

Exhibit No.:

EXHIBIT

Issue(s)

Gas Procurement Mechanisms

Witness/Type of Exhibit:

Meisenheimer/Rebuttal

Sponsoring Party:

Public Counsel

Case No.:

GT-2001-329

REBUTTAL TESTIMONY

OF

BARBARA A. MEISENHEIMER

Submitted on Behalf of the Office of the Public Counsel

LACLEDE GAS COMPANY

Case No.: GT-2001-329

May 4, 2001

Exhibit No. 35
Date 6/18/01 Case No. GT-2001-329
Reporter KLM

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the matter of Laclede Gas Company's tariff)
filing to implement an experimental fixed price)
Plan and other modifications to its gas supply)
incentive plan.)

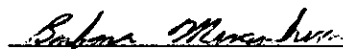
Case No. GT-2001-329

AFFIDAVIT OF BARBARA A. MEISENHEIMER

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

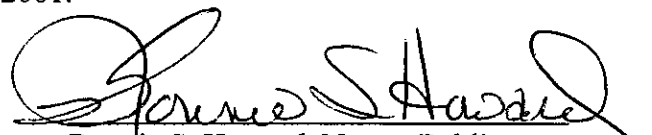
Barbara A. Meisenheimer, of lawful age and being first duly sworn, deposes and states:

1. My name is Barbara A. Meisenheimer. I am Chief Utility Economist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony consisting of pages 1 through 21 and Schedules BAM-1 through BAM-4.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.



Barbara A. Meisenheimer

Subscribed and sworn to me this 4th day of May, 2001.



Bonnie S. Howard, Notary Public

My Commission expires May 3, 2005.

REBUTTAL TESTIMONY
OF
BARBARA A. MEISENHEIMER
LACLEDE GAS COMPANY
TARIFF FILING TO MODIFY THE EXPERIMENTAL GAS
INCENTIVE SUPPLY PROGRAM
CASE NO. GT-2001-329

Introduction

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel, P. O. Box 7800, Jefferson City, Missouri 65102. I am also employed as an adjunct Economics Instructor for William Woods University.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND EMPLOYMENT BACKGROUND.

A. I hold a Bachelor of Science degree in Mathematics from the University of Missouri-Columbia (UMC) and have completed the comprehensive exams for a Ph.D. in Economics from the same institution. My two fields of study are Quantitative Economics and Industrial Organization. My outside field of study is Statistics. I have taught Economics courses for the following institutions: University of Missouri-Columbia, William Woods University, and Lincoln University. I have taught courses at both the undergraduate and graduate levels.

1 **Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THIS COMMISSION?**

2 A. Yes, I have testified on numerous issues before the Missouri Public Service Commission.
3 (PSC or Commission)

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 A. I am presenting Public Counsel's concerns and recommendations regarding the current
6 and proposed Gas Procurement portion of Laclede Gas Company's (Laclede's or the
7 Company's) Experimental Gas Incentive Supply Program (EGSIP or Program). Public
8 Counsel witness James Busch will address our concerns and recommendations regarding
9 the other three EGSIP mechanisms: Capacity Release, Transportation Discounts and Mix
10 of Pipeline Services. Schedule EGSIP-Summary provides an outline of each component
11 of the current EGSIP.

12 **Q. ARE YOU GENERALLY FAMILIAR WITH THE FIELDS OF ECONOMICS THAT ADDRESS THE**
13 **APPROPRIATE DESIGN OF INCENTIVE PLANS?**

14 A. Yes, I am. The focus of my graduate work was the study of Quantitative Economics and
15 Industrial Organization. These fields address the appropriate design of incentive plans
16 through the application of "game theory." Game theory is a hybrid of mathematics and
17 statistics that allows economists to model strategic interaction. Given assumptions
18 regarding objectives, the level of risk aversion, the term of interaction, and the
19 information available to individual economic agents, economists are able to evaluate the
20 efficiency of incentive plans under various market conditions.

1 **Q. IN PREPARATION OF YOUR TESTIMONY, WHAT MATERIALS DID YOU REVIEW?**

2 A. I have specifically reviewed the direct testimony of Kenneth Neises and Scott Jaskowiak
3 filed in support of the proposed tariff, materials from cases GT-99-303 and GO-2000-
4 395, and responses to OPC data requests.

5 **Laclede's Current Experimental Gas Procurement Mechanisms**

6 **Q. PLEASE DESCRIBE THE CURRENT EXPERIMENTAL GAS PROCUREMENT MECHANISMS**
7 **CONTAINED IN LACLEDE'S EGSIP.**

8 A. The Experimental Gas Procurement portion of the current EGSIP includes a fixed price
9 mechanism and a benchmark cost mechanism.

10 **Q. PLEASE DESCRIBE THE CURRENT FIXED PRICE MECHANISM.**

11 A. The current fixed price mechanism was originally proposed by Laclede and approved by
12 the Commission in GT-99-303. By design, it allows the Company through the use of
13 fixed price futures contracts to profit from securing gas at prices below a fixed target
14 price. The fixed target price is calculated as the five-year historic (summer or winter)
15 aggregated New York Mercantile Exchange (NYMEX) price adjusted for any delivery
16 month differential attributable to the specific delivering pipeline company.¹ Under this
17 mechanism, Laclede does not flow through to customers the full amount of the cost
18 reductions. Instead, Laclede is permitted to retain a portion of the commodity cost
19 discounts as excess profit. In other words, this mechanism provides a profit opportunity
20 in excess of the normal profit opportunity afforded through a traditional rate case.

¹ Laclede tariff P.S.C. MO. No. 5 Consolidated, Third Revised Sheet Nos. 26 – 27

The level of excess profit is based on the amount by which Laclede's actual price per MMBtu beats the fixed price target and the first of the month index price. The profit grid is illustrated below:

Table 1. Fixed Price Profit Scheme

If The Difference Between Laclede's Price Per MMBtu And The Lower Of The Index Or The Fixed Target Price Is:	Laclede Retains
Less than or equal to 10¢	10% on all volumes
11¢ up to and including 20¢	20% on all volumes
21¢ up to and including 30¢	30% on all volumes
31¢ up to and including 40¢	40% on all volumes
More than 40¢	50% on all volumes

It is also important to note that there is no reciprocal provision reflected in the grid that would require Laclede to compensate consumers in the event that the Company's actual cost exceed the fixed price target on the appropriate first of the month index.

Q. HAS LACLEDE UTILIZED THIS FIXED PRICE MECHANISM?

A. No, despite the fact that Laclede originally proposed the mechanism, the Company has not used it. Instead, the Company has consistently pursued a procurement strategy that allows the prices its customers pay to follow the more volatile moving market index price for gas.

1 **Q. WHY MIGHT THE COMPANY CHOOSE NOT TO USE THIS MECHANISM TO FIX GAS COSTS?**

2 A Laclede has repeatedly suggested that it views the threat of a prudence review as a reason
3 not to purchase under fixed price contracts. Another reason may be that given the recent
4 upward trend in gas futures prices it is likely that there was no possibility of securing
5 actual prices that would be less than the historic based fixed price target. Therefore, there
6 would be no opportunity to profit from pursuing a fixed price strategy. Despite the exact
7 motivation, the result was that Laclede's customers had no fixed price protection to
8 mitigate last winters unprecedented increase in gas costs.

9 **Q. PLEASE DESCRIBE THE CURRENT BENCHMARK COST MECHANISM.**

10 A. The benchmark cost mechanism allows Laclede to profit on volumes not secured under
11 fixed price contracts. The mechanism establishes a dual component benchmark to which
12 Laclede's actual cost performance is compared. Under this mechanism, profits are not
13 determined on a per MMBtu basis. Instead, Laclede's actual total monthly cost of all
14 volumes excluding fixed price volumes are compared to a monthly "cumulative
15 benchmark" that reflects the demand and commodity cost for multiple supply sources.²

16
17
18
19
² Laclede tariffs P.S.C. MO. No. 5 Consolidated, Third Revised Sheet Nos. 25, 26, 28

The general equation that describes the derivation of the benchmark is;

$$\text{Cumulative Benchmark Cost Of Gas} = \frac{\text{Demand Component} + \text{Commodity Component}}{12 \text{ Months}}$$

Where;

- The Demand Component reflects a simple monthly average of annual demand cost. It is calculated by multiplying established "annual supply design requirement" volumes (33.2 Bcf for baseload, 70.4 Bcf for combination, 14.1 Bcf for swing) by a weighted average demand charge cost per unit. The weighted average demand charge is based on responses to Company issued requests for proposals (RFPs) for various regions and types of load. The calculation excludes the use of the highest 10% of bids.
- The Commodity Component is calculated as the product of on-system monthly sales volumes excluding those purchased on a fixed price basis and a weighted average cost of gas. The weighted average cost of gas is based on the *Inside FERC* first-of-month price indices for "Reliant Gas Transmissions-East" and "Trunkline-Louisiana" weighted 60% and 40% respectively.

