

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

FILED³

JAN 25 2002

Missouri Public
Service Commission

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

Case No. GR-2002-356

A F F I D A V I T

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

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

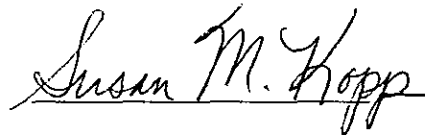
1. My name is Patricia A. Krieger. My business address is 720 Olive Street, St. Louis, Missouri 63101; and I am Manager of Accounting for Laclede Gas Company.

2. Attached hereto and made a part hereof for all purposes is my direct testimony, consisting of pages 1 to 25, inclusive; Section A – Schedules 1 to 7; and Section C – Schedules 3 to 8 and Schedule 19.

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

Subscribed and sworn to before me this 24th day of January, 2002.



SUSAN M. KOPP
Notary Public — Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: Dec. 19, 2005

Exhibit No.:

Issue:

Witness:

Type of Exhibit:

Sponsoring Party:

Case No.:

Rate Base,

Accounting Schedules

Patricia A. Krieger

Direct Testimony

Laclede Gas Company

GR-2002-356

LACLEDE GAS COMPANY

GR-2002-356

DIRECT TESTIMONY

OF

PATRICIA A. KRIEGER

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 ("Laclede" or
6 "Company").

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

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

14 Financial Reporting duties include preparing reports to the Securities and
15 Exchange Commission, to stockholders and to this Commission. General
16 Accounting duties include processing of payments to our suppliers and
17 maintaining various records. Gas Accounting covers accounting activities
18 relating to the Company's natural gas costs and customer revenues, as well as
19 analyses of the effects of weather on customer sales. Asset Management

1 maintains the continuing property records of the Company and carries out related
2 duties.

3 Q. What is your educational background?

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

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

8 A. I joined Laclede in November, 1976 as an Accountant in the Corporate
9 Accounting Department. I was promoted to Senior Auditor in June, 1979 and
10 transferred to the Internal Audit Department. In June, 1983, I was transferred to
11 the Budget Department, where I served as Senior Budget Analyst and Assistant
12 Manager until being promoted to Manager of the Budget Department in April,
13 1988. I held this position until being promoted to Manager of Accounting.

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

15 A. Yes, I have. I have previously filed testimony in Cases Nos. GR-2001-629,
16 GM-2001-342, GR-99-315, GR-98-374, GR-96-193, and GR-94-220.

17 Q. What is the purpose of your testimony?

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

23 Q. Please list the schedules you are sponsoring.

1 A. The following schedules were prepared by me or under my supervision: Section
2 A, RATE BASE: Schedule 1. This schedule summarizes the components of the
3 Company's original cost rate base estimated at March 31, 2002. Schedules 2
4 through 7 of Section A. These schedules provide detailed information in support
5 of certain elements of rate base, including working capital, and are described later
6 in my testimony. Section C, TEST YEAR UTILITY OPERATING INCOME
7 STATEMENTS AND ADJUSTMENTS; Schedules 3 through 8, and Schedule
8 19. These schedules provide supporting detail for certain adjustments to test year
9 utility operating income which I am sponsoring. These adjustments are described
10 later in my testimony.

11 Rate Base

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

14 A. Gross Plant amounts for Laclede have been estimated to March 31, 2002.
15 Deducted therefrom is the estimated balance of accumulated provision for
16 depreciation, depletion and amortization at the same date. I also deducted the
17 November 30, 2001 balance of customer advances for construction. Schedules 2
18 through 7 of Section A include the detail of balances for working capital, which I
19 am sponsoring as additions to rate base.

20 Q. What is "working capital?"

21 A. Working capital, as I use the term here, is the average amount of investment in the
22 utility business provided by investors, in excess of that which is included in net
23 utility plant, offset by appropriate deferred income taxes. Working capital

1 includes the Company's investment in its various inventories, prepayments and
2 deposits, and materials and supplies.

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

4 A. Schedule 2 shows actual balances for Special Deposits over the test year ending
5 November 30, 2001, and derives an average balance.

6 Schedules 3, 4 and 5 list actual balances for the Company's Propane Gas
7 Inventory, the current portion of Natural Gas Stored Underground in the Laclede
8 storage field and Natural Gas Stored Underground in the storage fields of others
9 (primarily Mississippi River Transmission Corporation), over the test year ended
10 November 30, 2001, and derive average balances.

