Exhibit No.	
Issue:	Rate of Return
Witness:	David P. Broadwater
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Case No.:	Case No. GR-99-315

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

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Missouri Public Service Commission

LACLEDE GAS COMPANY

CASE NO. GR-99-315

DIRECT TESTIMONY

OF

DAVID P. BROADWATER

Jefferson City, Missouri

June 1999

DIRECT TESTIMONY

OF

DAVID P. BROADWATER

LACLEDE GAS COMPANY

CASE NO. GR-99-315

Q. Please state your name.

A. My name is David P. Broadwater.

Q. Please state your business address.

A. My business address is P.O. Box 360, Jefferson City, Missouri, 65102.

Q. What is your present occupation?

A. I am employed as a Financial Analyst for the Missouri Public Service Commission (Commission). I accepted this position in March 1995. From December 1993 to February 1995, I was employed as a Management Services Specialist with the Commission. It should be noted that part of my training while a member of the Management Services Department included serving in the Financial Analysis Department.

Q. Were you previously employed before you joined the Commission's staff (Staff)?

A. Yes, I was employed by Cullum & Brown Inc. from July 1991 through November 1993, in a sales and sales support capacity.

Q. What is your educational background?

A. In 1991, I earned a Bachelor of Science degree in Business Finance from Northwest Missouri State University. In 1995, I earned a Master of Business Administration degree with an emphasis in Finance from the University of Missouri at Kansas City.

Q. Are you a member of any professional associations?

A. Yes. I am a member of the Society of Utility and Regulatory Financial Analysts (SURFA), formerly the National Society of Rate of Return Analysts.

Q. Do you hold any professional designations?

A. Yes. On May 13, 1997, I was awarded the professional designation of "Certified Rate of Return Analyst" (CRRA) by the Society of Utility and Regulatory Financial Analysts. This designation is based upon education, experience and the successful completion of a comprehensive examination.

Q. What is the purpose of your testimony in this case?

A. My testimony is presented to provide a recommendation to the Commission as to a fair and reasonable rate of return for Laclede Gas Company's (Laclede or Company) rate base.

Q. Have you prepared any schedules to your analysis of the cost of capital for Laclede?

A. Yes. I am sponsoring a study entitled "An Analysis of the Cost of Capital for Laclede Gas Company, Case No. GR-99-315" consisting of 31 schedules which are attached to this direct testimony (see Schedule 1).

Q. What do you conclude is the cost of capital for Laclede Gas Company?

A. My analysis leads me to conclude that the cost of capital for Laclede Gas Company is in the range of 8.02 to 8.53 percent.

Economic and Legal Rationale for Regulation

Q. Why are the prices charged to customers by utilities such as Laclede regulated?

A. A primary purpose of price regulation is to restrain the exercise of monopoly power. Monopoly power represents the ability to charge excessive or unduly discriminatory prices. Monopoly power may arise from the presence of economies of scale and/or from the granting of a monopoly franchise.

For services that operate efficiently and have the ability to achieve economies of scale, a monopoly is the most efficient form of market organization. Utility companies can supply service at lower costs if the duplication of facilities by competitors is avoided. This allows the use of larger and more efficient equipment and results in lower per unit costs. For instance, it may cost more to have two or more competing companies maintaining duplicate natural gas distribution systems and providing competing residential services to one household. This situation could result in price wars and lead to unsatisfactory and perhaps irregular service. For these reasons, exclusive rights may be granted to a single utility to provide service to a given territory. This also creates a more stable environment for operating the utility company. Utility regulation acts as a substitute for the economic control of market competition and allows the consumer to receive adequate utility service at a reasonable price.

Natural gas distribution utility companies such as Laclede provide natural gas distribution services essentially under a monopoly franchise. Therefore, it is clear that Laclede has monopoly power.

Another purpose of price regulation is to provide the utility company with an opportunity to earn a fair return on its capital, particularly on investments made as a result of a monopoly franchise.

Q. Please describe your understanding of the legal basis you must use when determining a fair and reasonable return for a public utility.

A. Several landmark decisions by the U.S. Supreme Court provide the legal framework for regulation and for what constitutes a fair and reasonable rate of return for a public utility. Listed below are some of the cases:

1. Munn v. People of Illinois (1877),
2. Bluefield Water Works and Improvement Company (1923),
3. Natural Gas Pipeline Company of America (1942), and
4. Hope Natural Gas Company (1944).

In the case of *Munn v. People of Illinois*, 94 U.S. 113 (1877), the Court found that:

> . . . when private property is "affected with a public interest, it ceases to be *juris privati* only" . . . . Property does become clothed with a public interest when used in a manner to make it of public consequence, and affect the community at large. When, therefore, one devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good, to the extent of the interest he has thus created. Id at 126.

The *Munn* decision is important because it states the conceptual basis for regulation of both utility and non-utility industries.

In the case of *Bluefield Water Works and Improvement Company v. Public Service Commission of the State of West Virginia*, 262 U.S. 679 (1923), the Supreme Court ruled that a fair return would be:

1. A return "generally being made at the same time" in that "general part of the country";

2. A return achieved by other companies with "corresponding risks and uncertainties";

3. A return "sufficient to assure confidence in the financial soundness of the utility"; and

4. A fair return can change with economic conditions and capital markets.

The Court specifically stated:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally. Id at 692-3.

In *Federal Power Commission et al. v. Natural Gas Pipeline Company of America et al.*, 315 U.S. 575 (1942), the Court decided that:

> The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas . . . . If the Commission's

> order, as applied to the facts before it and viewed in its entirety, produces no arbitrary result, our inquiry is at an end. Id at 586.

The U.S. Supreme Court also discussed the reasonableness of a return for a utility in the case of *Federal Power Commission et al. v. Hope Natural Gas Company*, 320 U.S. 591 (1944). The Court stated that:

> The rate-making process . . ., i.e., the fixing of "just and reasonable" rates, involves a balancing of the investor and the consumer interests. Thus we stated . . . that "regulation does not insure that the business shall produce net revenues" . . . it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock . . . . By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital. Id at 603.

Hope restates the concept of comparable returns to include those achieved by any other enterprises that have "corresponding risks." The Supreme Court also noted in this case that regulation does not guarantee profits to a utility company.

