills	Demand	Sales Volumes
Oct	1,014,631	39,882	**1,054,513**	**109**		**1,054,513**
Nov	1,540,261	46,371	**1,586,632**	**109**		**1,586,632**
Dec	1,984,977	352,953	**2,337,930**	**109**		**2,337,930**
Jan	2,775,583	389,167	**3,164,751**	**109**		**3,164,751**
Feb	2,059,306	258,287	**2,317,593**	**109**		**2,317,593**
Mar	1,957,494	189,292	**2,146,786**	**109**		**2,146,786**
Apr	1,712,840	68,917	**1,781,758**	**109**		**1,781,758**
May	1,008,929	32,096	**1,041,025**	**109**		**1,041,025**
Jun	926,797	50,411	**977,208**	**109**		**977,208**
Jul	901,884	28,479	**930,363**	**109**		**930,363**
Aug	832,407	14,774	**847,181**	**109**		**847,181**
Sep	915,266	20,347	**935,612**	**109**		**935,612**
Total	**17,630,374**	**1,490,977**	**19,121,351**	**1,308**		**19,121,351**
May-Oct	**5,599,913**	**185,989**	**5,785,902**	**654**		**5,785,902**
Nov-Apr	**12,030,461**	**1,304,988**	**13,335,449**	**654**		**13,335,449**
Coincident Demand					**135,283**	
Non-Coincident Demand					**135,283**	

INTERRUPTIBLE SALES

	Block 1	Block 2	Total Therms	Bills	Demand	Sales Volumes
Oct	333,477	102,081	**435,558**	**16**		**435,558**
Nov	381,945	0	**381,945**	**16**		**381,945**
Dec	526,203	53,696	**579,899**	**16**		**579,899**
Jan	599,758	81,683	**681,441**	**16**		**681,441**
Feb	603,371	82,267	**685,638**	**16**		**685,638**
Mar	565,625	82,194	**647,819**	**16**		**647,819**
Apr	415,609	17,882	**433,491**	**16**		**433,491**
May	286,951	0	**286,951**	**16**		**286,951**
Jun	300,507	0	**300,507**	**16**		**300,507**
Jul	287,366	0	**287,366**	**16**		**287,366**
Aug	282,303	216,980	**499,282**	**16**		**499,282**
Sep	295,050	48,341	**343,391**	**16**		**343,391**
Total	**4,878,164**	**685,124**	**5,563,288**	**192**		**5,563,288**
May-Oct	**1,785,654**	**367,402**	**2,153,055**	**96**		**2,153,055**
Nov-Apr	**3,092,510**	**317,722**	**3,410,232**	**96**		**3,410,232**
Coincident Demand					**34,072**	
Non-Coincident Demand					**34,282**	

Laclede Gas Company
Case No. GR-2007-0208
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BASIC TRANSPORT	Block 1	Block 2 inc. Wx Norm	Total Therms	Bills	Demand	Sales Volumes
Oct	3,215,674	7,291,431	**10,507,106**	**104**		**8,157**
Nov	3,369,273	8,684,015	**12,053,288**	**104**		**22,238**
Dec	3,386,086	10,577,925	**13,964,011**	**104**		**192,486**
Jan	3,297,285	9,921,842	**13,219,127**	**104**		**69,903**
Feb	3,339,286	9,674,237	**13,013,523**	**104**		**234,223**
Mar	3,389,470	9,125,852	**12,515,322**	**104**		**73,922**
Apr	3,256,653	6,488,407	**9,745,060**	**104**		**16,495**
May	3,197,741	6,415,576	**9,613,317**	**104**		**3,739**
Jun	3,086,447	5,678,100	**8,764,547**	**104**		**17,771**
Jul	2,994,074	5,214,749	**8,208,823**	**104**		**37,012**
Aug	3,064,297	5,941,806	**9,006,103**	**104**		**61,268**
Sep	3,110,184	6,390,670	**9,500,854**	**104**		**177,256**
Total	**38,706,468**	**91,404,612**	**130,111,080**	**1,248**		**914,468**
May-Oct	**18,668,417**	**36,932,333**	**55,600,750**	**624**		**305,202**
Nov-Apr	**20,038,052**	**54,472,279**	**74,510,330**	**624**		**609,266**
Coincident Demand					**665,911**	
Non-Coincident Demand					**665,911**	

FIRM TRANSPORT	Block 1	Block 2 inc. Wx Norm	Total Therms	Bills	Demand	Sales Volumes
Oct	1,399,755	3,326,203	**4,725,958**	**56**		**147,113**
Nov	1,577,530	3,469,659	**5,047,189**	**56**		**82,871**
Dec	1,653,641	5,431,182	**7,084,823**	**56**		**709,715**
Jan	1,608,603	5,405,060	**7,013,662**	**56**		**0**
Feb	1,585,766	4,386,889	**5,972,656**	**56**		**0**
Mar	1,578,310	3,947,959	**5,526,269**	**56**		**0**
Apr	1,262,329	2,334,413	**3,596,741**	**56**		**2,806**
May	1,218,557	2,099,339	**3,317,896**	**56**		**4,205**
Jun	1,139,280	1,987,378	**3,126,658**	**56**		**1,056**
Jul	1,063,124	2,253,687	**3,316,811**	**56**		**8,030**
Aug	1,122,790	1,984,439	**3,107,230**	**56**		**17,441**
Sep	1,168,019	1,415,576	**2,583,595**	**56**		**822**
Total	**16,377,703**	**38,041,784**	**54,419,488**	**672**		**974,060**
May-Oct	**7,111,525**	**13,066,622**	**20,178,147**	**336**		**178,667**
Nov-Apr	**9,266,179**	**24,975,162**	**34,241,341**	**336**		**795,393**
Coincident Demand					**302,250**	
Non-Coincident Demand					**302,250**	