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

17 Schedule 6 of Section A shows actual balances in Prepayments over the
18 test period ending November 30, 2001, and derives an average balance for
19 inclusion in rate base.

20 Schedule 7 shows the actual balances in Accounts 154 and 163, General
21 Materials and Supplies and Related Stores Expense, at the beginning of the test
22 year and at month end for each of the months in the test year. These balances

1 have been taken from the books and records of the Company. Also shown is the
2 average balance which I have included in rate base.

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

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

11 **Adjustments to Utility Operating Income**

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

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

Large User Load Changes

Q. Please discuss the adjustments related to large users.

A. Adjustments 1.c., 1.d., 1.e., and 1.g., reflect known and measurable changes through March 31, 2002 in the usage levels and/or rate schedules for several of our large customers. These are customers whose circumstances have changed or are expected to change due to changes in volumes, newly contracted-for demand levels, and/or changes in the rates under which they purchase gas. These adjustments are necessary to include the most recent known sales information for these customers in normalized revenues. The four categories are:

I. Firm Sales Service

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

II. Firm Transportation and Sales Service

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

III. Basic Transportation and Sales Service

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

IV. Interruptible Sales Service

1 Adjustment 1.g. (Schedule 7) reflects the rate switching and/or load
2 changes of one specific customer.

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

4 A. Adjustment 1.f. (Schedule 6) reflects a normalized level of unauthorized use
5 charges for the Company's basic transportation customers. During the test year
6 ended November 30, 2001, this group of customers was billed an abnormally high
7 level of unauthorized use charges due to their use of natural gas on days of
8 limitation. Due to the extremely cold weather experienced during the months of
9 December 2000 and January 2001, the days of limitation during the test year were
10 higher than normal. Adjustment 1.f. reduces revenues related to unauthorized use
11 charges to a normal level based on the average number of days of limitation per
12 year since the year that the unauthorized charge commenced.

13 **Residential and Small Commercial Customer Changes**

14 Q. Please explain the revenue adjustment made to reflect changes in residential and
15 small commercial customers.

16 A. During the test year, the Company experienced modest growth in both its
17 residential and small commercial customers billed at the General Service rate in
18 its St. Charles and Midwest operating divisions. Laclede and Missouri Natural
19 operating divisions experienced customer losses. Adjustment 1.h. (Schedule 8)
20 adjusts revenues to an annualized level that includes these changes in customer
21 levels as if those levels had been experienced for the full year. Furthermore, the
22 adjustment adds revenues related to projected customer growth in the St. Charles
23 and Midwest operating divisions of the Company through March 31, 2002.

1 Q. What is the basis for this adjustment?

2 A. This overall residential and small commercial customer adjustment reflects
3 annualized customer changes based on the period ended December 2001, and the
4 same rate of growth through March 31, 2002 in the St. Charles and Midwest
5 operating divisions.

6 **Weather Normalization**

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

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

14 Q. Is the effect of weather significant?

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

21 Approximately 98% of Laclede's residential customers use gas for their
22 primary heat source. A number of the remaining residential customers use gas for
23 a secondary heat source. In our service area, the vast majority of an average

1 heating customer's usage is for space heating, followed by water heating usage.
2 Other end uses, such as cooking, clothes drying, and lighting constitute a small
3 fraction of the total. Because Laclede is particularly dependent on space heating
4 for its revenues, weather is a primary variable in determining Laclede's revenues.

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

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

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

19 A. A heating degree day is a unit used to measure the requirement for space heating
20 due to the coldness of weather. Specifically, each heating degree day represents
21 each degree by which the average temperature for a day falls below 65°
22 Fahrenheit based on daily high and low temperatures recorded and published by
23 the National Oceanic and Atmospheric Administration (NOAA), an agency of the

1 United States Government. Thus, an average daily temperature of 45° Fahrenheit
2 would be equal to 20 degree days. Degree days can be calculated and
3 accumulated for a number of days, such as a month or a heating season, to
4 provide a measure of heat requirements.