A more recent case heard by the Supreme Court of Pennsylvania extends the *Hope* decision beyond balancing the interests of the investors and the consumers. The Supreme Court of Pennsylvania stated that:

> We do not believe, however, . . . that the end result of a rate-making body's adjudication *must* be the setting of rates at a level that will, in any given case, guarantee the continued financial integrity of the utility concerned . . . . In cases where the balancing of consumer interests against the interests of investors causes rates to be set at a "just and reasonable" level which is insufficient to ensure the continued financial integrity of the utility, it may simply be said that the utility has encountered one of the risks that imperil any business enterprise, namely the risk of financial failure. *Pennsylvania Electric Company, et al. v. Pennsylvania Public Utility Commission*, 502 A.2d 130, 133-34 (1985), cert. denied, 476 U.S. 1137 (1986).

Pennsylvania is included in my testimony to illustrate a point that is simply this: captive ratepayers of public utilities should not be forced to bear the brunt of poor or inept management that results in unnecessarily higher costs. It should be noted that I do not believe that utility companies should be casually subjected to risk of financial failure in a rate case proceeding. However, in a case of extremely poor management, I do not believe it would always be appropriate for a regulatory agency to provide sufficient funds to continue operations no matter what the costs are to the ratepayers.

Through these and other court decisions, it has generally been recognized that public utilities can operate more efficiently when they operate as monopolies. It has also been recognized that regulation is required to offset the lack of competition and maintain prices at a reasonable level. It is the regulatory agency's duty to determine a fair rate of return and the appropriate revenue requirement for the utility, while maintaining reasonable prices for the public consumer.

The courts today still believe that a fair return on common equity should be similar to the return for a business with similar risks, but not as high as a highly profitable or speculative venture requires. The authorized return should provide a fair and reasonable return to the investors of the company, while ensuring that excessive earnings do not result from the utility's monopolistic powers. However, this fair and reasonable rate does not necessarily guarantee revenues or the continued financial integrity of the utility.

It should be noted that the courts have determined that a reasonable return may vary over time as economic and business conditions change. Therefore, the past, present and projected economic and business conditions must be analyzed in order to calculate a fair and reasonable rate of return.

<u>Historical Economic Conditions</u>

Q. Please discuss the relevant historical economic conditions in which Laclede has operated.

A. One of the most commonly accepted indicators of economic conditions is the Discount Rate set by the Federal Reserve Board (Federal Reserve). The Federal Reserve tries to achieve its monetary policy objectives by controlling the Discount Rate (the interest rate charged by the Federal Reserve for loans of reserves to depository institutions) and the Fed Funds Rate (the overnight lending rate between banks). At the end of 1982, the U.S. economy was in the early stages of recovery from the longest post-World War II recession. This economic expansion began when the Federal Reserve reduced the Discount Rate seven times in the second half of 1982 in an attempt to stimulate the economy (see Schedule 2). This also led to a reduction in the Prime Interest Rate (the rate charged by banks on short-term loans to borrowers with high credit ratings) from 16.50 percent in June 1982, to 11.50 percent in December 1982. The economic expansion continued for approximately eight years until July of 1990, when the economy entered into a recession.

In December of 1990, the Federal Reserve responded to the slumping economy by lowering the Discount Rate to 6.50 percent. Over the next year and a half the Federal Reserve lowered the Discount Rate another six times to a low of 3.00 percent, which had the result of lowering the Prime Interest Rate to 6.00 percent. (See Schedule 3)

In 1993, newly elected President Clinton implemented a plan to raise additional revenues, by increasing certain corporate and personal income tax rates, but perhaps the most important factor for the U.S. economy in 1993 was the passage of the North American Free Trade Agreement (NAFTA). NAFTA created a free trade zone consisting of the United States, Canada and Mexico. The rate of economic growth for the fourth quarter of 1993, was one which the Federal Reserve believed could not be sustained without experiencing higher inflation. In the first quarter of 1994, the Federal Reserve took steps to try and restrict the economy by increasing interest rates. As a result, on March 24, 1994, the Prime Interest Rate increased to 6.25 percent. On April 18, 1994, the Federal Reserve announced its intention to raise its targeted interest rates which resulted in the Prime Interest Rate being increased to 6.75 percent. The Federal Reserve took action on May 17, 1994, by raising the Discount Rate to 3.5 percent. Three additional restrictive monetary actions were taken by the Federal Reserve, with the last occurring on February 1, 1995. These actions raised the Discount Rate to 5.25 percent and in turn banks raised the Prime Interest Rate to 9.00 percent.

The Federal Reserve then reversed its policy in late 1995, by lowering its target for the Fed Funds Rate 0.25 percentage points on two different occasions. This had the effect of lowering the Prime Interest Rate to 8.50 percent. On November 17, 1998, the Federal Reserve lowered the Discount Rate to its current rate of 4.50 percent.

The actions of the Federal Reserve over the last five years have been primarily focused at keeping the level of inflation under control, and they have been successful. The inflation rate as measured by the Consumer Price Index (CPI) was at 3.30 percent in January of 1993, and it has not exceeded 3.30 percent since (see Schedule 4-1). The CPI currently stands at 2.30 percent. What is significant about the low inflation rate is that while inflation has been at historically low levels the unemployment rate has also dropped to historically low levels. In January of 1993 the unemployment rate stood at 7.3 percent and gradually dropped to its current level of 4.3 percent.

The combination of low inflation and low unemployment has led to a prosperous economy as evidenced by the real GDP of the United States. Over the time period of 1994 through present, real GDP has increased every quarter. Another indicator of the strength of the economy is the run up of the stock market. The stock market, as measured by the Dow Jones Composite Index, has increased by 139.59 percent between December 30, 1993 and May 6, 1999, while the Dow Jones Industrial Index has increased by 189.91 percent over that same time frame. The stock market has increased 53.01 percent as measured by The Value Line Geometric Averages Composite Index from December 30, 1993 through May 6, 1999. It should be noted that the Value Line Composite Index is an equally weighted geometric average of 1581 companies as compared to the Dow Jones Composite Index that is a price weighted arithmetic average of 65 companies.

