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Rate Base, Accounting  
Schedules

Patricia A. Krieger

Direct Testimony

Laclede Gas Company

GR-2001-629

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LACLEDE GAS COMPANY

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DIRECT TESTIMONY

OF

PATRICIA A. KRIEGER

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DIRECT TESTIMONY OF PATRICIA A. KRIEGER

1 Q. Please state your name and business address.

2 A. My name is Patricia A. Krieger, and my business address is 720 Olive St., St.  
3 Louis, Missouri 63101.

4 Q. What is your present position?

5 A. I am Manager of Accounting for Laclede Gas Company.

6 Q. Please state how long you have held your position and briefly describe your  
7 responsibilities.

8 A. I was promoted to my present position in January, 1997. I am responsible for  
9 managing four departments: Financial Reporting, General Accounting, Gas  
10 Accounting and Asset Management. These departments maintain the books of the  
11 Company in accordance with generally accepted accounting principles and the  
12 rules and regulations of this Commission.

13 Financial Reporting duties include preparing reports to the Securities and  
14 Exchange Commission, to stockholders and to this Commission. General  
15 Accounting duties include processing of payments to our suppliers and  
16 maintaining various records. Gas Accounting accounts for the Company's natural  
17 gas costs and customer revenues, as well as analyzing the effects of weather on  
18 customer sales. Asset Management maintains the continuing property records of  
19 the Company and carries out related duties.

20 Q. What is your educational background?

1 A. I graduated from Saint Louis University in 1976 with the degree of Bachelor of  
2 Science in Business Administration, majoring in accounting.

3 Q. Will you briefly describe your experience with the Company prior to becoming  
4 Manager of Accounting?

5 A. I joined Laclede in November, 1976 as an Accountant in the Corporate  
6 Accounting Department. I was promoted to Senior Auditor in June, 1979 and  
7 transferred to the Internal Audit Department. In June, 1983, I was transferred to  
8 the Budget Department, where I served as Senior Budget Analyst and Assistant  
9 Manager until being promoted to Manager of the Budget Department in April,  
10 1988. I held this position until being promoted to Manager of Accounting.

11 Q. Have you previously filed testimony before this Commission?

12 A. Yes, I have, I have previously filed testimony in Cases GM-2001-342, GR-99-  
13 315, GR-98-374, GR-96-193, and GR-94-220.

14 Q. What is the purpose of your testimony?

15 A. I am sponsoring the Company's rate base on an original cost basis and certain  
16 components of working capital for inclusion in the Company's rate base. I am  
17 also sponsoring income statement adjustments in the areas of revenue and gas  
18 cost, depreciation and amortization, uncollectible accounts, taxes other than  
19 income and appliance service work.

20 Q. Please list the schedules you are sponsoring.

21 A. The following schedules were prepared by me or under my supervision: Section  
22 A, RATE BASE: Schedule 1. This schedule summarizes the components of the  
23 Company's original cost rate base estimated at July 31, 2001. Schedules 2

1 through 7 of Section A. These schedules provide detailed information in support  
2 of certain elements of rate base, including working capital, and are described later  
3 in my testimony. Section C, TEST YEAR UTILITY OPERATING INCOME  
4 STATEMENTS AND ADJUSTMENTS; Schedules 3 through 9, and Schedule  
5 18. These schedules provide supporting detail for certain adjustments to test year  
6 utility operating income which I am sponsoring. These adjustments are described  
7 later in my testimony.

8 Rate Base

9 Q. What items are you sponsoring for inclusion in the Company's original cost rate  
10 base (Schedule 1 of Section A)?

11 A. Gross Plant amounts for Laclede Gas Company have been estimated to July 31,  
12 2001. Deducted therefrom is the estimated balance of accumulated provision for  
13 depreciation, depletion and amortization at the same date. I also deducted the  
14 February 28, 2001 balance of customer advances for construction. Schedules 2  
15 through 7 of Section A include the detail of balances for working capital, which I  
16 am sponsoring as additions to rate base.

17 Q. What is "working capital?"

18 A. Working capital, as I use the term here, is the average amount of investment in the  
19 utility business provided by investors, in excess of that which is included in net  
20 utility plant, offset by appropriate deferred income taxes. Working capital  
21 includes the Company's investment in its various inventories, prepayments and  
22 deposits, and materials and supplies.

23 Q. Please explain the working capital schedules you are sponsoring in Section A.

1 A. Schedule 2 shows actual balances for Special Deposits over the test year ending  
2 February 28, 2001, and derives an average balance.

3 Schedules 3, 4 and 5 list actual balances for the Company's Propane Gas  
4 Inventory, the current portion of Natural Gas Stored Underground in the Laclede  
5 storage field and Natural Gas Stored Underground in the storage fields of others  
6 (primarily Mississippi River Transmission Corporation), over the test year ended  
7 February 28, 2001, and derive average balances.

8 As discussed more fully in the testimony of M. T. Cline, the Company is  
9 proposing to pass the financing costs related to gas and propane inventories  
10 through the Purchased Gas Adjustment Clause. Should the Commission grant this  
11 tariff change, inventory balances would no longer need to be included in rate  
12 base. In addition, the non-current portion of natural gas stored underground in the  
13 Laclede storage field would be excluded from rate base.

