Issue:	Firm Transportation Discounts/Staff Incentive Proposal
Witness:	Bruce B. Henning
Type of Exhibit:	Surrebuttal Testimony
Sponsoring Party:	Laclede Gas Company
Case No.:	GT-2001-329

LACLEDE GAS COMPANY

SURREBUTTAL TESTIMONY

OF

BRUCE B. HENNING

May 30, 2001

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

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

Bruce B. Henning, of lawful age, being first duly sworn, deposes and states:

1. My name is Bruce B. Henning. My business address is 1655 North Fort Myer Drive, Arlington, Virginia 22182; and I am Director, Regulatory and Market Analysis with Energy and Environmental Analysis, Inc.

2. Attached hereto and made part hereof for all purposes is my surrebuttal testimony, consisting of pages 1 to 11, inclusive.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded and the information contained in any attached schedules are true and correct to the best of my knowledge and belief.

Bruce B. Henning

Subscribed and sworn to before me this 29th day of May, 2001.

JOYCE L. JANSEN
Notary Public — Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: July 2, 2001

SURREBUTTAL TESTIMONY

OF

BRUCE B. HENNING

LACLEDE GAS COMPANY

CASE NO. GT-2001-329

Q. Please state your name and business address.

A. My name is Bruce B. Henning. My business address is 1655 North Fort Myer Drive, Arlington, Virginia 22182.

Q. By whom are you employed and in what capacity?

A. I am Director, Regulatory and Market Analysis with Energy and Environmental Analysis, Inc. (EEA).

Q. Would you briefly describe some of the services offered by EEA?

A. EEA provides consulting services to public, private, and institutional clients, including analysis of natural gas and energy market fundamentals. EEA is a nationally recognized provider of natural gas forecasts and analysis. EEA, under contract with GTI (formerly the Gas Research Institute, GRI), produces the annual GTI Baseline Forecast that is used throughout the gas industry as a reference forecast. In addition, EEA provided the quantitative forecast to the National Petroleum Council study *Natural Gas: Meeting the Challenges of the Nation's Growing Natural Gas Demand* published December 1999.

Q. Please describe your work and educational background.

A. Prior to joining EEA in January 1996, I was the Chief Economist at the American Gas Association. I have a Bachelor of Science in Economics from the

Massachusetts Institute of Technology where I completed my thesis with Robert Solow, Nobel Laureate in Economics. I have been an instructor at the Gas Rate Fundamentals course at the University of Wisconsin and the Advanced Utility Ratemaking course at the University of Maryland. My work in studying natural gas market performance and behavior, *Analysis of Short-term Natural Gas Markets*, was cited in FERC Order Nos. 637 and 637-a.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my testimony is to address certain aspects of the rebuttal testimony of Staff witnesses Robert E. Schallenburg and David M. Sommerer and Public Counsel witness James Busch. Specifically, I will respond to Mr. Busch's and Mr. Sommerer's recommendations regarding the firm transportation discount component of Laclede Gas Company's Gas Supply Incentive Plan ("GSIP"). In particular, I will explain why, contrary to their assertions, an incentive mechanism that focuses a company's efforts on obtaining pipeline transportation discounts, as the GSIP does, is appropriate and beneficial to Missouri gas consumers. I will also explain why it is inappropriate to raise the $13,000,000 baseline for firm pipeline discounts. Finally, I will explain why the alternative incentive plan proposed by Staff witness Schallenberg is inappropriate and ill-suited to the purpose of providing a reasonable benchmark to measure performance in the gas cost area.

Response to Recommendations Regarding Firm Transportation Discount Component

Q. Do you agree with Public Counsel witness Busch's recommendation that the firm transportation discount component of the GSIP should be eliminated?

A. No. The current treatment of pipeline discounts in the GSIP provides a strong incentive to maximize the value of pipeline discounts over time. Both the magnitude of the discount and the term of contract under which the discount is secured must be optimized by the Company to achieve the best performance. The interaction between the term of the agreement and the discount results in careful consideration of future market conditions along the pipelines that serve Laclede's service territory. This interaction should be considered one of the strengths of the program. It is also important to note that, according to Company witnesses, Laclede has recently been able to negotiate longer-term firm transportation discounts that exceed those achieved by other market participants and that are likely to out perform those contracts that did not anticipate the current tightening of the market which I describe below. Under such circumstances, elimination of an incentive mechanism for firm transportation discounts, advocated by Mr. Busch and Mr. Sommerer, would be particularly inappropriate in that it would effectively penalize rather than reward the Company for this superior effort.