Profit from the cumulative benchmark mechanisms is based on the following grid;

Table 2. Benchmark Cost Profit Scheme

If	Laclede
104% of Benchmark > Actual Cost > Benchmark	Pays 0, Guaranteed No Prudence Review
110% of Benchmark > Actual Cost > 104% of Benchmark	Pays 50% of (Actual Cost - 104% Benchmark), Guaranteed No Prudence Review
Actual Cost > Benchmark	Pays 50% of (110% - 104%) of Benchmark, Prudence Review of Actual Cost > 110%
Benchmark > Actual Cost	Receives 50% of (Benchmark - Actual Costs)

1 **Q. HAS LACLEDE UTILIZE THE COST BENCHMARK MECHANISM?**

2 A. Yes, by default, this mechanism applies to all of its on-system volumes except those
3 purchased on a firm fixed price basis.

4 **Q. HOW EFFECTIVE HAS THIS MECHANISM BEEN IN MITIGATING GAS COSTS FOR**
5 **CONSUMERS?**

6 A. Based on estimated EGSIP Gas Supply cost reductions and gas supply cost for the
7 1999/2000 ACA Period, it appears that the impact of this mechanism amounted to just
8 over 4¢ per dollar spent on natural gas. Of the 4¢, Laclede kept half reducing the
9 consumer impact to about 2¢ per dollar spent on gas. Keep in mind that this "savings"
10 was determined based on an assumption that the alternative was to basically pay the
11 moving market index price. It does not reflect the "savings" that might be achieved under
12 other procurement strategies.

13 **Q. HOW HAS LACLEDE FAIRED UNDER THIS MECHANISM?**

14 A. Laclede retained just over \$5.0 million dollars from this mechanism for the 1999/2000
15 ACA period.

16 **Q. WHY HAVE THE GAS PROCUREMENT MECHANISMS BEEN SO INEFFECTIVE IN REDUCING**
17 **CUSTOMER GAS COSTS?**

18 A. I believe that there are a number of contributing factors. With respect to the benchmark
19 mechanism, the demand component of gas costs represents only a small fraction of the
20 cost of gas, roughly 2-5%. The lion's share of the cost, 95-98% are instead attributable to
21 the commodity component. Under the benchmark mechanism Laclede has some ability

1 to control reductions in the demand charge. However, under this scenario Laclede pays
2 the going market price at delivery for the commodity component. Since Laclede has no
3 control over the commodity component that constitutes the vast majority of costs, the
4 benchmark mechanism provides no meaningful protection for customers.

5 **Q. PLEASE EXPLAIN THE OTHER CONTRIBUTING FACTORS.**

6 A. Another reason I believe that the gas procurement mechanisms have proven ineffective is
7 that the design of the incentive plan yields little incentive for Laclede to act in a manner
8 that promotes consumers' best interests. Economic theory suggests that when an
9 "**incentive planner**" (the Commission) acting on behalf of the "**principal**" (the body of
10 ratepayers) wants to design an incentive payment to induce an "**agent**" (Laclede) to take
11 the best action from the view point of the principle (ratepayers) the design of the
12 incentive payment must be "**individually rational**" and "**incentive compatible**" for the
13 agent. (Laclede) To be individually rational for the agent (Laclede) an incentive structure
14 must offer at least the "**reservation price**" (minimum payment) that would cause the
15 agent (Laclede) to be willing to participate. The more risk averse the agent (Laclede), the
16 higher the reservation price they would demand. Conversely, the higher the reservation
17 price, the less likely that the net benefit from the incentive plan will justify the cost to the
18 principal (ratepayers). To be incentive compatible, the structure of the incentive
19 payments must be designed in a way that causes the agent (Laclede), when acting in its
20 own best interest, to act in a manner that produces the principal's (ratepayer's) desired
21 outcome. Unfortunately, the design of portions of the current EGSIP do not satisfy these
22 constraints thus providing perverse incentives for Laclede to act in ways that do not
23 achieve the desired outcomes for ratepayers. Recent natural gas price increases
24 demonstrate that consumers would have been best served by a procurement strategy that

1 included purchasing a reasonable measure of fixed price contracts, however, under the
2 EGSIP Laclede was not persuaded to do so.

3 **Q. WHY DO YOU BELIEVE THE CURRENT FIXED PRICE MECHANISM IS NOT INCENTIVE**
4 **COMPATIBLE?**

5 A. The fixed price mechanism is not incentive compatible for two reasons. First, the
6 Company fears a prudence review apparently believing that such a review is less likely if
7 costs are left to float with a moving market index. Second, Laclede cannot profit from
8 volumes purchased under the fixed price mechanism when those prices exceed the
9 historic average. Given the unprecedented increase in prices during the past heating
10 season, it was impossible for Laclede to beat the historic average. I would suggest that
11 together with Laclede's probable concerns the plan contains perverse incentives that
12 reduce the likelihood that Laclede would ever choose to purchase fixed price contracts.
13 The longer Laclede waits to buy fixed price contracts during a downturn, the greater the
14 percentage payoff from the fixed price mechanism. By holding out there is little threat
15 that Laclede will loose the opportunity to profit since by default when such volumes are
16 not purchased under a fixed price mechanism, they can still generate profit under the
17 benchmark mechanism. For fiscal year 1999-2000, Laclede was operating at the 50%
18 (highest possible) profit level allowed by the Benchmark mechanism. The Company
19 appears to be maintaining that same level thus far in this fiscal year. It appears that under
20 the current incentive plan for the foreseeable future Laclede has little if any incentive to
21 acquire fixed price protection.

1 **Q. ARE YOU SUGGESTING THAT LACLEDE SHOULD NOT BE EXPECTED TO PURCHASE FIXED**
2 **PRICE CONTRACTS?**

3 A. No. I am simply suggesting that the current mechanisms cannot be relied upon to induce
4 the Company to diversify its portfolio by purchasing fixed price contracts. Reasonably
5 well balanced fixed price incentive mechanisms may produce the desired results from
6 other LDCs. However, Laclede appears to be to risk averse to accept what would be a
7 reasonable level of risk and reward from a ratepayer perspective.

8 **Q. WHAT ARE PUBLIC COUNSEL'S RECOMMENDATIONS REGARDING THE CURRENT**
9 **EXPERIMENTAL BENCHMARK GAS PROCUREMENT MECHANISM CONTAINED IN THE**
10 **CURRENT EGSIP?**

11 A. We strongly recommend that you terminate the Benchmark mechanism. As I have
12 explained, this mechanism has been ineffective in lowering natural gas costs. The
13 residential customer bill impact of the benchmark mechanism only amounted to about 2¢
14 per dollar spent on gas for the 1999-2000 fiscal year. Despite the miniscule cost
15 reduction flowed through to customers, Laclede has retained 50% of all cost reductions
16 which is the maximum allowable percentage. The primary reason that the Benchmark
17 mechanism has been ineffective is because although Laclede may have limited control
18 over the demand charge component (2%-5% of the benchmark costs), the remaining
19 commodity component (95%-98% of the benchmark cost) continues to float with volatile
20 moving market index prices. This mechanism also acts as a potentially profitable "catch-
21 all" for volumes not purchased under fixed contracts. Finally, and most importantly,
22 when the Commission approved this mechanism it pre-approved various ranges around
23 the Benchmark as being prudently incurred costs, eliminating any opportunity for parties
24 such as the Public Counsel to review Laclede's purchases. Further, since there are no

1 volume limits on the Benchmark method it acts as a safe haven against prudence as long
2 as actual cost are within the predetermined range around the Benchmark. Unfortunately,
3 this rules out Public Counsel's ability to challenge a complete lack of fixed protection
4 when markets were anticipated to rise. By terminating the Benchmark method, you will
5 reinstate our ability to protect consumers by participating in regular and thorough
6 reviews.