14 Schedule 6 of section A shows actual balances in Prepayments over the  
15 test period ending February 28, 2001, and derives an average balance for  
16 inclusion in rate base.

17 Schedule 7 shows the actual balances in Accounts 154 and 163, General  
18 Materials and Supplies and Related Stores Expense, at the beginning of the test  
19 year and at month end for each of the months in the test year. These balances  
20 have been taken from the books and records of the Company. Also shown is the  
21 average balance which I have included in rate base.

22 Q. What items of rate base do other Company witnesses address in this case?

1 A. The Gas Safety Deferral and the Prepaid Pension Asset are described in the  
2 testimony of Company witness J. A. Fallert. The cash working capital  
3 requirement of the Company is described in the testimonies of Company  
4 witnesses G. W. Buck and K. M. Beerup. The impact on rate base of the  
5 Insulation Financing Program, the EnergyWise Program, and Customer Deposits  
6 is described in the testimony of Company witness S. M. Kopp. In addition, the  
7 related balances of deferred income taxes have been deducted from rate base.

8 Adjustments to Utility Operating Income

9 Q. Please explain the adjustments you are sponsoring to Laclede's operating income.

10 A. I am sponsoring adjustments to revenues and gas costs to reflect changes in large  
11 users, increases in residential and small commercial customers, and the  
12 elimination of unbilled revenue accruals and amounts related to the Gas Supply  
13 Incentive Plan on the Company's books. In addition, I am sponsoring  
14 adjustments concerning the effect of weather on the Company's revenues. I am  
15 also sponsoring adjustments to the uncollectible accounts expense, depreciation  
16 and amortization expense, taxes other than income expense, and to the revenues  
17 and expenses related to appliance service work and off-system sales. These  
18 adjustments appear on Schedule 2 of Section C. Finally, I am sponsoring several  
19 schedules which provide supporting detail to these adjustments.

20 Large Users

21 Q. Please discuss the adjustments related to large users.

22 A. Adjustments 1.c., 1.d., 1.e., and 1.g., reflect known and measurable changes  
23 through July 31, 2001 in the usage levels and/or rate schedules for several of our

1 large customers. These are customers whose circumstances have changed or are  
2 expected to change due to changes in volumes, newly contracted-for demand  
3 levels, and/or changes in the rates under which they purchase gas. These  
4 adjustments are necessary to include the most recent known sales information for  
5 these customers in normalized revenues. The four categories are:

6 I. Firm Sales Service

7 Adjustment 1.c. (Schedule 4) reflects the rate switching and/or load  
8 changes of fifteen specific customers who were or are served under this  
9 rate classification.

10 II. Firm Transportation and Sales Service

11 Adjustment 1.d. (Schedule 5) reflects the rate switching and/or load  
12 changes of five specific customers who were or are served under this rate  
13 classification.

14 III. Basic Transportation and Sales Service

15 Adjustment 1.e. (Schedule 6) reflects the rate switching and/or load  
16 changes of six specific customers who were or are served under this rate  
17 classification.

18 IV. Interruptible Sales Service

19 Adjustment 1.g. (Schedule 7) reflects the rate switching and/or load  
20 changes of three specific customers.

21 Q. What other adjustments are you sponsoring related to large users?

22 A. Adjustment 1.f. (Schedule 6) reflects a normalized level of unauthorized use  
23 charges for the Company's basic transportation customers. During the test year



1 ended February 28, 2001, this group of customers was billed an abnormally high  
2 level of unauthorized use charges due to their use of natural gas on days of  
3 limitation. Due to the extremely cold weather experienced during the months of  
4 December 2000 and January 2001, the days of limitation during the test year were  
5 higher than normal. Adjustment 1.f. reduces revenues related to unauthorized use  
6 charges to a normal level based on the average number of days of limitation per  
7 year since the year that the unauthorized charge commenced.

8 Residential and Small Commercial Customers

9 Q. Please explain the revenue adjustment made to reflect growth in residential and  
10 small commercial customers.

11 A. During the test year, the Company experienced modest growth in both its  
12 residential and small commercial customers billed at the General Service rate.  
13 Adjustment 1.h. (Schedule 8) increases revenues to an annualized level that  
14 includes all of these customers as if they had been customers for the full year.  
15 Furthermore, the adjustment adds revenues related to customer levels the  
16 Company expects at July 31, 2001.

17 Q. What is the basis for this adjustment?

18 A. This overall residential and small commercial customer adjustment reflects annual  
19 customer growth based on the period ended February 2001 and the same rate of  
20 change through July 31, 2001.

Weather Normalization

1  
2 Q. Please discuss the adjustments you are sponsoring concerning the effect of  
3 weather on the Company's revenues and expenses.

4 A. Actual weather experienced in the heating season affects the Company's sales  
5 levels, its revenues and its gas cost expenses. If weather is colder than was  
6 anticipated, each of these items (i.e., sales, revenues and gas cost expenses) will  
7 increase in amount. Conversely, if weather is warmer than was anticipated, the  
8 amount of these items will decrease.