Moreover, adopting a measure that ignores the positive consumer impact of actions taken in previous years has the potential to create perverse incentives. A properly structured program should provide an incentive to maximize the potential consumer benefits. In many instances, appropriate long-term contract decisions can be an important part of an optimal program.

The negotiation of the optimal term of a discounted pipeline contract is one example of the actions that an LDC can take to the benefit of their customers. The term and magnitude of discounted pipeline contract are the result of intensive

efforts by the LDC. To be successful, the LDC must be constantly evaluating market conditions. The company must carefully consider all of the possible alternatives to the contract and be able to convince the pipeline that the company has viable alternatives. If the pipeline is convinced that the LDC is in a captive position, the pipeline will be unwilling to offer significant discounts. In effect, the LDC must understand major elements of an alternative gas supply plan and use the information to create negotiating leverage with the pipeline.

Q. As an alternative to eliminating this component, both Public Counsel witness Sommerer and Staff witness Busch have recommended that the baseline for this component be increased. Do you agree with their recommendation?

A. No. In order for the program to continue to provide the incentive to maximize pipeline discounts, baseline for the discounts must be at an achievable level in any given year. If the benchmark is unrealistically high, as I believe it would be under their respective proposals, then it eliminates any effective incentive. Simply put, incentives must bear some relationship to what can actually be achieved, and if they do not, they will serve no purpose.

Q. Why do you believe the baselines proposed by Staff and Public Counsel are not achievable?

A. By basing their proposed baselines on historical levels achieved by Laclede, both Staff and Public Counsel fail to recognize that the ability to negotiate pipeline transportation discounts, particularly at existing levels, is likely to decrease in the future in most regions of the country and along the pipeline corridors serving Laclede. Natural gas demand in the United States is projected to increase

substantially over the next decade, approaching 30 Trillion Cubic Feet (Tcf) per year by 2010. While gas use for power generation is projected to contribute the largest increment of growth, residential, commercial and industrial gas use are also projected to increase, tightening the available capacity. Schedule 1 shows EEA's projection of gas demand growth.

To meet the demand growth, pipeline load factors will increase as the volume of gas being delivered to the market increases. New pipeline capacity will need to be constructed in capacity constrained regions. EEA projects that the annual load factor for pipelines moving gas to Missouri from Louisiana will increase by more than 30 percent by 2005. Load factors will continue to increase through 2010.

Q. What are some of the factors contributing to the increase in pipeline load factors?

A. One of the factors contributing to the increases in pipeline load factors from the South is the growth in gas production from deep water drilling in the Gulf of Mexico. This important source of gas supply will more than offset the declines in production in the mature "shelf" production region of the Gulf. In total, the volume of gas being delivered into pipelines moving gas out of the Gulf will increase by more than 1.1 Billion Cubic Feet per day (Bcf/d) by 2005 and 2.1 Bcf/d by 2010. The increase in gas production will help satisfy a growing market, but it will also fill a significant amount of pipeline capacity.

Contributing to the increase in the pipeline load factors serving Missouri is the conversion of a major segment of the Trunkline pipeline from a natural gas pipeline to a products pipeline. In March, the FERC granted abandonment for the

gas service. As a result, approximately 253 Million cubic feet per day of gas transportation capacity will be removed from the market place within the next few months.

Because there will be substantially less unused capacity, pipelines will not have to discount capacity to the same extent that current market conditions require. Shippers will be less certain that interruptible capacity or capacity release will be available and will seek firm capacity commitments. The increased demand for firm capacity will make it significantly more difficult to negotiate discounts at prevailing levels.

Q. But won't additional pipeline capacity be added in response to this increased demand?

A. The increase in demand for firm capacity will not be matched with an immediate increase in supply of capacity from new pipeline construction. New pipeline construction projects are generally proposed and certificated by the FERC when shippers are willing to contract for the capacity for 10 years at maximum rates. When commitments are less than this threshold level, the constructing pipeline is placed "at risk" for the recovery of the project costs. As a result, projects are rarely constructed in a market characterized by significant pipeline discounts.