5 Q. How are normal degree days determined?

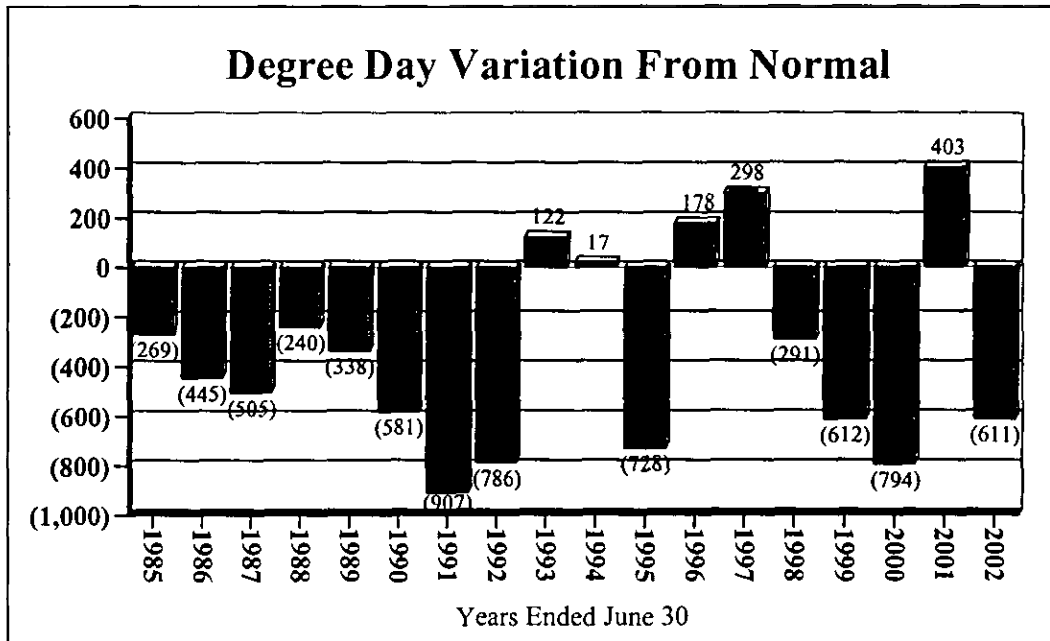
6 A. Generally, normal degree days are determined by an analysis of historical data. In
7 the past, the Company's rates have been based on various normals calculated by
8 averaging actual degree days experienced over periods ranging from thirty years
9 to longer-term averages which used all historical weather data available for this
10 century. More recently, rates have been set based on 30 years of historical data or
11 parameters agreed upon by the parties developed from 30 year data.

12 Q. What has recent experience shown the deviation to be between actual degree days
13 and such 30 year normals.?

14 A. Recent experience has shown that traditional 30-year normals are unreliable in
15 approximating expected degree days, even over a span of a number of years. The
16 following table shows the heating season degree days, as reported by NOAA, that
17 were actually experienced during recent years compared with the NOAA 30-year
18 normal degree days for St. Louis, Missouri.

19 The predominantly warmer-than-normal weather experienced since 1985
20 has caused Laclede's sales levels to fall short of those levels predicated on long-
21 term norms upon which rates were set, having a significant adverse effect on the
22 Company's earnings and rate of return. Earnings have been depressed by millions

1 of dollars during these years, resulting in long-term earnings shortfalls from the
 2 levels justified and approved by the Commission in previous rate cases.



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	5,161	4,758	**	403
2002	est. 4,147	4,758	**	(611)

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

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

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

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

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

18 A. No. There will still be colder-than-normal seasons, but not as frequently as in the
19 past. Weather fluctuates widely and natural weather variability still exists.
20 However, traditional 30-year normals do not adequately reflect the effect of
21 urbanization experienced in recent decades on the Company's service area nor the
22 warming trend which began in the mid-1980s. Until this warming trend ends and
23 the effects of urbanization are addressed in an appropriate normal, the probability

1 of warmer-than-normal seasons is greater than the probability of colder-than-
2 normal seasons. We cannot expect or hope that weather fluctuations will "level
3 out" over a span of years and approximate the traditional 30-year normal, unless
4 those fluctuations are the result of only natural weather variation. Unfortunately,
5 NOAA 30-year normals, especially the latest published normal which ends with
6 1990 data, cannot adequately reflect the effects of urbanization and warming
7 trends that have occurred not only during that 30-year period but also during the
8 decade that has followed.

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

11 A. Yes. The Company is asking the Commission to recognize for ratemaking
12 purposes weather methodologies that would more equitably serve the ratepayer
13 and the shareholder and that are more in tune with actual current climatological
14 conditions. Failure to recognize the inadequacies and inappropriateness of the use
15 of traditional 30-year normals, particularly without any other weather mitigation
16 measures, is extremely detrimental for a utility like Laclede, whose earnings are
17 so dependent on weather-related space heating sales. When the level of normal
18 degree days assumed in the regulatory process is consistently too high, it becomes
19 a virtual certainty that the utility will not be able to earn a fair return. A utility
20 which is consistently denied an opportunity to earn a fair return will soon suffer
21 adverse financial consequences which will negatively affect its ability to serve its
22 customers. The Company can no longer continue to absorb such shortfalls and
23 remain financially strong. The unlikelihood of being able to achieve a 30-year

1 degree day normal upon which rates have traditionally been set, coupled with
2 Laclede's higher-than-average weather-sensitive load, serves only to further
3 increase the Company's risk of being unable to recover its fixed operational costs
4 and achieve a fair rate of return.