9 Q. Is the effect of weather significant?

10 A. Yes. The weather sensitivity of a local gas distributor's sales levels is widely  
11 recognized in the industry and in financial and regulatory circles. Space heating  
12 constitutes by far the largest end-use of gas in Laclede's system. In fact, in terms  
13 of the percent of revenue attributable to space heating, Laclede's percentage is  
14 among the highest of utilities in Missouri and near the top of major utilities in the  
15 nation.

16 Approximately 98% of Laclede's residential customers use gas for their  
17 primary heat source. A number of the remaining residential customers use gas for  
18 a secondary heat source. In our service area, the vast majority of an average  
19 heating customer's usage is for space heating, followed by water heating usage.  
20 Other end uses, such as cooking, clothes drying, and lighting constitute a small  
21 fraction of the total. Because Laclede is particularly dependent on space heating  
22 for its revenues, weather is a primary variable in determining Laclede's revenues.

1 Q. How does the ratemaking process address the impact of weather fluctuations on a  
2 gas utility's operations?

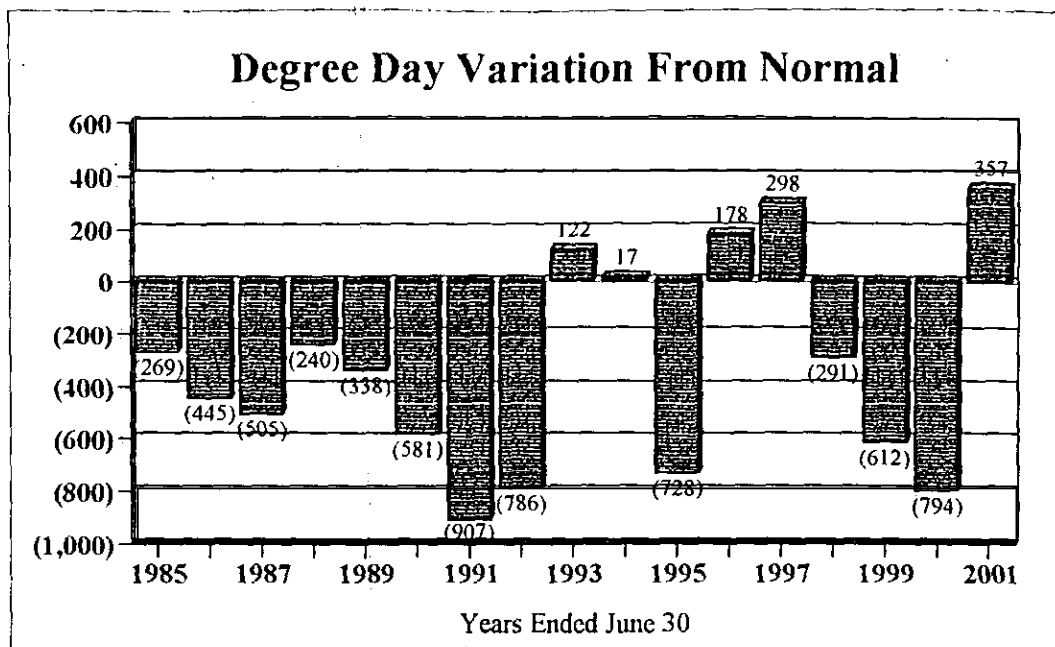
3 A. Space heating sales levels are primarily determined by heating season  
4 temperatures in the gas utility's service area. In setting rates, this Commission  
5 has traditionally approved an adjustment to Laclede's test year data to account for  
6 the effects of weather through use of a measure known as heating degree days  
7 (also referred to as "degree day deficiencies" or simply "degree days"). This  
8 adjustment has traditionally been calculated through a comparison of the actual  
9 number of degree days experienced in the test year in Laclede's service area with  
10 an historical measure of degree days considered to be normal in such area. The  
11 adjustment is designed to adjust test year operating results to levels which would  
12 have been experienced had the test year contained a normal number of heating  
13 degree days.

14 Q. Please define the term "heating degree day."

15 A. A heating degree day is a unit used to measure the requirement for space heating  
16 due to the coldness of weather. Specifically, each heating degree day represents  
17 each degree by which the average temperature for a day falls below 65°  
18 Fahrenheit based on daily high and low temperatures recorded and published by  
19 the National Oceanic and Atmospheric Administration (NOAA), an agency of the  
20 United States Government. Thus, an average daily temperature of 45° Fahrenheit  
21 would be equal to 20 degree days. Degree days can be calculated and  
22 accumulated for a number of days, such as a month or a heating season, to  
23 provide a measure of heat requirements.

1 Q. How are normal degree days determined?

2 A. Generally, normal degree days are determined by an analysis of historical data. In  
3 the past, the Company's rates have been based on various normals calculated by  
4 averaging actual degree days experienced over periods ranging from thirty years  
5 to longer-term averages which used all historical weather data available for this  
6 century. More recently, rates have been set based on 30 years of historical data or  
7 parameters agreed upon by the parties. In years past, fluctuations in earnings or  
8 return for a utility due to normal variations in weather have been accepted by  
9 many utilities. Utilities have accepted this fluctuation based on the concept that  
10 the actual weather to be experienced in the near future has an equal chance of  
11 having a lower or higher number of degree days than the normal level of degree  
12 days used in setting the utility's rates and, that over a span of years, the weather  
13 will approximate normal. However, recent experience has shown that traditional  
14 30-year normals are unreliable in approximating expected degree days, even over  
15 a span of a number of years. The following table illustrates heating season degree  
16 days as reported by NOAA actually experienced during recent years compared  
17 with the NOAA 30-year normal degree days for St. Louis, Missouri.