Current economic topics seem to revolve around the speculation about the Federal Reserve's next move on interest rates. In recent weeks, the Thirty-Year US Treasury Bond yield has moved above 6 percent. This has actually resulted in a decrease of the Dow Jones Industrial Average. On the other hand, the anticipated increase in interest rates has actually had a positive affect on other market indexes. However, investors are still reluctant to invest in bonds. Their fear has been driven by the impending interest rate decision due out at the end of June 1999 from the Federal Reserve. All indications lead us to believe that interest rates will be increased by approximately 25 basis points.

However, there is also speculation that the interest rates will hold steady because U.S. consumer prices remained unchanged in May. The last time CPI remained unchanged from the previous month was in March 1998. Another factor that influences investor's current expectations is the June 16th Inflation Report released by the Department of Labor. Inflation did not occur as anticipated which provided a sigh of relief for investors. However, there is still one remaining factor that will help to restore investor's confidence in the market. That factor will be the decision made by the Federal Reserve regarding interest rates. Economists, businesses and investors still believe interest rates will rise sometime this year, but that the urgency to do so will be reduced based on other economic indicators such as CPI, economic growth, low unemployment and increased consumer consumption. It is also believed that there will only be one interest rate increase this year contrary to the original fear of several rate hikes. Since the CPI is the main tool used by government in calculating inflation, any future movements in the market will be affected by further announcements made regarding CPI.

Overall, investors believe the stock market will continue its current level of volatility until the Federal Reserve decision is issued. If interest rates are increased and the U.S. does experience a rise in inflation, investors will be impacted further by decreases in their return on investments. Ironically, the resolution of the dispute in Kosovo also possesses the ability to hinder the U.S. securities market. As investors become more confident about investing in foreign opportunities, investment dollars will shift from U.S. securities to overseas investments in an attempt to realize higher returns.

These economic changes have resulted in cost of capital changes for utilities and are closely reflected in the yields on public utility bonds and yields of Thirty-Year U.S.

Treasury Bonds (see Schedule 5-1 and 5-2). Schedule 5-3 shows how closely the Moody's "Public Utility Bond Yields" have followed the yields of Thirty-Year U.S. Treasury Bonds during the period from 1983 to the present. The average spread for this time period between these two composite indices has been 127 basis points, with the spread ranging from a low of 80 basis points and a high of 283 basis points (see Schedule 5-4). These spread parameters can be utilized with numerous published forecasts of Thirty Year U.S. Treasury Bond yields to estimate future long-term debt costs for utility companies. Moody's "Public Utility Bond Yields" are also graphically compared to both Standard & Poor's "Utilities Stock Yields" and Standard & Poor's "Industrials Stock Yields" (see Schedule 6).

Q. How have utility stocks faired since 1994?

A. According to *The Value Line Investment Survey: Selection and Opinion,* utility stocks are up 29.65 percent since December 30, 1993, while industrials are up 48.55 percent. However since July 23, 1998 utility stocks are up 3.46 percent, while industrial stocks decreased 3.81 percent.

Economic Projections

Q. What are the inflationary expectations for the remainder of 1999 and beyond?

A. The latest inflation rate, as measured by the *Consumer Price Index-All Urban Consumers* (CPI), was 2.3 percent for the 12 months ended April 30, 1999. *The Value Line Investment Survey: Selection & Opinion*, February 19, 1999, predicts inflation to be 1.6 percent for 1999, 2.2 percent for 2000 and 2.5 percent for 2001 (see

Schedule 7). *Salomon Smith Barney*, December 1998, predicts inflation to be 1.6 percent for 1999 and 1.9 percent for 2000.

Q. What are interest rate forecasts for 1999, 2000 and 2001?

A. Short-term interest rates, those measured by Three-Month U.S. Treasury Bills, are expected to be approximately 4.5 percent in 1999 and 4.6 percent in 2000, and 4.6 percent in 2001 according to Value Line's predictions. Value Line expects long-term interest rates, those measured by the Thirty-Year U.S. Treasury Bond to remain rather steady from 5.2 percent in 1999, 5.4 percent in 2000 and 5.5 percent in 2001. Standard & Poor's (S&P) states the following in their May 12, 1999, issue of *The Outlook*:

> S&P economist David Blitzer looks for some slowing in spending by consumers, as well as in buying by corporations of technology products that could upset their Year 2000 compliance efforts. He believes, as a result, that bond yields are now around their highs for the year. Blitzer is forecasting a range of 5 3/8% - 5 7/8% for the 30-year T-bond.

The current rates are 4.28 percent for 3-month T-Bills and 5.55 percent for 30-year T-Bonds, as noted on Telescan's Wall Street City website, May 27, 1999.

Q. What are the growth expectations for real GDP in the future?

A. GDP is a benchmark utilized by the Commerce Department to measure economic growth within the United States' borders. Real GDP is measured by the actual Gross Domestic Product adjusted for inflation. During the first quarter of 1999 real GDP increased by 4.1 percent annualized (see Schedule 7). Value Line expects the real GDP growth to increase by 1.5 percent in 1999, 2.7 percent in 2000, and increase by 2.5 percent in 2001. Salomon Smith Barney expects the real GDP to increase by 3.7 percent in 1999 and 2.1 percent in 2000.

Q. Please summarize the expectations of the economic conditions for the next few years.

A. In summary, when combining the previously mentioned sources, inflation is expected to be in the range of 1.6 to 2.5 percent, real GDP in the range of 1.5 to 2.5 percent and long-term interest rates are expected to range from 5.2 to 5.5 percent. *The Value Line Investment Survey: Selection & Opinion*, March 5, 1999, states that:

> **The public is in an upbeat frame of mind.** A recent survey put out by the Conference Board (a research group), for example, indicated that consumer confidence has risen to an all-time high. The reasons for this optimism aren't hard to pinpoint. For instance, jobs are still very plentiful; unemployment is at a several-decade low; home prices are rising (thereby giving Americans a feeling of greater financial well being); and the stock market, even after recent turbulence, remains very high. In addition, most Americans feel that income levels will rise over the next six months.
>
> **All of this now suggests that consumer spending will continue to be the engine that drives the economy forward over the next few quarters.** Overall, the high consumer sentiment reading and positive data on job growth, housing, and industrial activity all point to a GDP increase of 3.0%-3.5% in the current quarter and to solid gains of close to 3% for the year as a whole.
>
> **The Federal Reserve Chairman has issued a few cautionary words.** In recent remarks before the Senate Banking Committee, Alan Greenspan indicated that the Fed was watching the economic situation closely and that it was ready to act (probably through a shift in interest rates) should conditions change materially. He also detailed concerns about the rapid rate of growth in this country and the high level of equity prices. Such worries would seem to support the idea that the Fed was considering an increase in interest rates as a means of slowing things down. The stock market's less-than-enthusiastic response to Chairman Greenspan's testimony suggests that investors now fear that the Fed could vote to lift interest rates before too many more months pass.
>
> **Upcoming economic reports will be closely scrutinized** for hints as to whether the Fed will need to raise interest rates in the months ahead. The key reports to focus on are those pertaining to job growth, wage costs, housing, and producer and consumer prices. If the current strength in the economy yields even the slightest hint of a pickup in pricing pressures, the Fed probably would act quickly to raise interest rates.