7 **Q. IF THE COMMISSION RETAINS THE BENCHMARK MECHANISM WHAT CHANGES WOULD**
8 **YOU RECOMMEND?**

9 A. Public Counsel recommends that you eliminate the commodity component of the
10 benchmark and allow the Company 25% of any positive difference between the annual
11 demand cost benchmark and the Company's actual annual demand charge costs. This
12 would more closely align the portion of costs that Laclede has some control over with
13 portion of cost from which the Company can generate excess profit.

14 **Q. WHAT IS PUBLIC COUNSEL'S RECOMMENDATION REGARDING THE FIXED PRICE**
15 **MECHANISM CONTAINED IN THE CURRENT EGSIP?**

16 A. Public Counsel recommends that the fixed price mechanism be eliminated. This
17 mechanism has not been proven an effective tool for encouraging Laclede to purchase
18 fixed price contracts. Furthermore, considering the recent price levels it is unlikely that
19 Laclede or its customers could benefit from this mechanism in the foreseeable future.

1 **Q. IF THE COMMISSION WANTS TO RETAIN A FIXED PRICE MECHANISM WHAT CHANGES**
2 **WOULD YOU RECOMMEND?**

3 A. Public Counsel continues to believe that the method proposed by Thomas Shaw on behalf
4 of our office in GT-99-303 is a reasonable method for establishing a fixed price
5 mechanism. The fixed price benchmark should be based on Inside FERC Gas Market
6 Report's (IFGMR) first-of-the-month spot market index for the transporting pipeline for
7 the month of delivery plus associated premium. If IFGMR does not report a spot market
8 index for the transporting pipeline, a reasonable substitute could be the first-of-the-month
9 spot market index published in Gas Daily or Natural Gas Intelligence. Public Counsel
10 also believes it would be reasonable to include a \$0.055/MMBtu premium (i.e. adder) to
11 the first-of-the-month spot market index. This \$0.055/MMBtu premium is intended to
12 reflect the *firm* nature of service being provided by fixed price contracts while the spot
13 market index generally represents *interruptible* (i.e. no guarantee of availability)
14 purchases.

15 **Q. HOW DOES PUBLIC COUNSEL RECOMMEND CALCULATING THE FINANCIAL BENEFIT OR**
16 **DETRIMENT ASSOCIATED WITH FIXED PRICE CONTRACTS?**

17 A. The difference between the fixed price and benchmark (i.e. first-of-the-month spot market
18 index plus \$0.055/MMBtu premium) would be determined and multiplied by the actual
19 purchase volumes. When the fixed price is below the benchmark rate, a financial benefit
20 would occur. Likewise, if the fixed price is above the benchmark rate, a financial
21 detriment has been incurred.

Laclede's Proposed Modifications to Gas Procurement

Q. PLEASE DESCRIBE LACLEDE'S PROPOSED REPLACEMENT FOR THE CURRENT FIXED PRICE MECHANISM.

A. Laclede proposes to eliminate the existing fixed price mechanism, replacing it with an Experimental Fixed Price Program. (EFPP) Under the EFPP, Laclede would follow a mandatory rule for procuring gas through a fixed price mechanism. The EFPP would require Laclede to purchase fixed price contracts whenever a series of conditions are met. Conversely, the mechanism would prohibit Laclede from purchasing whenever the conditions are not satisfied. Laclede also proposes two exceptions to the purchasing rule. The maximum volumes covered under the fixed price mechanism would be 2,000,000 MMBtu per month for 12 months. This amounts to roughly 30% of the Company's expected volumes.

Q. PLEASE DESCRIBE THE CONDITIONS UNDER WHICH LACLEDE WOULD BE REQUIRED TO PURCHASE FIXED PRICE CONTRACTS.

A. The first condition for purchasing fixed price futures contracts is that the current NYMEX first-of-month 12-month futures strip (NYMEX FOM strip) price must be less than the NYMEX FOM strip price averaged over the previous 12-months. The second condition is that the first condition must have been satisfied for at least 12 out of the previous 24 months. Finally, the third condition is that during the five ensuing business days from when the first two conditions are met the NYMEX strip on each day must be equal to or less than the NYMEX FOM strip on the first day of the current month. Mr. Jaskowiak indicated in response to OPC data request No. 12 that the condition must be met for five consecutive business days to establish the fixed price. Weekends and

1 holidays are not included in the triggering condition. On page 3 of his testimony he
2 clarifies that favorable price conditions must exist for sufficient time to allow the
3 Company a reasonable opportunity to purchase such contracts at that price level. If the
4 three conditions were met Laclede would purchase fixed price contracts. During the last
5 six months of an existing contract the Company would re-evaluate the pricing rule. If the
6 rule were again satisfied the Company would buy fixed price contracts covering the first
7 unprotected 12-month period.

8 **Q. PLEASE DESCRIBE LACLEDE'S PROPOSED EXCEPTIONS TO THE PURCHASING RULE.**

9 A. Laclede's first exception is that on a one-time basis Laclede would be required to acquire
10 fixed price contracts if the NYMEX FOM strip price falls below \$3.75 for five
11 consecutive days. The second exception is that on an ongoing basis Laclede would be
12 prohibited from purchasing under a fixed price mechanism if the FOM strip price exceeds
13 \$6.00.

14 **Q. HOW LONG WOULD THE PURCHASING RULE BE IN EFFECT?**

15 A. According Laclede's EFPP proposal the purchasing rule would be in effect for three
16 years.

17 **Q. DOES PUBLIC COUNSEL HAVE CONCERNS REGARDING LACLEDE'S FIXED PRICE**
18 **PROPOSAL?**

19 A. Yes, Public Counsel has a number of concerns regarding Laclede's fixed price proposal.
20 Our primary concern is that under the rigidly designed purchasing rule on a going
21 forward basis the Company would be forced to forgo opportunities to secure fixed price

1 contracts that would produce reasonable price protection for customers. Schedule BAM-
2 1 illustrates an expanded version of Schedule 1 attached to the direct testimony of
3 Laclede witness Scott Jaskowiak. Schedule BAM-1 is based on the Company's method
4 of applying the proposed purchasing rule. It is intended to demonstrate the impact of
5 Laclede's method on the level of historic and future fixed price purchases over a longer
6 time horizon than was presented in Mr. Jaskowiak's testimony. As illustrated in
7 Schedule BAM-1, assuming Laclede's own method of applying the rule there would have
8 been extended periods of time during which the proposed purchasing rule would prohibit
9 the purchase of fixed price contracts. For example, no fixed price protection would have
10 been purchased for the entire fiscal year ending September 1994 or September 1998. The
11 Company would have been prohibited from purchasing gas irrespective of the potential
12 opportunities in March 1993 and March 1997 to secure lower prices. Conversely, on a
13 going forward basis, the condition requiring that for at least 12 of the previous 24 months
14 the NYMEX FOM strip must be below its 12 month average could realistically prohibit
15 fixed price purchases far into the future regardless of what the NYMEX FOM strip prices
16 turn out to be. For example, as of May 2, 2001 the NYMEX FOM strip was below its 12
17 month average only once in the previous 24 months. Therefore, assuming that the price
18 never falls below \$3.75 the Company would be prohibited from purchasing gas under the
19 fixed price mechanism until at least the spring of 2002 and perhaps even longer.

1 **Q. MR. JASKOWIAK ESTIMATES \$49.7 MILLION AS THE HISTORIC SAVINGS THAT THE**
2 **EFPP WOULD HAVE PRODUCED OVER THE PERIOD OF FISCAL YEARS ENDING 1993-2000.**
3 **HAVE YOU HAD AN OPPORTUNITY TO REVIEW THE DATA AND ASSUMPTIONS**
4 **UNDERLYING HIS ESTIMATE?**

5 A. Yes, I have. In addition to providing Public Counsel the underlying historical data, Mr.
6 Jaskowiak has responded to my inquiries regarding some of the assumptions upon which
7 his estimate is based.