Year	Actual Degree Days	Normal Degree Days		Degree Day Variation From Normal
1985	4,669	4,938	*	(269)
1986	4,493	4,938	*	(445)
1987	4,433	4,938	*	(505)
1988	4,698	4,938	*	(240)
1989	4,600	4,938	*	(338)
1990	4,357	4,938	*	(581)
1991	4,031	4,938	*	(907)
1992	4,152	4,938	*	(786)
1993	4,880	4,758	**	122
1994	4,775	4,758	**	17
1995	4,030	4,758	**	(728)
1996	4,936	4,758	**	178
1997	5,056	4,758	**	298
1998	4,467	4,758	**	(291)
1999	4,146	4,758	**	(612)
2000	3,964	4,758	**	(794)
2001	est. 5,115	4,758	**	357

\* 30-year normal based on 1951-1980 period published by NOAA

\*\* 30-year normal based on 1961-1990 period published by NOAA

1           The predominantly warmer-than-normal weather experienced since 1985  
2 has caused Laclede's sales levels to fall short of those levels predicated on long-  
3 term norms upon which rates were set, having a significant adverse effect on the  
4 Company's earnings and rate of return. Earnings have been depressed by millions  
5 of dollars during these years, resulting in long-term earnings shortfalls from the  
6 levels justified and approved by the Commission in previous rate cases.

7   Q.   Is this deviation between actual degree day experience and the NOAA 30-year  
8 normals simply the result of natural weather variability?

9   A.   No, I do not believe so. It is unlikely that natural weather variation is the sole  
10 cause underlying the mild winters experienced in recent years. This increased  
11 incidence of warmer-than-normal heating seasons is of particular concern in light  
12 of the increasing recognition and acceptance within the scientific community of  
13 the existence of climatic warming, urbanization and heat island effects in  
14 metropolitan areas, and other factors contributing to an overall warming trend.  
15 The warm weather experienced in the St. Louis area in recent years is consistent  
16 with climatic warming trends being experienced elsewhere. In my opinion, it  
17 would be extremely unlikely that such experience resulted from chance alone.  
18 The likelihood that this trend is only the result of natural weather variation  
19 diminishes each year the warm-weather pattern persists; each additional warmer-  
20 than-normal year increases the statistical probability that this warming trend exists  
21 and will continue into the future.

22   Q.   Does evidence of a warming trend mean that we will not have seasons colder than  
23 the NOAA 30-year normal?

1 A. No. There will still be colder-than-normal seasons, such as this past heating  
2 season, but not as frequently as in the past. Weather fluctuates widely and natural  
3 weather variability still exists. However, traditional 30-year normals do not  
4 adequately reflect the effect of urbanization experienced in recent decades on the  
5 Company's service area nor the warming trend which began in the mid-1980s.  
6 Until this warming trend ends and the effects of urbanization are addressed in an  
7 appropriate normal, the probability of warmer-than-normal seasons is greater than  
8 the probability of colder-than-normal seasons. We cannot expect or hope that  
9 weather fluctuations will "level out" over a span of years and approximate the  
10 traditional 30-year normal, unless those fluctuations are the result of only natural  
11 weather variation. Unfortunately, NOAA 30-year normals, especially the latest  
12 published normal which ends with 1990 data, cannot adequately reflect the effects  
13 of urbanization and warming trends that have occurred not only during that 30-  
14 year period but also during the decade that has followed.

15 Q. Should the Commission seek more appropriate weather normalization  
16 methodologies in setting rates in this proceeding?

17 A. Yes. The Company is asking the Commission to recognize for ratemaking  
18 purposes the need for a benchmark in weather normalization that would more  
19 equitably serve the ratepayer and the shareholder and be more in tune with actual  
20 current climatological conditions. Failure to recognize the inadequacies and  
21 inappropriateness of the use of traditional 30-year normals is extremely  
22 detrimental for a utility like Laclede, whose earnings are so dependent on  
23 weather-related space heating sales. When the level of normal degree days

1 assumed in the regulatory process is consistently too high, it becomes a virtual  
2 certainty that the utility will not be able to earn a fair return. A utility which is  
3 consistently denied an opportunity to earn a fair return will soon suffer adverse  
4 financial consequences which will negatively affect its ability to serve its  
5 customers. The Company can no longer continue to absorb such shortfalls and  
6 remain financially strong. The unlikelihood of being able to achieve a 30-year  
7 degree day normal upon which rates have traditionally been set, coupled with  
8 Laclede's higher-than-average weather-sensitive load, serves only to further  
9 increase the Company's risk of being unable to recover its fixed operational costs  
10 and achieve a fair rate of return.

11 Q. How can the adverse effects of a traditional 30-year normal on the Company be  
12 addressed in the ratemaking process?