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

7 A. One solution in addressing the complexities of the issues surrounding weather
8 normalization is to implement some form of weather mitigation clause. The
9 Company has proposed a weather mitigation clause (WMC) which, if approved
10 by the Commission, would provide an equitable solution to the weather
11 normalization issue for both the shareholder and the ratepayer. Please see the
12 testimony of M. T. Cline filed in this proceeding. Not only would such a
13 mechanism allow the Company to recover what are basically fixed distribution
14 costs, but it would additionally provide a more stable pricing environment for the
15 Company's customers. Adoption of the weather mitigation clause would
16 substantially reduce the burden of determining precisely the appropriate number
17 of normal heating degree days. Although a reasonable level of normal degree
18 days would need to be calculated to ensure "real time" cost to ratepayers and "real
19 time" recovery to shareholders, the adoption of such a mechanism would, more or
20 less, eliminate long-term shortfalls or windfalls in customer revenues. In the
21 process, such a mechanism would more equitably serve both the shareholder and
22 the ratepayer than the current "win or lose" ratemaking methodology. The effect

1 of the proposed WMC on the weather normalization adjustment I am sponsoring
2 is described in the testimony of G. W. Buck filed in this case.

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

5 A. Adoption of a WMC is the best solution to the issue for all concerned. However,
6 if a WMC is not implemented, then the alternative is to employ a 10-year normal
7 in the traditional weather normalization process. Use of a 10-year normal can be
8 scientifically supported and is consistent with commercial applications of weather
9 data as well.

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

13 A. Traditional 30-year normals as published by NOAA are not intended to predict
14 future weather experience. NOAA's 30-year "normals" are published to provide
15 a baseline predicated on past history to which current experience can be
16 compared. They are simply intended to show where we have been and are not
17 intended to be an indicator of future conditions. Therefore, 30-year normals are
18 not appropriate benchmarks to establish rates for the future. The normals used in
19 ratemaking should be the number of heating degree days most likely to result in a
20 leveling out of natural weather variations so as not to impact severely either the
21 Company or the ratepayer over a relatively near-term span of years. Given the
22 increasing evidence of climatic warming and recognized urbanization and heat
23 island impacts on weather stations in densely populated areas, it follows that the

1 use of more recent historical weather data would better indicate the climate
2 conditions which can be expected during the periods rates will be in effect. In
3 fact, for long-term temperature predictions, the Climate Prediction Center (a
4 division of NOAA) currently utilizes optimal climate normals (OCNs). OCNs are
5 based on a ten-year history of weather experience.

6 Q. Explain how OCNs were developed.

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

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

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

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

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

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

8 A. Yes, adjustment 1.a. reflects the decrease in revenues at base rates for customers
9 served under the general service rate to the level that would have been achieved at
10 4,444 degree days. Calculations supporting the amount of the adjustment are
11 shown on Schedule 3 of Section C, Pages 1 through 14.

12 Actual revenues for the twelve months ending November 2001 reflected
13 5,027 heating degree days on a billing cycle basis. As is shown on Page 2 of
14 Schedule 3, this was 583 heating degree days more than the normal heating
15 degree day level of 4,444 for the 10-year period ended December 2001. As I
16 previously indicated, Company Witness Buck is sponsoring a separate adjustment
17 based on a higher number of degree days that Laclede is proposing to use only in
18 the event the Commission adopts the Company's proposed WMC.

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

20 A. Heating degree days recorded on a calendar day basis have been converted by the
21 Company to a billing cycle basis, which reflects the Company's cycle method of
22 billing its customers. Although the Company recognizes revenues on a calendar-
23 month basis for financial reporting, its underlying records are maintained on a

1 cycle billing basis, with a separate entry each month to adjust to a calendar month
2 basis. I am also sponsoring an adjustment to reverse this entry, effectively
3 returning the income statement set out on Schedule 1 of Section C to a billing
4 cycle basis. Under this method, the Company recognizes revenue as recorded by
5 its meters, which are read throughout the month. Thus, monthly billing cycle
6 revenues do not reflect usage through month-end for most customers but
7 generally reflect one month of consumption ending on various days during the
8 billing month. For consistency, heating degree days have been calculated on a
9 billing cycle basis.