Q. In summary what is the impact of Staff's and Public Counsel's proposal to increase the discount baseline?

A. In summary, these proposals fail to recognize that the ability to negotiate pipeline discounts are likely to decrease over time. Moreover, significant amounts of capacity from new pipeline construction are unlikely to be available in the near

future. As a result, the Commission should maintain the baseline which is not only achievable but also rewards the efforts that correctly anticipated changes in market conditions.

Response to Staff's Alternative Incentive Plan

Q. Does Staff witness Schallenberg's proposal to use relative changes in the delivered gas acquisition costs of Missouri LDCs provide a reasonable measurement of the quality of their performance?

A. No. First there are a number of internal and operational differences between each LDC in Missouri and elsewhere. For example: the amount of storage available to the LDC, its ability to transport the stored gas when needed, the ability to secure gas at a time when it may be wise to inject and the ability of the LDC to enter into long and short term contracts. There are also a number of factors outside of the control of the utility that can affect the relative ranking of gas acquisition cost. Shifting sources of gas production and historical patterns of pipeline construction can affect relative gas acquisition costs substantially.

As mentioned earlier, total gas production in the Gulf of Mexico is projected to increase as a result of increases in deep water gas production. This increase was made possible by significant improvements in deep water drilling technology. By contrast, gas production in Oklahoma, Kansas and the Texas panhandle are projected to decrease by 25 percent over the next decade. These production areas are mature and hold much less potential for new production. Pipelines originating in this region will rely on gas supplies from Colorado, Wyoming, and New Mexico to fill the pipeline. In these regions, access and

permitting issues will be important in determining how much gas production is developed.

In the future, utilities in Missouri will rely on both of these sources of increased gas production to meet consumer needs. However, utilities in the western portion of the state and utilities in the eastern portion of the state will differ in terms of their sources of supply because of the pipelines that serve their markets. Although the cost of gas from both producing areas are affected by overall North American supply/demand, localized events in the Rockies or on the Gulf Coast can affect the relative cost in any one year. Over the past four years, gas prices in the Gulf Coast have been substantially higher than prices in the Rockies. From 1997 though 2000, the average gas price in the Opal trading area in the Rockies was $2.36 per thousand cubic feet. Over the same period, the average price at the Henry Hub was $2.78 per thousand cubic feet or nearly 18 percent higher. Using a simplistic approach of unit gas costs as a measure of relative performance would disadvantage an LDC that relies on Gulf Coast gas and would not reflect the relative performance of the companies in the state.

A number of other external factors can affect the relative costs of gas. They include processing plant outages or constraints, pipeline operational flow orders and short-term imbalances caused by a pipeline operational event. As a result, in any given year, the relative performance can be affected by factors outside of the utility's control. An incentive program where incentive compensation is heavily based on external factors does not promote economic efficiency. There are also differences between the natural gas commodity market

and the market for firm pipeline transportation services that justify their separation in an incentive program. The market for firm pipeline transportation service to serve Laclede's gas customers reflects balance of the supply of pipeline capacity and the demand for that capacity. The value of the capacity in the marketplace is determined by capacity utilization or load factor on the pipeline, as well as the utility's ability to create leverage and negotiate effectively. At low levels of capacity utilization, firm capacity prices are discounted below the maximum regulated rate to stimulate additional demand and to compete with capacity release and interruptible transportation. If capacity utilization increases, discounts for firm transportation service are reduced, with the pipeline ultimately commanding maximum rates for capacity contracts.

Q. Are there factors other than regional supply cost differences that are outside of the utility's control and that would affect relative performance based on the Staff's proposal?

A. Yes. The utility's customer mix can also affect the relative performance due to the influence of the mix of customers on the load factor of the system. Consider two utilities. Utility 1 has a large percentage of temperature sensitive residential customers. Utility 1 must reserve sufficient capacity to meet the peak day requirements and must pay the demand charges on the pipeline for that capacity. The load factor for the pipeline transportation of Utility 1 may be only 50 percent. By contrast, consider Utility 2 with a large amount of interruptible industrial load. Using this mix of customers, Utility 2 may have a load factor that approaches 100 percent. If these two utilities were able to negotiate identical pipeline contracts,

the demand charge component of the performance measure proposed by Staff for Utility 1 would be would be 100 percent larger than the measure for Utility 2.

Similarly, differences in the location and availability of storage and peak shaving facilities can affect the load factor of a capacity contract. These relative differences have very little to do with the performance of the utility.