13 A. One solution in addressing the complexities of the issues surrounding weather  
14 normalization is to implement some form of weather mitigation clause. The  
15 Company has proposed a weather mitigation clause which, if approved by the  
16 Commission, would provide an equitable solution to the weather normalization  
17 issue for both the shareholder and the ratepayer. Not only would such a  
18 mechanism allow the Company to recover what are basically fixed distribution  
19 costs, but it would additionally provide a more stable pricing environment for the  
20 Company's customers. Adoption of the weather mitigation clause would  
21 substantially reduce the burden of determining precisely the appropriate number  
22 of normal heating degree days. Although a reasonable level of normal degree  
23 days would need to be calculated to ensure "real time" cost to ratepayers and "real



1 time" recovery to shareholders, the adoption of such a mechanism would, more or  
2 less, eliminate long-term shortfalls or windfalls in customer revenues. In the  
3 process, such a mechanism would more equitably serve both the shareholder and  
4 the ratepayer than the current "win or lose" ratemaking methodology. The effect  
5 of the proposed weather mitigation clause on the weather normalization  
6 adjustment I am sponsoring is described in the testimony of Company witness G.  
7 W. Buck.

8 Q. Are there other alternatives that at least partially address the adverse effects of a  
9 traditional 30-year normal on the Company in the ratemaking process?

10 A. The First Amended Partial Stipulation and Agreement approved by the  
11 Commission in the Company's last rate case, Case No. GR-99-315, provided for  
12 the Company and Staff, as well as other interested parties in the State of Missouri,  
13 to cooperate in a joint undertaking for the purpose of studying technical issues  
14 regarding weather normalization, including the effects of air temperature readings  
15 related to changes in a sensor or its location, environmental factors such as  
16 urbanization and seasonality, an appropriate normals period, and other  
17 temperature data issues at the St. Louis International Airport (Lambert Field)  
18 weather station. As a result, the parties and participants of the weather  
19 normalization group agreed to contact Dr. Thomas B. McKee, Ph.D. from the  
20 Colorado Climate Center of Colorado State University regarding consultation on  
21 the project. Prior to the filing of this rate case, Dr. McKee agreed to share with  
22 the group his findings from a study, supported by NOAA, that he was already  
23 engaged in concerning instrumentation change and the 1996 installation of the

1 ASOS thermometer at Lambert Field. The parties to the weather normalization  
2 project are currently evaluating Dr. McKee's report.

3 Q. Please continue.

4 A. In my opinion, the conclusions reached by Dr. McKee appear to suggest that a  
5 cooling bias was introduced into the Lambert temperature data when the ASOS  
6 was commissioned and the instrument's location changed in 1996. However, Dr.  
7 McKee's report also indicated that the determination of an adjustment to make  
8 historical temperature data consistent with current temperature reporting for an  
9 extended period of time, i.e., 30 years, cannot be done with great accuracy.

10 Q. Do you agree with Dr. McKee's findings?

11 A. One must appreciate the complexities and challenges inherent under current  
12 circumstances to perfect temperature data with a high enough level of confidence  
13 to be appropriate for ratemaking purposes. At a minimum, it is clear that any  
14 effort to correct for temperature measurement bias over an extended time period  
15 would be extremely problematic. This reinforces my belief that use of a 10-year  
16 normal is appropriate in that it provides a way to minimize the use of inconsistent  
17 temperature data, to utilize the official objective third-party data currently  
18 available, and to recognize the effects of urbanization and recent climate trends  
19 which deviate significantly from long-term norms. Use of a 10-year normal can  
20 also be scientifically supported and is consistent with commercial applications of  
21 weather data. I am therefore proposing the use of a 10-year normal as the best  
22 alternative currently available for setting rates which will best approximate the  
23 weather most probable to occur near-term. If the Commission consistently

1 monitors these climatological developments and periodically updates the rate  
2 setting standard, both the Company and its customers will receive equitable  
3 treatment in the future.

4 Q. Is 10 years of data a sufficient information base upon which to derive a normal for  
5 ratemaking and what evidence exists to support the reliability of a 10-year normal  
6 versus the traditional 30-year normal?

7 A. Traditional 30-year normals as published by NOAA are not intended to predict  
8 future weather experience. NOAA's 30-year "normals" are published to provide  
9 a baseline predicated on past history to which current experience can be  
10 compared. They are simply intended to show where we have been and are not  
11 intended to be an indicator of future conditions. In my opinion, therefore, 30-year  
12 normals are not appropriate benchmarks to establish rates for the future. The  
13 normals used in ratemaking should be the number of heating degree days most  
14 likely to result in a leveling out of natural weather variations so as not to impact  
15 severely either the Company or the ratepayer over a relatively near-term span of  
16 years. Given the increasing evidence of climatic warming and recognized  
17 urbanization and heat island impacts on weather stations in densely populated  
18 areas, it follows that the use of more recent historical weather data would better  
19 indicate the climate conditions which can be expected during the periods rates  
20 will be in effect. In fact, for long-term temperature predictions, the Climate  
21 Prediction Center (a division of NOAA) currently utilizes optimal climate  
22 normals (OCNs). OCNs are based on a ten-year history of weather experience.