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

11 A. Pages 3 through 14 of this Schedule contain the calculation of the weather
12 normalization adjustment to therm sales and revenues. A separate calculation is
13 made for each appropriate revenue class of each operating division. In each case,
14 the average annual use per customer is the starting point, and the customer use
15 that does not vary with degree days is subtracted to yield the use per customer per
16 degree day.

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

19 A. This use per customer is based upon the July and August use per customer. The
20 months of July and August do not reflect any space heating load. This two-month
21 use is multiplied by six, to produce an annual figure, and the product of this
22 multiplication is finally multiplied by a factor of 1.35 (135%) to calculate the
23 annual usage which does not vary with temperature. It is necessary to increase

1 the 12 months of summer usage by 35% to reflect the fact that customers' "base"
2 usage in winter months exceeds their usage during the summer. This increase is
3 separate from any space heating requirement and is not a function of the number
4 of degree days experienced. Rather, it arises in large part from the necessity of
5 heating water from lower starting temperatures during the winter. The seasonal
6 increase in water heating load has been supported over the years by special
7 studies of Laclede customers wherein monthly usages have been analyzed and
8 patterned.

9 Q. Please continue with your explanation.

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

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

20 A. Yes. Adjustment 1.b. reflects the decrease in revenues at base rates for customers
21 served on the large volume and transportation service rates to the level that would
22 have been achieved at 4,444 degree days. Although gas requirements for
23 customers served on these service rates are primarily for purposes other than

1 spaceheating, some customers served on these rates exhibit weather sensitivity.
2 An average heating use per degree day for each rate and revenue class was
3 determined by deducting the annualized May through October 2001 usage from
4 the total usage for these groups of customers and dividing by actual degree days
5 for the test year. The degree day variation from normal was multiplied by the
6 average heating usage per degree day and priced at the appropriate second block
7 base rate.

8 Q. Does this complete your discussion of weather?

9 A. Yes, it does.

10 **Unbilled Revenues**

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

12 A. Adjustment 1.1. removes accruals of unbilled revenues from test year operating
13 income.

14 Q. Why have you made this adjustment?

15 A. The Company reads meters throughout the month, so revenues billed to our
16 customers do not reflect usage through the end of the month in most cases. The
17 Company records revenues and the related cost of gas for all gas delivered during
18 a month. This method properly reports revenues in the period in which gas was
19 used by our customers but requires that estimates of sales be made each month
20 between the date meters were read and the end of the month. Adjustments 1.1.
21 and 2.a. eliminate the effect of these estimates so that test year revenues and gas
22 costs are based on an actual billed twelve-month period.

1 **Gas Supply Incentive Plan, Capacity Release and Off-System Sales**

2 Q. Please explain the adjustments related to the Company's Gas Supply Incentive
3 Plan and revenues from off-system sales and the release of pipeline capacity.

4 A. Adjustments 1.m. and 2.b. eliminate revenues related to the Gas Supply Incentive
5 Plan from test year operating income and adjusts off-system sales and related gas
6 costs as well as capacity release income to a normalized level of net revenues.

7 Q. Why have you made these adjustments?

8 A. Pursuant to the Commission's Order, the Company's Gas Supply Incentive Plan
9 was allowed to expire on September 30, 2001. As a result of the Stipulation and
10 Agreement approved in Case No. GR-2001-629, an amount of capacity release
11 and off-system sales revenues was imputed in base rates in exchange for the
12 Company's right to retain all such revenues from those transactions. I am
13 sponsoring adjustment 1.m. to reduce the revenues and adjustment 2.b. to reduce
14 the gas cost expense associated with these items to reflect these developments
15 and to adjust amounts recognized during the twelve months ended November 30,
16 2001 to a level that is representative of ongoing conditions.

17 **Unrealized Portion of General Rate Increase**

18 Q. Please explain the adjustment related to the Company's last general rate increase.

19 A. The Stipulation and Agreement in Case No. GR-2001-629 provided for new
20 customer rate schedules to be effective December 1, 2001. Natural gas sales to
21 customers during the test year ended November 30, 2001 were billed based on
22 rate schedules in effect prior to December 1, 2001. Adjustment 1.i. adjusts

1 revenues to the level of non-gas revenues that would have been realized during
2 the test year if the new rate schedules had been in effect.