8 **Q. WHAT ARE YOUR THOUGHTS REGARDING THE ESTIMATED \$49.7 MILLION IN**
9 **"SAVINGS"?**

10 A. First, I would like to clarify that Laclede did not rely on a historic average of strip prices
11 in deriving the estimated savings for fiscal years 1993 and 1994. Schedule BAM-2 is an
12 excerpt of the data Laclede used to derive the estimated savings. I have noted in
13 italicized text the additions that I made to the information provided by Laclede for
14 purposes of this explanation. The first of the month strip data was tracked beginning in
15 the month of August 1990. The first 12-month average strip was reported in the month of
16 August 1991. One of the conditions of the purchasing rule is that the current strip must
17 be below the average for at least 12 of the previous 24 months. Based on the data
18 provided, this condition could not even have been evaluated for an additional 24 months
19 or until August of 1993. If I could direct your attention to the boxed column on Schedule
20 BAM-2 you can see that March 1995 was the first month in which the "at least 12 out of
21 24 month" condition was satisfied. Clearly, if the stated assumptions of the purchasing
22 rule were not met until March of 1995 the 1993 and 1994 "savings" estimates were based
23 on additional assumptions. Laclede simply assumed that for the first month in which the

1 other assumption could be evaluated the "at least 12 out of 24 month" condition was met
2 and the Company would be required to buy. Laclede made a similar assumption in
3 determining that it would buy again in March of 1992, at a particularly advantageous
4 price. The low price from the March 1992 purchase covered 92% of the fiscal year 1993
5 volumes. If Laclede had not made this assumption the estimated savings for both 1993
6 and 1994 would have been zero, reducing the total estimate by roughly 36% or \$17.7M.

7 Another problem with Mr. Jaskowiak's estimate is that the third condition contained in
8 the Company's proposed rule was not met for even one of the months in which Laclede
9 would have supposedly been required to buy. Therefore, according to the rule, Laclede
10 would have never bought in those months, thus, the projected savings estimate is not
11 accurate. Upon reviewing the data it does appear that for April of 1995 and January of
12 1999 all of the conditions were met. Adjusting Mr. Jaskowiak's numbers produces an
13 estimate of \$10.76M.

14 The final point that I would like to make is that perhaps it would be more appropriate to
15 label the schedule illustrating Laclede's estimated "savings" as "EFPP Impact On Prices
16 As Opposed To Doing Absolutely Nothing." This would clarify that Laclede's 49.7M
17 estimate was not developed in comparison to other price mitigation strategies that the
18 Company could have pursued for protecting the relevant volumes. Suppose for a moment
19 that we accept Laclede's \$49.7M 1993-2000 savings estimate at face value and compare
20 it to the results of two alternative purchasing strategies. The first strategy is that Laclede
21 voluntarily purchases in March for the following fiscal year. Schedule BAM-3 illustrates
22 that the 1993-2000 savings for the buy in March strategy would be \$48.1M yielding a net
23 saving of Laclede's proposal of 1.6M. Another method might be that Laclede voluntarily
24 buys if the strip price has fallen for two consecutive months and either currently there is
25 no contract or the Company is in the last six months of an existing contract. Schedule

BAM-4 illustrates that the 1993-2000 savings for the two declining month strategy would be \$60.28M yielding a net saving of Laclede's proposal of -10.58M.

Q. HAVE YOU PERFORMED AN ANALYSIS OF THE CUSTOMER BILL IMPACTS OF LACLEDE'S PROPOSAL?

A. Yes, I have. Table 3 below demonstrates the annual bill impact of Laclede's proposal assuming an annual average residential usage of 111.55 MMBtu and Program coverage for 30% of annual usage. The calculation for fiscal year 2001 assumes that the price of gas does not fall below \$3.75.

Table 3. Average Residential Bill Impacts

	1993-2000	1998-2000	2001
Program Volumes (Millions)	192	72	24
Claimed Savings For Fiscal Years (Millions)	\$49.7	\$5	\$0
Claimed Savings Per MMBtu	\$0.26	\$0.07	\$0.0
Average Annual Bill Impact	\$6.63	\$1.78	\$0.0

Q. WHAT POLICY IMPLICATIONS SHOULD THE COMMISSION CONSIDER WHEN EVALUATING LACLEDE'S PROPOSAL?

A. First, I believe that you should consider that by approving this type of mechanism the Commission will assume responsibility for mandating when and when not to buy fixed price protection for roughly 30% of Laclede's gas supply. If gas prices do not fall below \$3.75 before next winter, no matter what level gas prices reach you will have sanctioned Laclede's lack of price protection. If gas prices reach \$5.00, \$10.00 or even \$15.00 per

1 MMBtu, Laclede will be able to say, "Our hands were tied. The Commission forbade us
2 from purchasing fixed price protection." While on the other hand, having approved this
3 mechanism without prior knowledge of market trends, the Commission will be in the
4 unenviable position of saying "We just didn't know this would happen." Further
5 compounding an already bad situation, remember that volumes not covered by fixed price
6 protection qualify as potentially profitable under the Benchmark gas procurement
7 mechanism. If you approve a mechanism that forces Laclede not to buy when prices are
8 rising, you will also be indirectly responsible for creating a situation in which Laclede
9 can earn excess profit from those volumes. Good intentions aside, this would obviously
10 be a bad public policy move. Public Counsel strongly recommends that you do not place
11 yourselves or the public at the mercy of such an unpredictable mechanism.

12 Another implication of granting this type of pre-approval for Laclede's fixed price
13 purchases is that if it offers an attractive outcome for Laclede it may also be attractive to
14 other LDCs. Hard pressed to deny other LDCs something you approved for Laclede, in
15 the event the program eventually produces undesirable outcomes you will have
16 compounded problems that arise.

17 Keep in mind that if Laclede has confidence in this purchasing rule they can certainly
18 follow it without your mandate. Absent a mandate to follow a rigid pricing rule, Laclede
19 would retain the flexibility to alter the timing of transactions and the volumes purchased
20 in respond to changing market conditions.

1 **Q. DO YOU BELIEVE THAT THE TYPE OF MICRO-MANAGEMENT PRESCRIBED BY THE FIXED**
2 **PRICE PROGRAM WILL BENEFIT CONSUMERS IN THE LONG RUN?**

3 A. No, I do not. I am concerned that by imposing regulatory oversight further and further
4 into the day to day management and operations of companies such as Laclede we are
5 nurturing timidity in there decision making behavior.

6 **Q. THEORETICALLY, BY DENYING PRE-APPROVAL ARE A COMPANY'S DECISIONS SUBJECT**
7 **TO PRUDENCE-BASED CHALLENGES?**

8 A. Yes, I do acknowledge that a company may face some exposure from regulatory review.
9 However, in the context of a regulatory review, court decisions and Commission
10 precedent ensure that any decision that a utility makes is afforded fair consideration by
11 the Commission based on the circumstances that existed **at the time the decision was**
12 **made.** Further protection from unreasonable disallowances is afforded by a company's
13 ability to seek judicial review. While a company might prefer pre-approval regarding its
14 purchasing practices, pre-approval is not necessary to ensure fair treatment.

15 **Q. PLEASE SUMMARIZE PUBLIC COUNSEL'S RECOMMENDATION REGARDING LACLEDE'S**
16 **PURCHASING RULE.**

17 A. Just as we wouldn't recommend using your cruise control when your breaks don't work,
18 we don't recommend that you approve this plan. For its three-year term the purchasing
19 rule locks in a course of action that cannot be adjusted for hazards that arise along the
20 way. You may require Laclede to buy when prices are anticipated to fall. You may
21 prohibit the Company from buying when prices are anticipated to rise. You simply do
22 not know the potential future impacts of this mechanism. Laclede has not submitted

1 market forecasts that would provide you with any insight as to the anticipated outcomes
2 this plan would produce. In the event that prices remain above \$3.75 for the next few
3 months and then begin to rise through the winter, Laclede's customers will once again
4 have no fixed price protection. However, in this instance customers will also have no
5 opportunity of recourse before the Commission.