23 Q. Explain how OCNs were developed.

1 A. A statistical study was conducted to determine the optimal time period which  
2 would produce the highest correlation between forecasts and actual observations.  
3 The study was based on temperature data at 344 U.S. climate divisions during the  
4 period 1931-1993. The results indicated that, in most cases, annually updated  
5 climate normals averaged over shorter than 30-year periods are better than the  
6 NOAA 30-year baseline normals in predicting the upcoming year and periods  
7 beyond one year. In most cases, the optimal number of years was less than  
8 fifteen.

9 Q. How are OCNs being applied in forecasts issued by the Climate Prediction  
10 Center?

11 A. Although varying OCNs can be determined by location for each season, the result  
12 in nearly all cases is that a shorter time period results in the best prediction. In  
13 light of these results, the Climate Prediction Center has chosen to use a constant  
14 time period of ten years to calculate forecasted temperatures for all seasons and  
15 all locations.

16 Q. What do other commercial applications of weather data use as normal degree  
17 days?

18 A. It is my understanding that many weather-related commercial applications, such  
19 as weather derivatives and other weather insurance products, utilize timeframes  
20 much shorter than 30 years and rely more heavily on recent temperature data for  
21 determining appropriate "normal" levels of degree days. This would imply that  
22 use of a more recent 10-year timeframe is not only supportable, but preferable.

1 Q. Have you sponsored an adjustment based on a 10-year normal level of heating  
2 degree days?

3 A. Yes, adjustment 1.a. reflects the decrease in revenues at base rates for customers  
4 served under the general service rate to the level that would have been achieved at  
5 4,433 degree days. Calculations supporting the amount of the adjustment are  
6 shown on Schedule 3 of Section C, Pages 1 through 14.

7 Actual revenues for the twelve months ending February 2001 reflected  
8 4,965 heating degree days on a billing cycle basis. As is shown on Page 2 of  
9 Schedule 3, this was 532 heating degree days more than the normal heating  
10 degree day level of 4,433 for the 10-year period ended December 2000.

11 Q. What is the significance of using heating degree days on a billing cycle basis?

12 A. Heating degree days recorded on a calendar day basis have been converted by the  
13 Company to a billing cycle basis, which reflects the Company's cycle method of  
14 billing its customers. Although the Company recognizes revenues on a calendar-  
15 month basis for financial reporting, its underlying records are maintained on a  
16 cycle billing basis, with a separate entry each month to adjust to a calendar month  
17 basis. I am also sponsoring an adjustment to reverse this entry, effectively  
18 returning the income statement set out on Schedule 1 of Section C to a billing  
19 cycle basis. Under this method, the Company recognizes revenue as recorded by  
20 its meters, which are read throughout the month. Thus, monthly billing cycle  
21 revenues do not reflect usage through month-end for most customers but  
22 generally reflect one month of consumption ending on various days during the

1 billing month. For consistency, heating degree days have been calculated on a  
2 billing cycle basis.

3 Q. Please continue with your explanation of Schedule 3 of Section C.

4 A. Pages 3 through 14 of this schedule contain the calculation of the weather  
5 normalization adjustment to therm sales and revenues. A separate calculation is  
6 made for each appropriate revenue class of each operating division. In each case,  
7 the average annual use per customer is the starting point, and the customer use  
8 that does not vary with degree days is subtracted to yield the use per customer per  
9 degree day.

10 Q. How do you determine the portion of customer use which does not vary with  
11 temperature?

12 A. This use per customer is based upon the July and August use per customer. The  
13 months of July and August do not reflect any space heating load. This two-month  
14 use is multiplied by six, to produce an annual figure, and the product of this  
15 multiplication is finally multiplied by a factor of 1.35 (135%) to calculate the  
16 annual usage which does not vary with temperature. It is necessary to increase  
17 the 12 months of summer usage by 35% to reflect the fact that customers' "base"  
18 usage in winter months exceeds their usage during the summer. This increase is  
19 separate from any space heating requirement and is not a function of the number  
20 of degree days experienced. Rather, it arises in large part from the necessity of  
21 heating water from lower starting temperatures during the winter. The seasonal  
22 increase in water heating load has been supported over the years by special

1 studies of Laclede customers wherein monthly usages have been analyzed and  
2 patterned.

3 Q. Please continue with your explanation.

4 A. The degree day departure from the average level for each month has been  
5 multiplied by the use per customer per degree day to determine the monthly  
6 adjustment to use per customer necessary to reflect normal weather. This  
7 monthly factor is then multiplied by the number of customers each month in that  
8 rate class to determine the total adjustment to therm sales for the month. The total  
9 therm sales adjustment is then multiplied by the appropriate rate per therm to  
10 calculate the adjustment to net revenue for each rate class by division. Page 1 of  
11 Schedule 3 contains a summary of the calculations made on Pages 3 through 14 of  
12 Schedule 3.