> **We expect the stock market will remain volatile in the weeks ahead,** as investors assess each economic report for its potential influence on Fed policy. With first-quarter earnings reports still more than a month away from being issued, investor attention will be carefully focused on each set of new economic data. Therefore, the impact of any possible surprises will be magnified. The potential for a rise in stock market volatility can only increase in such an environment. A more cautious approach toward the stock market is therefore appropriate at this juncture.

S&P states the following in their June 2, 1999, issue of *The Outlook*:

> S&P research director Ken Shea is optimistic about the market over the next six to 12 months, based in large part on a re-acceleration of earnings gains. Operating earnings (before special charges) on the S&P 500 were up 7%, year-to-year, in the first quarter of 1999, after two quarters of declines. Shea's team of securities analysts is estimating operating earnings gains of 11% for the current quarter, 26% for the third quarter, 23% for the final quarter and 17% for 1999 as a whole. Second-half comparisons should benefit from weak results last year, when the Asian crisis battered the energy, financial, and commodities sectors.

S&P also stated in their June 9, 1999 issue of *The Outlook*:

> Little follow-through is being seen just now to either up or down moves. Investors appear to be waiting for emergence of a clearer picture of the economy and the likely path of monetary policy.
>
> S&P economist David Blitzer feels that worries about stepped-up inflation are overdone. He points to the jump in the purchasing managers' prices paid index that temporarily spooked the market last week as an example. The May index reading was 52.2, up from 49.9 a month before. The increase, however, was the result of just 19% of the survey respondents reporting higher prices paid while 14% reported lower prices. Fully two-thirds of purchasing managers surveyed saw prices unchanged.
>
> Blitzer rates the chances as just 50-50 that the Fed will hike short-term rates over the balance of the year, and if they choice is to tighten, he thinks it will be just one increase of a quarter of a point. The credit markets have already priced that in, with the higher rates now acting to slow the economy.
>
> S&P technical analyst Mark Arbeter views the stock market's inability to sustain an upward move at this time as the result of technical damage done during the recent pullback. The S&P 500 broke below its 50-day exponential moving average and its previous reaction low set in mid-April, and this line now becomes resistance to an advance. Fortunately,

according to Arbeter, the "500" shows a broad support area just below the current level.

Dr. Jeremy J. Siegel, Professor of Finance - the Wharton School of the University of Pennsylvania, gives the following of what can happen when outdated economic ideals are applied to current economic situations in his book *Stocks for the Long Run*:

In the summer of 1958, an event of great significance took place for those who followed long-standing indicators of stock market value. For the first time in history, the interest rate on long-term government bonds exceeded the dividend yield on common stocks.

Business Week noted this event in an August 1958 article entitled "An Evil Omen Returns," warning investors that when yields on stocks approached those on bonds, a major market decline was in the offing. The stock market crash of 1929 occurred in a year when stock dividend yields fell to the level of bond yields. The stock crashes of 1907 and 1891 also followed episodes when the yield on bonds came within one percent of the dividend yield on stocks.

Prior to 1958, the dividend yield on stocks had always been higher than long-term interest rates, and most analysts thought that this was the way it was supposed to be. Stocks were riskier than bonds and therefore should command a higher yield in the market. Under this reasoning, whenever stock prices went too high and brought dividend yields down to that of bonds, it was time to sell.

But things did not work that way in 1958. Stocks returned over 30 percent in the 12 months after dividend yields fell below bond yields, and continued to soar into the early 1960s. There were good economic reasons why this famous benchmark fell by the wayside. Inflation increased the yield on bonds to compensate lenders for rising prices, while investors regarded stocks as the best investment to protect against the eroding value of money. As early as September 1958, *Business Week* noted that "the relationship between stock and bond yields was clearly posting a warning signal, but investors still believe inflation is inevitable and stocks are the only hedge against it."

Yet many on Wall Street were still puzzled by the "great yield reversal." Nicholas Molodovsky, Vice President of White, Weld & Co. and editor of the *Financial Analysts Journal*, observed:

Some financial analysts called [the reversal of bond and stock yields] a financial revolution brought about by many complex causes. Others, on

> the contrary, made no attempt to explain the unexplainable. They showed readiness to accept it as a manifestation of providence in the financial universe.
>
> Imagine the value-oriented investor who pulled all his money out of the stock market in August of 1958 and put it into bonds, vowing never to buy stocks again unless dividend yields rose above those on high-quality bonds. Such an investor would still be waiting to get back into stocks. After 1958, stock dividend yields never again exceeded those of bonds. Yet, from August 1958 onward, overall stock returns overwhelmed the returns on fixed-income securities for any holding period.
>
> Benchmarks for valuation are valid only as long as the economic institutions of the economy do not change. The chronic postwar inflation, resulting from a switch to a paper money standard, changed forever the way investors judged the yields on stocks and bonds.

<u>Business Operations of Laclede Gas Company</u>

Q. Please describe Laclede's business operations.

A. In Laclede Gas Company's 1998 Stockholders' Annual Report, Laclede states:

> Laclede Gas Company is a public utility engaged in the retail distribution of natural gas. The Company serves an area in eastern Missouri, with a population of approximately 2.0 million, including the City of St. Louis, St. Louis County, and parts of eight other counties. As an adjunct to its gas distribution business, the Company operates underground natural gas storage fields and is engaged in the transportation and storage of liquid propane. The Company has also made investments in some non-utility businesses as part of a diversification program.