6 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

7 **A. Yes, it does.**

	Gas Procurement Capped at 3% of Indexed-Based Benchmark Cost of Gas Revenues of			
Mechanism	Fixed Price		B	
Current Treatment	GSIP			
Mechanism Description	Condition	Profit Scheme	Condition	
	Fixed Price<Lower of Five Year Seasonal Historic Fixed Price and Wholesale Price	10% of difference amounts <= .10	104% of Benchmark> Actual Cost>Benchmark	Co. Pays 0% of
		20% of difference amounts .10<x<=.20	Actual Cost between 104% and 110% of Benchmark	Co Pays 50% of
		30% of difference amounts .20<x<=.30	Actual Cost > 110% of Benchmark	Co Pays 50% of
		40% of difference amounts .30<x<=.40	Benchmark>Actual Costs	Co. Receives 5
		50% of difference amounts .40<x		
		**The Cumulative Benchmark Cost of Gas= Demand Component+ Comp according to the proportion of volumes secured under various contract ty based on RFP responses by contract type and supply region exclusive of on-system volumes exclusive of those purchased on a firm, fixed price ba indices for "Reliant Gas Transmission- East" and "Trunkline-Louisiana" v		

	Pipeline Related Components				
Mechanism	Capacity Release		Transportation Discounts		
Current Treatment	GSIP		GSIP		
Mechanism Description	Condition	Profit Scheme	Condition	Profit Scheme	
	Capacity Release Greater Than Zero	10% of first 1.5M	Transportation Discounts Greater Than 13M	30% of all amounts	Variation from (excluding rate requirements)
		+20% of amounts $1.5 < x \leq 2.5$ M			
		+30% of amounts > 2.5 M			

	Other Revenue Issues
Mechanism	Off-system Sales
Current Treatment	Rate Case
Mechanism Description	Laclede's revenue requirement in GR-99-315 reflects \$900,000 of annual revenue from off-system sales.

Month	NYMEX FOM strip	Average for preceding 12 months**	Is the NYMEX FOM strip below the average of the NYMEX FOM strips for the preceding 12 months?	How many times has Column D been "Yes" in last 24 consecutive months?	Purchase Rule If Approved*	
Aug-90	1.758					
Sep-90	1.855					
Oct-90	1.927					
Nov-90	1.905					
Dec-90	1.853					
Jan-91	1.658					
Feb-91	1.646					
Mar-91	1.711					
Apr-91	1.674					
May-91	1.628					
Jun-91	1.578					
Jul-91	1.501					
Aug-91	1.585	1.725	Yes			
Sep-91	1.650	1.710	Yes			
Oct-91	1.675	1.693	Yes			
Nov-91	1.625	1.672	Yes			
Dec-91	1.583	1.649	Yes			
Jan-92	1.389	1.626	Yes			
Feb-92	1.412	1.604	Yes			
Mar-92	1.402	1.584	Yes			
Apr-92	1.524	1.559	Yes			
May-92	1.561	1.546	No			
Jun-92	1.767	1.540	No			
Jul-92	1.669	1.556	No			
Aug-92	1.785	1.570	No			
Sep-92	1.868	1.587	No			
Oct-92	1.973	1.605	No			
Nov-92	1.929	1.630	No			
Dec-92	1.693	1.655	No			
Jan-93	1.661	1.654	Yes			
Feb-93	1.828	1.687	No			
Mar-93	1.905	1.722	No			
Apr-93	2.035	1.764	No			
May-93	2.299	1.806	No			
Jun-93	2.281	1.868	No			
Jul-93	2.294	1.911	No	10	Don't Buy	
Aug-93	2.277	1.963	No	9	Don't Buy	
Sep-93	2.325	2.004	No	8	Don't Buy	
Oct-93	2.235	2.042	No	7	Don't Buy	
Nov-93	2.220	2.064	No	6	Don't Buy	
Dec-93	2.095	2.088	No	6	Don't Buy	
Jan-94	2.004	2.122	Yes	6	Don't Buy	
Feb-94	2.271	2.150	No	4	Don't Buy	
Mar-94	2.212	2.187	No	3	Don't Buy	
Apr-94	2.201	2.213	Yes	3	Don't Buy	
May-94	2.160	2.226	Yes	4	Don't Buy	
Jun-94	2.128	2.215	Yes	5	Don't Buy	
Jul-94	2.208	2.202	No	5	Don't Buy	
Aug-94	2.086	2.195	Yes	6	Don't Buy	
Sep-94	1.953	2.179	Yes	7	Don't Buy	
Oct-94	1.923	2.148	Yes	8	Don't Buy	
Nov-94	1.943	2.122	Yes	9	Don't Buy	
Dec-94	1.730	2.099	Yes	10	Don't Buy	
Jan-95	1.738	2.068	Yes	10	Don't Buy	
Feb-95	1.604	2.046	Yes	11	Don't Buy	
Mar-95	1.680	1.991	Yes	12	Buy	
Apr-95	1.842	1.946	Yes	13	Don't Buy	1.680
May-95	1.816	1.916	Yes	14	Don't Buy	1.680
Jun-95	1.882	1.888	Yes	15	Don't Buy	1.680
Jul-95	1.705	1.867	Yes	16	Don't Buy	1.680
Aug-95	1.699	1.825	Yes	17	Don't Buy	1.680
Sep-95	1.783	1.793	Yes	18	Don't Buy	1.680
Oct-95	1.816	1.779	No	18	Don't Buy	1.680
Nov-95	1.768	1.770	Yes	19	Buy	1.680
Dec-95	1.823	1.755	No	19	Don't Buy	1.680
Jan-96	1.995	1.763	No	18	Don't Buy	1.680
Feb-96	2.007	1.785	No	18	Don't Buy	1.680
Mar-96	2.027	1.818	No	18	Don't Buy	1.680
Apr-96	2.192	1.847	No	17	Don't Buy	1.768
May-96	2.174	1.876	No	16	Don't Buy	1.768
Jun-96	2.310	1.906	No	15	Don't Buy	1.768
Jul-96	2.510	1.942	No	15	Don't Buy	1.768
Aug-96	2.216	2.009	No	15	Don't Buy	1.768
Sep-96	1.996	2.052	Yes	14	Don't Buy	1.768
Oct-96	2.115	2.070	No	13	Don't Buy	1.768
Nov-96	2.186	2.094	No	12	Don't Buy	1.768
Dec-96	2.413	2.129	No	11	Don't Buy	1.768
Jan-97	2.356	2.178	No	10	Don't Buy	1.768
Feb-97	2.152	2.209	Yes	10	Don't Buy	1.768
Mar-97	2.016	2.221	Yes	10	Don't Buy	1.768

 Denotes A new Fiscal Year

Commission Mandated Lack Of Fixed Price Protection

Price Test passed (Provisions (a) and (b) are both satisfied): Future contracts are purchased for 12 months.

During the last six months that the future contracts are held by the Company, the Company re-evaluates the Price Test. The Price Test again passes and the Company is required to purchase futures for an additional 12 months. See footnote (1).