13 Q. Are you sponsoring any other adjustments related to weather normalization?

14 A. Yes. Adjustment 1.b. reflects the decrease in revenues at base rates for customers  
15 served on the large volume and transportation service rates to the level that would  
16 have been achieved at 4,433 degree days. Although gas requirements for  
17 customers served on these service rates are primarily for purposes other than  
18 spaceheating, some customers served on these rates exhibit weather sensitivity.  
19 An average heating use per degree day for each rate and revenue class was  
20 determined by deducting the annualized May through October 2000 usage from  
21 the total usage for these groups of customers and dividing by actual degree days  
22 for the test year. The degree day variation from normal was multiplied by the

1 average heating usage per degree day and priced at the appropriate second block  
2 base rate.

3 Q. Does this complete your discussion of weather?

4 A. Yes, it does.

5 Unbilled Revenue

6 Q. Please explain the revenue adjustment involving accruals of unbilled revenues.

7 A. Adjustment 1.j. removes accruals of unbilled revenues from test year operating  
8 income.

9 Q. Why have you made this adjustment?

10 A. The Company reads meters throughout the month, so revenues billed to our  
11 customers do not reflect usage through the end of the month in most cases. The  
12 Company records revenues and the related cost of gas for all gas delivered during  
13 a month. This method properly reports revenues in the period in which gas was  
14 used by our customers but requires that broad estimates of sales be made each  
15 month between the date meters were read and the end of the month. Adjustments  
16 1.j. and 2.a. eliminate the effect of these estimates so that test year revenues and  
17 gas costs are based on an actual billed twelve-month period.

18 Gas Supply Incentive Plan and Off-System Sales

19 Q. Please explain the adjustments related to the Gas Supply Incentive Plan and off-  
20 system sales.

21 A. Adjustments 1.k. and 2.b. eliminate revenues related to the Gas Supply Incentive  
22 Plan from test year operating income and adjusts off-system sales and related gas  
23 costs to a normalized level of net revenues.



1 Q. Why have you made an adjustment for the Gas Supply Incentive Plan?

2 A. Pursuant to the terms of the Company's Gas Supply Incentive Plan, such revenues  
3 are addressed through the Company's Purchased Gas Adjustment Clause rather  
4 than through base rates. A separate proceeding addressing the Company's Gas  
5 Supply Incentive Plan is currently underway before the Commission.

6 Q. Why have you made adjustments to normalize off-system sales?

7 A. I am sponsoring adjustment 1.k. to reduce the revenues and adjustment 2.b. to  
8 reduce the gas cost expense associated with the Company's off-system sales. The  
9 Company is permitted to sell gas outside of its traditional service area when gas  
10 supply and market conditions permit. An abnormally high level of net revenues  
11 were generated from off-system sales during the twelve months ended February  
12 28, 2001. This level of net revenues has been reduced to a level that is more  
13 representative of normal conditions.

14 Rates Used in Calculation of Adjustments

15 Q. What rates have you used to price out the revenue adjustments you have made to  
16 test year utility operating income related to on-system sales levels?

17 A. Revenue adjustments related to on-system sales have been calculated using the  
18 non-gas rates in the Company's current tariffs that are designed to recover the  
19 Company's cost of service, other than the cost of purchased gas. The Purchased  
20 Gas Adjustment (PGA) Clause included in Laclede's tariffs provides for current  
21 recovery of projected gas cost levels and for deferred recovery of other gas cost  
22 price differences. Changes in the PGA rate are made on a prorated basis for  
23 billing purposes, based on number of days at the respective rate. In addition,

1 differences which occur between PGA revenue recovery and experienced gas cost  
2 are adjusted through deferral. We have not adjusted revenues for PGA rates in  
3 our individual adjustments of revenue. This makes some of the adjustments less  
4 complicated and has absolutely no impact on the Company's pro forma operating  
5 income because in each case we use non-gas rates to calculate revenue. In other  
6 words, if we had changed PGA revenue, we would also have changed expenses  
7 by exactly the same amount of adjusted natural gas cost and the result would have  
8 been the same operating income as the one calculated in our filing. In addition,  
9 we have not adjusted for gross receipts taxes in the revenue adjustments because  
10 if we had done so, we would have again adjusted exactly the same amount of  
11 dollars in the expense account for Taxes Other Than Income. As with the PGA,  
12 we have eliminated several calculations without changing the net result.

#### 13 Gross Receipts Taxes

14 Q. Please explain the adjustment to Taxes Other Than Income related to gross  
15 receipts tax expense.

16 A. Adjustment 8.e. normalizes, for ratemaking purposes, the gross receipts tax  
17 expense related to certain townships based on the level of gross receipts taxes  
18 recorded in test year revenues. Gross receipts taxes are levied upon and collected  
19 by the Company as a license to do business with various municipal entities within  
20 the Company's service territory that impose a license tax on gas sales. All gross  
21 receipts taxes billed to customers are recorded in the billing month as revenues,  
22 and are ultimately expensed in the current or subsequent months as appropriate.  
23 This adjustment is necessary to eliminate net revenues during the test year

1 resulting from timing differences in recognizing revenues and expenses related to  
2 these particular townships, thereby eliminating any impact on revenue  
3 requirement as a result of obligations imposed on the Company to collect and  
4 remit gross receipts taxes on behalf of these municipalities.