Laclede's total operating revenues were $506,080,000 for the 12-month period ended March 31, 1999, of which 97.05 percent ($491,138,000) were accounted for by the Company's Missouri jurisdictional natural gas distribution utility operations. These total operating revenues resulted in an overall net income of $6,159,420. These revenues and net incomes were generated from a net utility plant in service with a book value of

$503,667,576 at March 31, 1999. These figures were taken from Laclede's response to Data Request Nos. 3801 and 3808.

Q. Please describe the credit ratings of Laclede.

A. Currently, Standard & Poor's Corporation rates the senior secured debt of Laclede as "AA-," its commercial paper as "A-1+" and categorizes Laclede's business position as being "Average." Also, Moody's Investors Service rates Laclede's first mortgage bonds as "Aa3." All of these ratings are considered to be of "investment grade" ("investment grade" as defined as a "BBB" rating or higher). It should be noted that in the financial community Standard & Poor's Corporation's "AA-" credit rating is comparable to Moody's Investment Service's "Aa3" credit rating. The Corporate Credit Rating issued by Standard & Poor's reflects a stable outlook for Laclede.

Q. Please provide Standard & Poor's Corporation's most recent outlook concerning the credit rating assigned to Laclede.

A. Standard & Poor's Corporation's *Utilities Ratings Service*, May 1999, provides a summary explaining the outlook. Specifically the report states:

> Ratings for Laclede Gas Co. reflect an average business position and improved financial measures. The business position, which measures qualitative credit fundamentals, is supported by modest growth prospects, low market risk, competitive residential rates, efficient operations, and a conservative financial management. Laclede, a regulated natural gas distribution utility, has a St. Louis service area that is very stable and mature with a heating saturation level of about 94%, which lessens growth opportunities. Expected annual sales increases of about 1% - 1.5% during the next few years are attributable to modest customer growth, flat consumption patterns, few main extensions, and a limited conversions potential. Business risk is mitigated by a large firm customer base (85% of gas sales and over 95% of operating margin) and competitive rates to core residential customers. Bypass exposure is lessened from the lack of large industrial customers.

> However, a large share of margins are sensitive to winter weather patterns because of the sizeable residential space heating load. Indeed, warm winters have eroded financial measures despite a high residential monthly customer charge ($12). Financial measures are expected to continue to support the rating with funds from operations interest coverage approaching 4.5 times (x) and net cash flow mostly matching capital spending. Ongoing common equity additions from the dividend reinvestment plan (DRIP) should help to maintain a balanced capital structure.

Q. Please provide some historical financial information for Laclede.

A. Schedules 8 and 9 present historical capital structures and selected financial ratios from 1994 to 1998 for Laclede. Laclede's common equity ratio has ranged from a high of 52.08 percent to a low of 47.86 percent over the time period of 1994 through 1998. *The Value Line Investment Survey: Ratings & Reports* dated March 26, 1999, reported that the average common equity ratio (figured excluding short-term debt) for the natural gas distribution industry for 1998 was 49.5 percent. Laclede's common equity ratio is lower than the "industry average," but the financial management of Laclede is very conservative. According to Standard & Poor's *Utilities Rating Service: Utility Credit Report* dated May 1998, "A $28.6 million common stock issuance in May 1995 illustrates that Laclede is not adverse to issuing common equity. Moreover, the ability to issue $3 million to $4 million in DRIP equity per year will help fund capital spending and allow the company to fine tune the capital structure."

Laclede's return on year-end common equity (ROE) has fluctuated during this time period ranging from a high of 13.59 percent in 1996 to a low of 9.15 percent in 1995. Laclede's 1998 ROE of 10.82 percent was below the average earned by other natural gas distribution utilities of 12 percent according to *The Value Line Investment Survey: Ratings & Reports*, March 26, 1999. Value Line also estimates that Laclede's return on equity for 1999 will be 9.5 percent. In addition, Edward Jones's *Natural Gas Industry Summary: Monthly Financial & Common Stock Information,* March 31, 1999, reports the average return on equity for its composite list of 29 natural gas distribution companies was 9.6 percent for the latest 12-month period available. Laclede's market-to-book ratio has varied from a low of 1.55 times in 1995 to a high of 1.77 in year 1996.

Determination of the Cost of Capital

Q. Please describe the cost of capital approach for determining a utility company's cost of capital.

A. The total dollars of capital for a utility company are determined for a specific point in time. This total dollar amount is proportioned into each specific capital component. A weighted cost for each capital component is determined by multiplying each capital component ratio by the appropriate embedded cost or the estimated cost of common equity. The individual weighted costs are summed to arrive at a total weighted cost of capital. This total weighted cost of capital is synonymous with the fair rate of return for the utility company.

Q. Why is a total weighted cost of capital synonymous with a fair rate of return?

A. From a financial viewpoint, a company employs different forms of capital to support or fund the assets of the company. Each different form of capital has a cost and these costs are weighted proportionately to fund each dollar invested in the assets.

Assuming that the various forms of capital are within a reasonable balance and are costed correctly, the resulting total weighted cost of capital, when applied to rate base, will provide the funds necessary to service the various forms of capital. Thus, the total weighted cost of capital corresponds to a fair rate of return for the utility company.

Capital Structure and Embedded Costs

Q. What capital structure have you employed in developing a weighted cost of capital for Laclede?

A. I have employed a capital structure as of March 31, 1999, which is the end of the update period for Laclede. Schedule 10 presents Laclede's capital structure and associated capital ratios. The resulting capital structure consists of 51.07 percent common stock equity, 0.36 percent preferred stock, 32.98 percent long-term debt and 15.59 percent short-term debt.

The amount of long-term debt outstanding on March 31, 1999, includes current maturities due within one year and was reduced by $2,578,241 (see Schedule 11-1) for the net balance associated with the unamortized premium or discount expense and debt issuance expense (including losses on reacquired debt).

As of March 31, 1999, Laclede had $86,000,000 of short-term debt outstanding. However, for purposes of this analysis, the amount of short-term debt deemed appropriate was $83,871,924 (see Schedule 12). This amount reflects the average short-term debt balance for each of the last 12 months ($94,658,917) reduced by the average construction work in progress balance for each of the last 12 months ($10,786,993). Due to the wide fluctuations in short-term debt during the year ($33,000,000 to $137,500,000) including an average short-term debt balance in the capital structure rather than a single point in time short-term debt balance was deemed appropriate.