Month	NYMEX FOM strip	Average for preceding 12 months**	Is the NYMEX FOM strip below the average of the NYMEX FOM strips for the preceding 12 months?	How many times has Column D been "Yes" in last 24 consecutive months?	Purchase Rule If Approved*	Denotes A new Fiscal Year
Apr-97	2.087	2.220	Yes	10	Don't Buy	
May-97	2.306	2.211	No	9	Don't Buy	
Jun-97	2.200	2.222	Yes	9	Don't Buy	
Jul-97	2.191	2.213	Yes	9	Don't Buy	
Aug-97	2.259	2.186	No	8	Don't Buy	
Sep-97	2.490	2.190	No	7	Don't Buy	
Oct-97	2.556	2.231	No	7	Don't Buy	
Nov-97	2.518	2.268	No	6	Don't Buy	
Dec-97	2.378	2.295	No	6	Don't Buy	
Jan-98	2.208	2.283	Yes	7	Don't Buy	
Feb-98	2.438	2.280	No	7	Don't Buy	
Mar-98	2.429	2.304	No	7	Don't Buy	
Apr-98	2.581	2.338	No	7	Don't Buy	
May-98	2.412	2.380	No	7	Don't Buy	
Jun-98	2.384	2.388	Yes	8	Don't Buy	
Jul-98	2.608	2.404	No	8	Don't Buy	
Aug-98	2.276	2.430	Yes	8	Don't Buy	
Sep-98	2.178	2.432	Yes	9	Don't Buy	
Oct-98	2.308	2.405	Yes	10	Don't Buy	
Nov-98	2.298	2.385	Yes	11	Don't Buy	
Dec-98	2.070	2.367	Yes	12	Buy	
Jan-99	2.100	2.341	Yes	13	Don't Buy	2.070
Feb-99	2.012	2.332	Yes	13	Don't Buy	2.070
Mar-99	1.997	2.296	Yes	13	Don't Buy	2.070
Apr-99	2.226	2.280	Yes	13	Don't Buy	2.070
May-99	2.431	2.231	No	13	Don't Buy	2.070
Jun-99	2.473	2.232	No	12	Don't Buy	2.070
Jul-99	2.426	2.240	No	11	Don't Buy	2.070
Aug-99	2.576	2.233	No	11	Don't Buy	2.070
Sep-99	2.675	2.258	No	11	Don't Buy	2.070
Oct-99	2.677	2.268	No	11	Don't Buy	2.070
Nov-99	2.649	2.330	No	11	Don't Buy	2.070
Dec-99	2.413	2.359	No	11	Don't Buy	2.070
Jan-00	2.365	2.388	Yes	11	Don't Buy	2.070
Feb-00	2.654	2.410	No	11	Don't Buy	2.070
Mar-00	2.907	2.464	No	11	Don't Buy	2.070
Apr-00	2.960	2.539	No	11	Don't Buy	2.070
May-00	3.207	2.601	No	11	Don't Buy	2.070
Jun-00	3.946	2.665	No	10	Don't Buy	2.070
Jul-00	3.818	2.788	No	10	Don't Buy	2.070
Aug-00	3.871	2.804	No	9	Don't Buy	2.070
Sep-00	4.382	3.012	No	8	Don't Buy	2.070
Oct-00	4.841	3.154	No	7	Don't Buy	2.070
Nov-00	4.277	3.334	No	6	Don't Buy	2.070
Dec-00	5.361	3.470	No	5	Don't Buy	2.070
Jan-01	5.768	3.716	No	4	Don't Buy	2.070
Feb-01	5.603	3.995	No	3	Don't Buy	2.070
Mar-01	5.313	4.245	No	2	Don't Buy	2.070
Apr-01	5.151	4.446	No	1	Don't Buy	2.070
May-01	4.849	4.628	No	1	Don't Buy	2.070
Jun-01	?	?	?	?	Don't Buy	2.070
Jul-01	?	?	?	?	Don't Buy	2.070
Aug-01	?	?	?	?	Don't Buy	2.070
Sep-01	?	?	?	?	Don't Buy	2.070
Oct-01	?	?	?	?	Don't Buy	2.070
Nov-01	?	?	?	?	Don't Buy	2.070
Dec-01	?	?	?	?	Don't Buy	2.070
Jan-02	?	?	?	?	Don't Buy	2.070
Feb-02	?	?	?	?	Don't Buy	2.070
Mar-02	?	?	?	?	Don't Buy	2.070
Apr-02	?	?	?	?	Don't Buy	2.070

*This Schedule is intended to show the impact on purchasing practices assuming that Lacarde's proposal is approved excluding the "one time" requirement to buy if the price falls below \$3.75 per MMBtu.

**Due to rounding the values in this column may vary slightly from those shown in Schedule 1 of Mr. Jastrow's direct testimony.