3 **Rates Used in Calculation of Adjustments**

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

6 A. Revenue adjustments related to on-system sales have been calculated using the
7 non-gas rates in the Company's tariffs, effective December 1, 2001, that are
8 designed to recover the Company's cost of service, other than the cost of
9 purchased gas. The Purchased Gas Adjustment (PGA) Clause included in
10 Laclede's tariffs provides for current recovery of projected gas cost levels and for
11 deferred recovery of other gas cost price differences. Changes in the PGA rate
12 are made on a prorated basis for billing purposes, based on number of days at the
13 respective rate. In addition, differences which occur between PGA revenue
14 recovery and experienced gas cost are adjusted through deferral. Adjustment 1.o.
15 eliminates from the income statement all gas costs included in revenues
16 associated with amounts billed to customers under the Company's PGA Clause.
17 Accordingly, Adjustment 2.c. eliminates the natural gas costs associated with
18 billed sales. Since all gas costs have been removed from the income statement,
19 we have not adjusted revenues for PGA rates in our individual adjustments of
20 revenue. This makes some of the adjustments less complicated and has absolutely
21 no impact on the Company's pro forma operating income because in each case we
22 use non-gas rates to calculate revenue. In other words, if we had changed PGA
23 revenue, we would also have changed expenses by exactly the same amount of

1 adjusted natural gas cost and the result would have been the same operating
2 income as the one calculated in our filing. In addition, we have not adjusted for
3 gross receipts taxes in the revenue adjustments because if we had done so, we
4 would have again adjusted exactly the same amount of dollars in the expense
5 account for Taxes Other Than Income. As with the PGA, we have eliminated
6 several calculations without changing the net result.

7 Gross Receipts Taxes

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

10 A. Adjustment 8.e. normalizes, for ratemaking purposes, the gross receipts tax
11 expense related to certain townships based on the level of gross receipts taxes
12 recorded in test year revenues. Gross receipts taxes are levied upon and collected
13 by the Company as a license to do business in certain municipalities that impose a
14 license tax on gas sales. All gross receipts taxes billed to customers are recorded
15 in the billing month as revenues, and are ultimately expensed in the current or
16 subsequent months as appropriate. This adjustment is necessary to eliminate net
17 revenues during the test year resulting from timing differences in recognizing
18 revenues and expenses related to these particular municipalities, thereby
19 eliminating any impact on revenue requirement as a result of obligations imposed
20 on the Company to collect and remit gross receipts taxes on behalf of these
21 municipalities.

22 Depreciation and Amortization

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

1 A. Yes. Adjustments 7.a.and 7.b., detailed on Schedule 19 of Section C, shows
2 calculations that decrease depreciation expense and increase amortization expense
3 to the levels expected as of March 31, 2002. This amount is based on
4 depreciation rates effective December 1, 2001, as approved by the Commission
5 (pending the outcome of certain judicial review proceedings). Applicable utility
6 plant in service estimated at March 31, 2002 was multiplied by these effective
7 rates. The resulting annualized amount was compared to actual test year expense
8 to derive the adjustment.

9 **Costs of Removal**

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

11 A. Yes. During the 12 months ended November 30, 2001, a provision for removal
12 costs of retired utility plant was included in depreciation expense. Pursuant to the
13 Stipulation and Agreement in Case No. GR-2001-629, removal costs are expensed
14 as incurred, effective December 1, 2001. Pending the outcome of certain judicial
15 review proceedings, the depreciation rates authorized by the MoPSC effective
16 December 1, 2001 exclude any provision for costs of removal. Adjustment 7.a..
17 adjusts depreciation expense to a level reflecting implementation of the December
18 1, 2001 depreciation rates. Accordingly, Adjustment 7.d. provides for costs of
19 removal to be treated as an item of expense, and such adjustment is based on the
20 actual costs of removal incurred during the test year.

21 **Appliance Service Work**

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

- 1 A. Yes. Adjustment 6.h., eliminates the net revenues related to the Company's
2 appliance service work, pursuant to Section 386.756 (RSMo. Supp. 1998).
3 Consistent with the statute, my adjustment effectively excludes all of the revenues
4 received by the Company and costs incurred by the Company as a result of the
5 Company's involvement in HVAC service work during the test year. Costs
6 incurred include labor, materials, advertising, administrative and general
7 expenses, and transportation costs (including related depreciation expense).
- 8 Q. Does this conclude your direct testimony?
- 9 A. Yes, it does.