Q. Is it appropriate to include short-term debt in Laclede's capital structure?

A. Yes. It is the Staff's opinion that it is appropriate to include the balance of short-term debt that exceeds the balance of construction work in progress (CWIP) in a utility company's capital structure because these funds are being used to fund utility activities. In this specific case, the Staff's capital structure includes short-term debt because these funds are supporting certain rate base items. The rate base items supported by short-term debt include the natural gas and propane inventories and cash working capital.

Laclede provides a description of the role of short-term debt in its business operations on page 17 of its current Form 10-K (September 30, 1998) on file with the Securities and Exchange Commission. Specifically, the Company reports the following:

Liquidity and Capital Resources

> Cash flow from operations, net of dividend payments, has generally provided the principal liquidity to meet operating requirements and to fund the majority of the Company's construction program. Any remaining funding requirements for construction or other needs has been provided by long-term and short-term financing. The issuance of long-term financing is dependent on management's evaluation of need, financial market conditions, and other factors. Short-term financing is used to meet seasonal cash requirements and/or to defer long-term financing until market conditions are favorable.
>
> Short-term borrowing requirements typically peak during colder months, principally because of required payments for natural gas made in advance of the receipt of cash from the Company's customers for the sale of that gas. Such short-term cash requirements have traditionally been met through the sale of commercial paper supported by lines of credit with banks. In January 1998, the Company renewed its primary line of bank credit under which it may borrow up to an aggregate of $40.0 million prior to January 31, 1999, with renewal of any loans outstanding on that date

permitted up to June 30, 1999. This, along with the Company's previously obtained $70.0 million supplemental line of credit which ran through August 30, 1998, provided a total line of credit of $110.0 million for the 1997 - 1998 heating season. Short-term requirements peaked at $110.0 million in January 1998, a level that was met through sales of commercial paper supported by lines of credit with banks. Under current bank loan agreements, Laclede may borrow up to $140.0 million, which includes the Company's primary lines of credit of $40.0 million and a $100.0 million supplemental line of credit extending through August 30, 1999. The Company plans to increase its supplemental credit lines to provide total lines of credit of $160.0 million during its peak winter months. Short-term borrowings outstanding at September 30, 1998 were $98.5 million.

Q. What was the embedded cost of long-term debt for Laclede on March 31, 1999?

A. I determined the embedded cost of long-term debt on March 31, 1999, for Laclede to be 7.77 percent (see Schedule 11).

Q. What was the embedded cost of short-term debt for Laclede on March 31, 1999?

A. I determined the appropriate embedded cost of short-term debt to be the average short-term debt interest rate paid by Laclede for the 12-month period ended March 31, 1999. Based on the Company's response to Staff's Data Information Request No. 3809, the average short-term debt rate paid by Laclede for the 12-month period ended March 31, 1999, was 5.37 percent.

Q. What was the embedded cost of preferred stock for Laclede on March 31, 1999?

A. I determined the embedded cost of preferred stock on March 31, 1999, for Laclede to be 4.96 percent (see Schedule 13).

Cost of Equity

Q. How do you propose to analyze those factors by which the cost of equity for Laclede may be determined?

A. I have selected the DCF model as the primary tool to determine the cost of equity for Laclede.

The DCF Model

Q. Please describe the DCF model.

A. The DCF model is a market-oriented approach for deriving the cost of equity. The return on equity calculated from the DCF model is inherently capable of attracting capital. This results from the theory that security prices adjust continually over time, so that an equilibrium price exists, and the stock is neither under-valued nor over-valued. It can also be stated that stock prices continually fluctuate to reflect the required and expected return for the investor.

The continuous growth form of the DCF model was used in estimating the cost of equity for Laclede. This model relies upon the fact that a company's common stock price is dependent on the expected cash dividends and on cash flows received through capital gains or losses that result from stock price changes. The rate that discounts the sum of the future expected cash flows to the current market price of the common stock is the calculated cost of equity. This can be expressed algebraically as:

$$\text{Present Price} = \frac{\text{Expected Dividends}}{\text{Discounted by k}} + \frac{\text{Expected Price in 1 year}}{\text{Discounted by k}} \quad (1)$$

Since the expected price of a stock in one year is equal to the present price multiplied by one plus the growth rate, equation (1) can be restated as:

$$\text{Present Price} = \frac{\text{Expected Dividends}}{(1+k)} + \frac{\text{Present Price }(1+g)}{(1+k)} \qquad (2)$$

where g equals the growth rate, and k equals the cost of equity. Letting the present price equal P_0 and expected dividends equal D_1, the equation appears as:

$$P_0 = \frac{D_1}{(1+k)} + \frac{P_0(1+g)}{(1+k)} \qquad (3)$$

The cost of equity equation may also be algebraically represented as:

$$k = \frac{D_1}{P_0} + g \qquad (4)$$

Thus, the cost of common stock equity, k, is equal to the expected dividend yield (D_1/P_0) plus the expected growth in dividends (g) continuously summed into the future. The growth in dividends and implied growth in earnings will be reflected in the current price. Therefore, this model also recognizes the potential of capital gains or losses associated with owning a share of common stock.

The DCF method is a continuous stock valuation model. The DCF theory is based on the following assumptions:

1. Market equilibrium,
2. Perpetual life of the company,
3. Constant payout ratio,
4. Payout of less than 100% earnings,
5. Constant price/earnings ratio,
6. Constant growth in cash dividends,
7. Stability in interest rates over time,
8. Stability in required rates of return over time; and

9. Stability in earned returns over time.

Flowing from these, it is further assumed that an investor's growth horizon is unlimited and that earnings, book values and market prices grow hand-in-hand. Even though the entire list of above assumptions is rarely met, the DCF model is a reasonable working model describing an actual investor's expectations and resulting behaviors.

Q. Can you directly analyze the cost of equity for Laclede?

A. Yes. In order to arrive at a company-specific DCF result, the company must have common stock that is market-traded and must pay dividends. Laclede's stock is publicly traded on the New York Stock Exchange under the ticker symbol of "LG" and Laclede has paid cash dividends each year since 1946.