original	date	value												
\$1.758	8/1/90	\$1.758												
\$1.855	9/1/90	\$1.855												
\$1.927	10/1/90	\$1.927												
\$1.905	11/1/90	\$1.905												
\$1.853	12/1/90	\$1.853												
\$1.658	1/1/91	\$1.658												
\$1.646	2/1/91	\$1.646												
\$1.711	3/1/91	\$1.711												
\$1.674	4/1/91	\$1.674												
\$1.628	5/1/91	\$1.628												
\$1.578	6/1/91	\$1.578												
\$1.501	7/1/91	\$1.501	Low	Low mid	Avg	1.0	Avg	High	history	ifstrip	ifstrip			
										gratavg=	lessavg=1			
\$1.585	8/1/91	\$1.585	\$1.501	\$1.725	\$1.725	\$1.725	\$1.725	\$1.927	-	1	1	0	12	
\$1.650	9/1/91	\$1.650	\$1.501	\$1.606	\$1.710	\$1.710	\$1.710	\$1.927	-	1	1	1	0	
\$1.675	10/1/91	\$1.675	\$1.501	\$1.597	\$1.693	\$1.693	\$1.693	\$1.927	-	1	1	2	0	
\$1.625	11/1/91	\$1.625	\$1.501	\$1.587	\$1.672	\$1.672	\$1.672	\$1.905	-	1	1	3	0	
\$1.583	12/1/91	\$1.583	\$1.501	\$1.575	\$1.649	\$1.649	\$1.649	\$1.853	-	1	1	4	0	
\$1.389	1/1/92	\$1.389	\$1.501	\$1.564	\$1.626	\$1.626	\$1.626	\$1.711	-	1	1	5	0	
\$1.412	2/1/92	\$1.412	\$1.389	\$1.496	\$1.604	\$1.604	\$1.604	\$1.711	-	1	1	6	0	
\$1.402	3/1/92	\$1.402	\$1.389	\$1.487	\$1.584	\$1.584	\$1.584	\$1.711	-	1	1	6	12	
\$1.524	4/1/92	\$1.524	\$1.389	\$1.474	\$1.559	\$1.559	\$1.559	\$1.675	-	1	1	6	0	
\$1.561	5/1/92	\$1.561	\$1.389	\$1.468	\$1.546	\$1.546	\$1.546	\$1.675	0.100	1	1	6	0	
\$1.767	6/1/92	\$1.767	\$1.389	\$1.465	\$1.540	\$1.540	\$1.540	\$1.675	0.182	1	1	5	0	
\$1.669	7/1/92	\$1.669	\$1.389	\$1.473	\$1.556	\$1.556	\$1.556	\$1.767	0.250	1	1	4	0	
\$1.785	8/1/92	\$1.785	\$1.389	\$1.480	\$1.570	\$1.570	\$1.570	\$1.767	0.308	1	1	3	0	
\$1.868	9/1/92	\$1.868	\$1.389	\$1.488	\$1.587	\$1.587	\$1.587	\$1.785	0.357	1	1	2	0	
\$1.973	10/1/92	\$1.973	\$1.389	\$1.497	\$1.605	\$1.605	\$1.605	\$1.868	0.400	1	1	1	0	
\$1.929	11/1/92	\$1.929	\$1.389	\$1.630	\$1.630	\$1.630	\$1.630	\$1.973	0.438	1	1	0	0	
\$1.693	12/1/92	\$1.693	\$1.389	\$1.655	\$1.655	\$1.655	\$1.655	\$1.973	0.471	1	1	0	0	
\$1.661	1/1/93	\$1.661	\$1.389	\$1.664	\$1.664	\$1.664	\$1.664	\$1.973	0.444	1	1	0	0	
\$1.828	2/1/93	\$1.828	\$1.402	\$1.545	\$1.687	\$1.687	\$1.687	\$1.973	0.474	1	1	1	0	
\$1.905	3/1/93	\$1.905	\$1.402	\$1.562	\$1.722	\$1.722	\$1.722	\$1.973	0.500	1	1	1	0	
\$2.035	4/1/93	\$2.035	\$1.524	\$1.644	\$1.764	\$1.764	\$1.764	\$1.973	0.524	1	1	1	0	
\$2.299	5/1/93	\$2.299	\$1.561	\$1.684	\$1.806	\$1.806	\$1.806	\$2.035	0.545	1	1	1	0	
\$2.281	6/1/93	\$2.281	\$1.661	\$1.764	\$1.868	\$1.868	\$2.299	0.565	0.565	1	1	1	0	
\$2.294	7/1/93	\$2.294	\$1.661	\$1.786	\$1.911	\$1.911	\$2.299	0.583	0.583	1	10	1	0	
\$2.277	8/1/93	\$2.277	\$1.661	\$1.963	\$1.963	\$1.963	\$2.299	0.625	0.625	1	9	0	0	
\$2.325	9/1/93	\$2.325	\$1.661	\$2.004	\$2.004	\$2.004	\$2.299	0.667	0.667	1	8	0	0	
\$2.238	10/1/93	\$2.238	\$1.661	\$2.042	\$2.042	\$2.042	\$2.325	0.708	0.708	1	7	0	0	
\$2.220	11/1/93	\$2.220	\$1.661	\$2.064	\$2.064	\$2.064	\$2.325	0.750	0.750	1	6	0	0	
\$2.095	12/1/93	\$2.095	\$1.661	\$2.088	\$2.088	\$2.088	\$2.325	0.792	0.792	1	5	0	0	
\$2.004	1/1/94	\$2.004	\$1.661	\$2.122	\$2.122	\$2.122	\$2.325	0.792	0.792	1	5	0	0	
\$2.271	2/1/94	\$2.271	\$1.828	\$1.989	\$2.150	\$2.150	\$2.325	0.833	0.833	1	4	1	0	
\$2.212	3/1/94	\$2.212	\$1.905	\$2.046	\$2.187	\$2.187	\$2.325	0.875	0.875	1	3	1	0	
\$2.201	4/1/94	\$2.201	\$2.004	\$2.108	\$2.213	\$2.213	\$2.325	0.875	0.875	1	3	1	0	
\$2.147	5/1/94	\$2.147	\$2.004	\$2.115	\$2.226	\$2.226	\$2.325	0.833	0.833	1	4	2	0	
\$2.128	6/1/94	\$2.128	\$2.004	\$2.109	\$2.214	\$2.214	\$2.325	0.792	0.792	1	5	3	0	
\$2.208	7/1/94	\$2.208	\$2.004	\$2.103	\$2.201	\$2.201	\$2.325	0.792	0.792	1	5	4	0	
\$2.086	8/1/94	\$2.086	\$2.004	\$2.099	\$2.194	\$2.194	\$2.325	0.750	0.750	1	6	3	0	
\$1.953	9/1/94	\$1.953	\$2.004	\$2.091	\$2.178	\$2.178	\$2.325	0.708	0.708	1	7	4	0	
\$1.923	10/1/94	\$1.923	\$1.953	\$2.050	\$2.147	\$2.147	\$2.271	0.667	0.667	1	8	5	0	
\$1.943	11/1/94	\$1.943	\$1.923	\$2.022	\$2.121	\$2.121	\$2.271	0.625	0.625	1	9	5	0	
\$1.730	12/1/94	\$1.730	\$1.923	\$2.010	\$2.098	\$2.098	\$2.271	0.583	0.583	1	10	5	0	
\$1.738	1/1/95	\$1.738	\$1.730	\$1.899	\$2.067	\$2.067	\$2.271	0.583	0.583	1	10	5	0	
\$1.604	2/1/95	\$1.604	\$1.730	\$1.888	\$2.045	\$2.045	\$2.271	0.542	0.542	1	11	6	0	
\$1.680	3/1/95	\$1.680	\$1.604	\$1.797	\$1.989	\$1.989	\$2.212	0.500	0.500	1	12	6	12	
\$1.842	4/1/95	\$1.842	\$1.604	\$1.775	\$1.945	\$1.945	\$2.208	0.458	0.458	1	13	6	0	
\$1.816	5/1/95	\$1.816	\$1.604	\$1.760	\$1.915	\$1.915	\$2.208	0.417	0.417	1	14	6	0	
\$1.882	6/1/95	\$1.882	\$1.604	\$1.746	\$1.888	\$1.888	\$2.208	0.375	0.375	1	15	6	0	
\$1.705	7/1/95	\$1.705	\$1.604	\$1.736	\$1.867	\$1.867	\$2.208	0.333	0.333	1	16	6	0	
\$1.699	8/1/95	\$1.699	\$1.604	\$1.715	\$1.825	\$1.825	\$2.086	0.292	0.292	1	17	6	0	
\$1.783	9/1/95	\$1.783	\$1.604	\$1.698	\$1.793	\$1.793	\$1.953	0.250	0.250	1	18	6	0	
\$1.818	10/1/95	\$1.818	\$1.604	\$1.691	\$1.779	\$1.779	\$1.943	0.250	0.250	1	18	6	0	
\$1.768	11/1/95	\$1.768	\$1.604	\$1.687	\$1.770	\$1.770	\$1.943	0.208	0.208	1	19	5	12	
\$1.823	12/1/95	\$1.823	\$1.604	\$1.680	\$1.755	\$1.755	\$1.882	0.208	0.208	1	19	5	0	
\$1.995	1/1/96	\$1.995	\$1.604	\$1.684	\$1.763	\$1.763	\$1.882	0.250	0.250	1	18	4	0	
\$2.007	2/1/96	\$2.007	\$1.604	\$1.694	\$1.785	\$1.785	\$1.995	0.250	0.250	1	18	3	0	
\$2.027	3/1/96	\$2.027	\$1.680	\$1.749	\$1.818	\$1.818	\$2.007	0.250	0.250	1	18	2	0	
\$2.192	4/1/96	\$2.192	\$1.699	\$1.773	\$1.847	\$1.847	\$2.027	0.292	0.292	1	17	1	0	
\$2.174	5/1/96	\$2.174	\$1.699	\$1.788	\$1.876	\$1.876	\$2.192	0.333	0.333	1	16	1	0	
\$2.310	6/1/96	\$2.310	\$1.699	\$1.906	\$1.906	\$1.906	\$2.192	0.375	0.375	1	15	0	0	
\$2.510	7/1/96	\$2.510	\$1.699	\$1.942	\$1.942	\$1.942	\$2.310	0.375	0.375	1	15	0	0	
\$2.216	8/1/96	\$2.216	\$1.699	\$2.009	\$2.009	\$2.009	\$2.510	0.417	0.417	1	14	0	0	
\$1.996	9/1/96	\$1.996	\$1.768	\$2.052	\$2.052	\$2.052	\$2.510	0.417	0.417	1	14	0	0	
\$2.115	10/1/96	\$2.115	\$1.768	\$1.919	\$2.070	\$2.070	\$2.510	0.458	0.458	1	13	1	0	

First of month strip prices tracked starting August 1990.

August 1991 first reported previous 12 month average

This column indicates the actual measure of the number of times in the previous 12 months that the first-of month strip was below the average based on the date provided by Laclede.

Because information regarding the number of times in the previous 12 months that the first-of month strip was below the average was not available, Laclede made the initial assumption that they would have bought protection for future twelve month period in this month.

First month that the "at least 12 out 24" condition was met based on the data provided.