Q. In the process of negotiating for firm transportation rights, does the ability of an LDC to switch between pipeline alternatives also potentially vary based on the location of the LDC and the market for capacity on the pipelines which serve it?

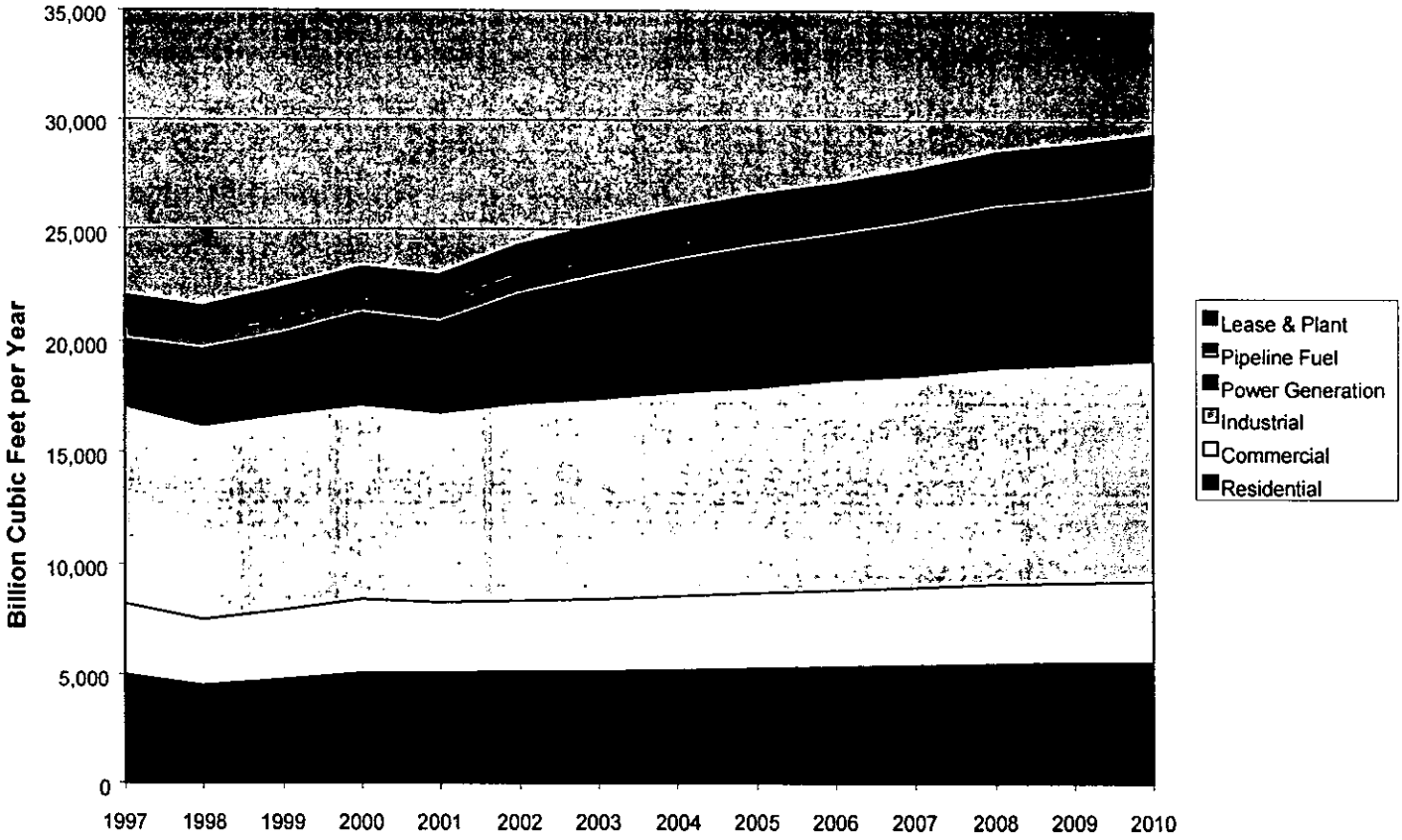
A. The value of firm transportation capacity will vary from one geographic market to another. Shippers that require firm delivery rights at a particular location cannot easily or always substitute unused capacity from another transportation corridor.

Q. Does this conclude your testimony?

A. Yes, it does.

Schedule 1

Projected United States Natural Gas Consumption (Bcf)



Source: EEA Base Case
Model Run May 5, 2001