Q. Please explain how you determined a value range for the growth term of the DCF formula for Laclede.

A. I reviewed Laclede's actual dividends per share (DPS), earnings per share (EPS) and book values per share (BVPS) as well as projected growth rates for Laclede. Schedule 14 lists annual compound growth rates and trend line growth rates calculated for DPS, EPS and BVPS for the periods of 1988 through 1998 and 1993 through 1998. Schedule 15 presents the historical DPS, EPS and BVPS growth rates and projected growth rates for Laclede. The projected growth rates were obtained from three outside sources. I/B/E/S Inc.'s *Institutional Brokers Estimate System*, April 15, 1999, projects a five-year growth forecast of 4.00 percent for Laclede. Standard & Poor's Corporation's *Earnings Guide*, May 1999, projects a five-year EPS growth rate of 4.00 percent for Laclede. *Value Line's Investment Survey; Ratings & Reports*, March 26, 1999, projects the compound annual rate of growth for EPS during the next three to five years will be

4.00 percent for Laclede. The average of the three outside sources produces a projected growth rate of 4.00 percent. Combining the average of the historical DPS, EPS and BVPS of 2.55 percent with the projected growth rates produces a reasonable growth rate range of 3.25 to 4.00 percent. This range of growth (g) is the range that I used in the DCF model to calculate a cost of common equity for Laclede.

Q. Please explain how you determined the yield term of the DCF formula for Laclede.

A. The expected yield term (D_1/P_0) of the DCF model is calculated by dividing the amount of common dividends per share expected to be paid over the next twelve months (D_1) by the current market price per share of the firm's common stock (P_0). Even though the model requires the use of a current or spot market price, I have chosen to use a monthly high / low average market price of Laclede's common stock for the period of January 1, 1999, through March 31, 1999. This averaging technique is an attempt to minimize the effects on the dividend yield which can occur due to daily volatility in the stock market.

Schedule 16 presents the monthly high / low average stock market prices from January 1, 1999, through March 31, 1999, for Laclede. Laclede's common stock price has ranged from a low of $20.625 per share to a high of $27.000 per share for the above-mentioned time period. This has produced a range for the monthly average high/low market price of $22.156 to $25.219 per share and reflects the most recent market conditions for the price term (P_0) in the DCF model.

The Value Line Investment Survey: Ratings & Reports, March 26, 1999, is estimating that Laclede's common dividend declared per share will be $1.34 for 1999 and

1.36 for 2000. Therefore, I have chosen to use the value of \$1.35 for the amount of common dividends per share (D_1) expected to be paid by Laclede over the period ending March 31, 1999.

Combining the expected dividend of \$1.35 per share and an average market price range of \$22.156 to \$25.219 per share produces an average dividend yield of 5.75, but in analyzing the yields I developed an expected dividend yield range of 5.75 to 6.00 percent. This is the range that I used as the yield portion (D_1/P_0) in the DCF model.

Q. Please summarize the results of your expected dividend yield and growth rate analysis for the DCF return on equity for Laclede.

A. The summarized DCF cost of equity estimate for Laclede is presented as follows:

Yield (D_1/P_0)	+	Growth Rate (g)	=	Cost of Equity(k)
5.75%	+	3.25%	=	9.00%
6.00%	+	4.00%	=	10.00%

This range of return on common equity of 9.00 to 10.00 percent, with a mid-range of 9.50 percent, is the company-specific cost of equity range for Laclede.

Reasonableness of DCF Returns for Laclede

Q. What analysis was performed to determine the reasonableness of your DCF model derived return on common equity for Laclede?

A. I performed a risk premium cost of equity analysis for Laclede. The risk premium concept implies that the required return on equity is found by adding an explicit premium for risk to a current interest rate. Schedule 17 shows the average risk premium above the yield of "Aa" rated Moody's Public Utility Bonds for Laclede's expected return on common equity. This analysis shows, on average, Laclede's expected return on equity as reported by *The Value Line Investment Survey: Ratings & Reports* is 355 basis points higher than the average yield on "Aa" rated Moody's Public Utility Bonds for the period of January 1988 to present (see Schedule 17).

Moody's *Bond Record*, May 1999, reports the average yield for "Aa" rated utility bonds for March 1999 was 7.11 percent. Adding 355 basis points to this "Aa" yield produces an estimated cost of equity of 10.66 percent.

Q. Did you perform the Capital Asset Pricing Model (CAPM) to check the reasonableness of your DCF model derived return on common equity for Laclede?

A. Yes. I performed a CAPM cost of equity analysis for Laclede. The CAPM describes the relationship between a security's investment risk and its market rate of return. This relationship identifies the rate of return that investors expect a security to earn so that its market return is comparable with the market returns earned by other securities that have similar risk. The general form of the CAPM is as follows:

$$k = R_f + \beta (R_m - R_f)$$

where:

k = the expected return on equity for a specific security,

R_f = the risk free rate,

β = beta; and

$R_m - R_f$ = the market risk premium.

The first term of the CAPM is the risk free rate (R_f). The risk free rate reflects the level of return which can be achieved without accepting any risk. In reality, there is no such riskless asset, but it is generally represented by U.S. Treasury securities, because of the government's unlimited ability to tax and create money. For purposes of this analysis, the risk free rate was represented by the yield on 30-Year U.S. Treasury Bonds. The appropriate rate was determined to be the high / low range of 5.58 to 5.01 percent for the six-month period ending March 31, 1999, as published on the Federal Reserve website, http://www.stls.frb.org/fred/data/irates/gs30.

The second term of the CAPM is beta (β). Beta is an indicator of a security's investment risk. It represents the relative movement and relative risk between a particular security and the market as a whole (where beta for the market equals 1.00). Securities with betas greater than 1.00 exhibit greater volatility than do securities with betas less than 1.00. This causes a higher beta security to be riskier and therefore requires a higher return in order to attract investor capital away from a lower beta security. For purposes of this analysis, the appropriate beta was determined to be 0.55 as published in *The Value Line Investment Survey: Ratings & Reports*, March 26, 1999.

The final term of the CAPM is the market risk premium (R_m - R_f). The market risk premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk-free investment. For purposes of this analysis, the appropriate market risk premium was determined to be 7.40 percent as calculated in Ibbotson Associates, Inc.'s *Stocks, Bonds, Bills, and Inflation: 1998 Yearbook.*

Schedule 18 presents the CAPM analysis with regard to Laclede. The CAPM analysis produces an estimated cost of equity range of 9.08 to 9.65 percent for Laclede.