\$2.186	\$2.186	11/1/96	\$2.186	\$1.768	\$1.931	\$2.094	\$2.094	\$2.510	0.500	1	12	1	0
\$2.413	\$2.413	12/1/96	\$2.413	\$1.823	\$1.976	\$2.129	\$2.129	\$2.510	0.542	1	11	1	0
\$2.356	\$2.356	1/1/97	\$2.356	\$1.995	\$2.087	\$2.178	\$2.178	\$2.510	0.583	1	10	1	0
\$2.152	\$2.152	2/1/97	\$2.152	\$1.996	\$2.102	\$2.209	\$2.209	\$2.510	0.583		10	1	0
\$2.016	\$2.016	3/1/97	\$2.016	\$1.996	\$2.108	\$2.221	\$2.221	\$2.510	0.583		10	2	0
\$2.087	\$2.087	4/1/97	\$2.087	\$1.996	\$2.108	\$2.220	\$2.220	\$2.510	0.583		10	2	0
\$2.306	\$2.306	5/1/97	\$2.306	\$1.996	\$2.103	\$2.211	\$2.211	\$2.510	0.625	1	9	3	0
\$2.200	\$2.200	6/1/97	\$2.200	\$1.996	\$2.109	\$2.222	\$2.222	\$2.510	0.625		9	3	0
\$2.191	\$2.191	7/1/97	\$2.191	\$1.996	\$2.104	\$2.213	\$2.213	\$2.510	0.625		9	4	0
\$2.259	\$2.259	8/1/97	\$2.259	\$1.996	\$2.091	\$2.186	\$2.186	\$2.413	0.667	1	8	5	0
\$2.490	\$2.490	9/1/97	\$2.490	\$1.996	\$2.093	\$2.190	\$2.190	\$2.413	0.708	1	7	4	0
\$2.556	\$2.556	10/1/97	\$2.556	\$2.016	\$2.123	\$2.231	\$2.231	\$2.490	0.708	1	7	3	0
\$2.518	\$2.518	11/1/97	\$2.518	\$2.016	\$2.142	\$2.268	\$2.268	\$2.556	0.750	1	6	2	0
\$2.379	\$2.379	12/1/97	\$2.379	\$2.016	\$2.156	\$2.295	\$2.295	\$2.556	0.750	1	6	2	0
\$2.208	\$2.208	1/1/98	\$2.208	\$2.016	\$2.154	\$2.293	\$2.293	\$2.556	0.708		7	1	0
\$2.438	\$2.438	2/1/98	\$2.438	\$2.016	\$2.148	\$2.280	\$2.280	\$2.556	0.708	1	7	1	0
\$2.429	\$2.429	3/1/98	\$2.429	\$2.016	\$2.160	\$2.304	\$2.304	\$2.556	0.708	1	7	1	0
\$2.581	\$2.581	4/1/98	\$2.581	\$2.087	\$2.213	\$2.338	\$2.338	\$2.556	0.708	1	7	1	0
\$2.383	\$2.383	5/1/98	\$2.383	\$2.191	\$2.285	\$2.380	\$2.380	\$2.581	0.708	1	7	1	0
\$2.384	\$2.384	6/1/98	\$2.384	\$2.191	\$2.289	\$2.386	\$2.386	\$2.581	0.667		8	1	0
\$2.508	\$2.508	7/1/98	\$2.508	\$2.191	\$2.296	\$2.401	\$2.401	\$2.581	0.667	1	8	2	0
\$2.276	\$2.276	8/1/98	\$2.276	\$2.208	\$2.318	\$2.428	\$2.428	\$2.581	0.625		9	1	0
\$2.178	\$2.178	9/1/98	\$2.178	\$2.208	\$2.319	\$2.429	\$2.429	\$2.581	0.625		9	2	0
\$2.308	\$2.308	10/1/98	\$2.308	\$2.178	\$2.291	\$2.403	\$2.403	\$2.581	0.583	1	10	3	0
\$2.298	\$2.298	11/1/98	\$2.298	\$2.178	\$2.280	\$2.383	\$2.383	\$2.581	0.542	1	11	4	0
\$2.070	\$2.070	12/1/98	\$2.070	\$2.178	\$2.271	\$2.364	\$2.364	\$2.581	0.500	1	12	5	12
\$2.100	\$2.100	1/1/99	\$2.100	\$2.070	\$2.204	\$2.338	\$2.338	\$2.581	0.458	1	13	5	0
\$2.012	\$2.012	2/1/99	\$2.012	\$2.070	\$2.200	\$2.329	\$2.329	\$2.581	0.458	1	13	6	0
\$1.997	\$1.997	3/1/99	\$1.997	\$2.012	\$2.153	\$2.294	\$2.294	\$2.581	0.458	1	13	6	0
\$2.226	\$2.226	4/1/99	\$2.226	\$1.997	\$2.127	\$2.258	\$2.258	\$2.581	0.458		13	6	0
\$2.431	\$2.431	5/1/99	\$2.431	\$1.997	\$2.113	\$2.228	\$2.228	\$2.508	0.458	1	13	6	0
\$2.473	\$2.473	6/1/99	\$2.473	\$1.997	\$2.115	\$2.232	\$2.232	\$2.508	0.500	1	12	5	0
\$2.426	\$2.426	7/1/99	\$2.426	\$1.997	\$2.118	\$2.240	\$2.240	\$2.508	0.542	1	11	4	0
\$2.576	\$2.576	8/1/99	\$2.576	\$1.997	\$2.115	\$2.233	\$2.233	\$2.473	0.542	1	11	3	0
\$2.675	\$2.675	9/1/99	\$2.675	\$1.997	\$2.127	\$2.258	\$2.258	\$2.576	0.542	1	11	2	0
\$2.677	\$2.677	10/1/99	\$2.677	\$1.997	\$2.148	\$2.299	\$2.299	\$2.675	0.542	1	11	1	0
\$2.649	\$2.649	11/1/99	\$2.649	\$1.997	\$2.330	\$2.330	\$2.330	\$2.677	0.542	1	11	0	0
\$2.413	\$2.413	12/1/99	\$2.413	\$1.997	\$2.359	\$2.359	\$2.359	\$2.677	0.542	1	11	0	0
\$2.365	\$2.365	1/1/00	\$2.365	\$1.997	\$2.388	\$2.388	\$2.388	\$2.677	0.542		11	0	0
\$2.654	\$2.654	2/1/00	\$2.654	\$1.997	\$2.204	\$2.410	\$2.410	\$2.677	0.542	1	11	1	0
\$2.907	\$2.907	3/1/00	\$2.907	\$1.997	\$2.230	\$2.464	\$2.464	\$2.677	0.542	1	11	1	0
\$2.960	\$2.960	4/1/00	\$2.960	\$2.226	\$2.383	\$2.539	\$2.539	\$2.907	0.542	1	11	1	0
\$3.207	\$3.207	5/1/00	\$3.207	\$2.365	\$2.483	\$2.601	\$2.601	\$2.960	0.542	1	11	1	0
\$3.946	\$3.946	6/1/00	\$3.946	\$2.365	\$2.515	\$2.665	\$2.665	\$3.207	0.583	1	10	1	0
\$3.818	\$3.818	7/1/00	\$3.818	\$2.365	\$2.576	\$2.788	\$2.788	\$3.946	0.583	1	10	1	0
\$3.871	\$3.871	8/1/00	\$3.871	\$2.365	\$2.904	\$2.904	\$2.904	\$3.946	0.625	1	9	0	0
\$4.382	\$4.382	9/1/00	\$4.382	\$2.365	\$3.012	\$3.012	\$3.012	\$3.946	0.667	1	8	0	0
\$4.841	\$4.841	10/1/00	\$4.841	\$2.365	\$3.154	\$3.154	\$3.154	\$4.382	0.708	1	7	0	0

March Purchasing Rule Example

Period	Percentage of Program Volumes Hedged	Average Price without EFPP Mechanism (\$/MMBtu)	Average Price with EFPP Mechanism (\$/MMBtu)	Average Price Savings of EFPP (\$/MMBtu)	Annual Savings on Program Volumes (\$Millions)
Fiscal 1993	100%	\$ 2.22	\$ 1.65	\$ 0.57	\$ 14
Fiscal 1994	100%	\$ 2.06	\$ 2.06	\$ (0.00)	\$ (0)
Fiscal 1995	100%	\$ 1.56	\$ 1.95	\$ (0.39)	\$ (9)
Fiscal 1996	100%	\$ 2.36	\$ 1.85	\$ 0.51	\$ 12
Fiscal 1997	100%	\$ 2.52	\$ 2.02	\$ 0.50	\$ 12
Fiscal 1998	100%	\$ 2.36	\$ 2.22	\$ 0.14	\$ 3
Fiscal 1999	100%	\$ 2.13	\$ 2.21	\$ (0.08)	\$ (2)
Fiscal 2000	100%	\$ 3.21	\$ 2.45	\$ 0.76	\$ 18
					\$ 48.13

Two Declining Months Example

Period	Percentage of Program Volumes Hedged	Average Price without EFPP Mechanism (\$/MMBtu)	Average Price with EFPP Mechanism (\$/MMBtu)	Average Price Savings of EFPP (\$/MMBtu)	Annual Savings on Program Volumes (\$Millions)
Fiscal 1993	100%	\$ 2.22	\$ 1.65	\$ 0.58	\$ 14
Fiscal 1994	100%	\$ 2.06	\$ 2.09	\$ (0.03)	\$ (1)
Fiscal 1995	100%	\$ 1.56	\$ 2.02	\$ (0.46)	\$ (11)
Fiscal 1996	100%	\$ 2.36	\$ 1.62	\$ 0.74	\$ 18
Fiscal 1997	100%	\$ 2.52	\$ 1.90	\$ 0.62	\$ 15
Fiscal 1998	100%	\$ 2.36	\$ 2.31	\$ 0.05	\$ 1
Fiscal 1999	100%	\$ 2.13	\$ 2.18	\$ (0.05)	\$ (1)
Fiscal 2000	100%	\$ 3.21	\$ 2.15	\$ 1.06	\$ 25
					\$ 60.28