5 Uncollectible Accounts Expense

6 Q. Please describe your adjustment to uncollectible accounts expense.

7 A. I am sponsoring Adjustment 3.a. to Customer Accounts Expense, relating to  
8 Uncollectible Accounts Expense in the test period.

9 Q. Why is this adjustment necessary?

10 A. This adjustment reflects a normalized level of expense. Calculation of this  
11 amount is determined by multiplying the "percentage loss factor" times applicable  
12 normalized Company revenues. These calculations are shown on Schedule 9 to  
13 Section C.

14 Q. How was the percentage loss factor derived?

15 A. Uncollectible account write-offs for the five years ending February 28, 2001 were  
16 divided by net revenues for the five years ending on July 31, 2000. "Net  
17 revenues" are customer revenues less Transportation, Large Volume and  
18 Interruptible rate revenues, and less gross receipts tax expensed. This calculation  
19 results in the percentage loss factor shown on Schedule 9.

20 Q. Why are different time periods used for purposes of determining the uncollectible  
21 account and revenue amounts used in the calculation?

22 A. There is generally a seven-month lag between the revenue period when the  
23 customer is rendered service and the period when the customer's account will be

1 written off. Uncollectible accounts written off for the year ending February are,  
2 therefore, compared with revenues for the year ending the prior July because such  
3 a seven-month lag period allows us to better compare write-offs with the revenue  
4 period that actually generated the write-off amount.

5 Q. Does this pro forma level of Uncollectible Accounts Expense include the effect  
6 resulting from higher revenues associated with this rate request?

7 A. Yes. The Company is entitled to recognition of the increased bad debt expense  
8 from higher revenues associated with this rate request.

9 Q. Are you aware of any other factors that could significantly affect Laclede's  
10 uncollectible accounts expense in the future?

11 A. In general, the economy in the service area, the collection policies of the  
12 Company, the Commission's rules regarding service disconnection, and the level  
13 of energy assistance (heat grant) payments have the largest potential effect on our  
14 bad debts. A major cut in grants, or a shortfall between the level of energy  
15 assistance available and the amount required by customers, would have a  
16 significant adverse impact on Laclede's uncollectible accounts.

17 Q. Are there factors that might affect the level of uncollectible accounts expense in  
18 light of recent developments?

19 A. Yes. The Company's most immediate concern regarding uncollectible accounts  
20 expense is the impact that the recent dramatic rise in utility bills will have on the  
21 customers' ability to pay, and the subsequent effect on the percentage loss factor.  
22 Due to both the unprecedented increase in wholesale gas cost levels in recent  
23 months and colder than normal weather experienced during this past heating

1 season (following several mild heating seasons), utility bills have reached their  
2 highest levels since the 1980s. While it is difficult at this time to estimate the  
3 impact of the recent significant increase in utility bills on future uncollectible  
4 accounts expense, such factors as percentage loss experience and the market price  
5 of natural gas should be re-evaluated upon update to provide for an appropriate  
6 level of uncollectible accounts expense during the period for which new rates will  
7 apply.

#### 8 Depreciation and Amortization

9 Q. Are you sponsoring any adjustments to depreciation and amortization expense?

10 A. Yes. Adjustment 7, detailed on Schedule 18 of Section C, shows calculations that  
11 increase depreciation and amortization expense to the levels expected as of July  
12 31, 2001. This amount is based on proposed depreciation rates listed on Schedule  
13 1 of Section D., in the testimony of Company witness R. Lawrence Sherwin.  
14 Applicable utility plant in service estimated at July 31, 2001 was multiplied by  
15 these effective rates. The resulting annualized amount was compared to actual  
16 test year expense to derive the adjustment.

#### 17 Appliance Service Work

18 Q. Are you sponsoring any other income statement adjustments?

19 A. Yes. Adjustment 6.j., eliminates the net revenues related to the Company's  
20 appliance service work, pursuant to Section 386.756 (RSMo. Supp. 1998).  
21 Consistent with the statute, my adjustment effectively excludes all of the revenues  
22 received by the Company and costs incurred by the Company as a result of the  
23 Company's involvement in HVAC service work during the test year. Costs

1           incurred include labor, materials, advertising, administrative and general  
2           expenses, and transportation costs (including related depreciation expense).

3    Q.     Does this conclude your testimony?

4    A.     Yes.

FILED<sup>3</sup>

MAY 18 2001

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

Missouri Public  
Service Commission

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

Case No. GR-2001-629

AFFIDAVIT

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

Patricia A. Krieger, of lawful age, being first duly sworn, deposes and states:

1. My name is Patricia A. Krieger. My business address is 720 Olive Street, St. Louis, Missouri 63101; and I am Manager of Accounting for Laclede Gas Company.

2. Attached hereto and made part hereof for all purposes is my direct testimony, consisting of pages 1 to 28, inclusive; Section A - Schedules 1 to 7; and Section C - Schedules 3 to 9 and Schedule 18.

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.

Patricia A. Krieger  
Patricia A. Krieger

Subscribed and sworn to before me this 16<sup>th</sup> day of May, 2001.

Susan M. Kopp

SUSAN M. KOPP  
Notary Public — Notary Seal  
STATE OF MISSOURI  
St. Louis County  
My Commission Expires: Dec. 19, 2003