Q. Did you perform an analysis on Laclede's resulting pre-tax interest coverage ratios?

A. Yes. A pro forma pre-tax interest coverage calculation was completed for Laclede (see Schedule 19). It reveals that the return on equity range of 9.00 to 10.00 percent would yield a pre-tax interest coverage ratio in the range of 3.86 to 4.17 times. This interest coverage range is in line with Standard & Poor's Financial Mean for an "A" and "AA" rated gas distribution company of 3.83 and 4.12 times respectively.

Additionally, the low end of the return on equity range allows enough earnings power for Laclede to meet its Net Earnings Requirement of two times the amount of the annual interest requirements pursuant to provisions of its Supplemental Indenture. Thus, the pro forma pre-tax interest coverage test shows that there will be enough earnings potential for Laclede to meet its capital costs based upon the above-referenced return on equity range for Laclede.

Q. Did you perform any cost of equity analysis on other utility companies?

A. Yes. I have selected a group of comparable natural gas distribution companies to analyze for determining the reasonableness of the company-specific DCF results for Laclede. Schedule 20 presents a list of 29 market-traded natural gas distribution companies monitored by Edward Jones of which Laclede is one. This list was reviewed for the following criteria:

1. Information printed in Value Line: This criterion eliminated nine companies;

2. Pretax interest coverage greater than 2.70 times: This criterion eliminated eight additional companies;

3. Long-term debt to total capital less than 50 percent: This criterion eliminated two additional companies;

4. Distribution revenue to total revenues greater than 90 percent: This criterion eliminated no additional companies;

5. Positive Dividends Per Share Annual Compound Growth Rate for the period of 1988 through 1998: This criterion eliminated two additional companies; and

6. No Missouri Operations: This criterion eliminated Laclede.

On average, this final group of seven publicly traded natural gas distribution companies (comparable natural gas distribution companies) is comparable to Laclede because of similar business operations and financial conditions. The seven comparable gas utility companies are listed on Schedule 21.

Q. Please explain how you approached the determination of the cost of equity for the comparable natural gas distribution companies.

A. I have calculated a DCF cost of equity for each of the seven comparable natural gas distribution companies. The first step was to calculate a growth rate. Basically, I used the same approach of obtaining a growth rate estimate for the seven comparable natural gas distribution companies as I used in calculating a growth rate for Laclede, except that I utilized the average of the positive historical DPS, EPS and BVPS growth rates as well as projected growth rates (see Schedules 22 and 23). The comparable natural gas distribution companies' average historical growth rates ranged from 1.01 to 5.71 percent with an overall average of 2.92 percent for the group (Column 1 of Schedule 23). The projected growth rates ranged from 3.50 to 7.20 percent with an average of 5.28 percent. Taking into account the projected and historical growth rates, a proposed range of growth of 4.15 to 5.28 (see Schedule 23) percent was used in the DCF calculation for the comparable companies. The growth rate range of 3.25 to 4.00 percent as calculated for Laclede falls below the proposed range of growth for the seven comparable natural gas distribution companies.

The next step was to calculate an expected dividend yield for each of the seven comparable natural gas distribution companies. Schedule 24 presents the average high / low stock price for the period of January 1, 1999, through March 31, 1999, for each gas utility company. Column 3 of Schedule 25 shows that the projected dividend yields ranged from 4.12 to 5.60 percent for the seven comparable natural gas distribution companies with the average at 4.96 percent. Laclede's proposed dividend yield range of 5.75 to 6.00 percent falls above the average for the seven comparable natural gas distribution companies.

The projected growth rates and projected dividend yields were then added together to reach an estimated DCF cost of equity for each of the seven comparable natural gas distribution companies (see Column 5 of Schedule 25). These estimates produced a DCF cost of equity ranging from 9.44 to 11.07 percent for the comparable natural gas distribution companies with an average of 10.24 percent. Using the average dividend yield of 4.96 percent and adding that to the proposed growth rate range of 4.15 to 5.28 percent produces a proposed cost of common equity range of 9.11 to 10.24 percent for the seven comparable natural gas distribution companies. This solidly supports my proposed cost of equity range for Laclede of 9.00 to 10.00 percent.

Q. What analysis was performed to determine the reasonableness of your DCF model derived return on common equity for the comparable company group?

A. I performed a risk premium and CAPM cost of equity analysis for the comparable company group. The risk premium analysis shows that the comparable companies' expected return on equity as reported by *The Value Line Investment Survey: Ratings & Reports* ranges from 258 to 419 basis points higher than the appropriate yielding Moody's Public Utility Bond (see Schedule 26). Adding the equity premium to the current yield on "A" or "AA" New Issue 30-Year Utility Bonds produces an estimated cost of equity ranging from 9.84 to 11.45 percent, with an average of 10.80 percent. This provides support to my DCF cost of equity analysis for the seven comparable natural gas distribution companies and my estimated required return on common equity for Laclede (see Schedule 27).

A CAPM cost of equity analysis was also preformed. The betas for the seven comparable natural gas distribution companies averaged 0.63, well above Laclede's beta of 0.55. This suggests that Laclede is less risky than the comparable companies on average and therefore suggests a slightly lower required return. The CAPM analysis implies that, on average, the required return on equity for the seven comparable natural gas distribution companies falls within the range of 9.66 to 10.23 percent (see Schedule 28). This provides support to my DCF cost of equity analysis for the comparable company group and my entire required return on common equity range for Laclede.

Q. What additional analysis was performed to determine the reasonableness of your DCF model derived returns for the seven comparable natural gas distribution companies?

A. An analysis was performed on the reported returns on equity. These figures were compared to the market-to-book ratios to provide some insight into the DCF cost of equity results.

Q. Please describe the analysis completed on the reported returns on equity and market-to-book values for the seven comparable natural gas distribution companies.

A. The market-to-book ratio is an important valuation ratio. It indicates the value that the financial markets attach to the management and organization of the company. It also measures, from an investor's viewpoint, the potential earning power of a company. A well-run company with strong management and an organization that functions efficiently should have a market value at least equal to the book value of its physical assets. Market-to-book ratios having values greater than 1.0 times are one indication that investors are satisfied with the potential returns and that the investors believe the company's expected earnings will be more than its cost of capital. It is difficult to predict future values for market-to-book ratios because they are affected by the overall market conditions and factors that determine stock prices.

Schedule 29 shows market-to-book values for Laclede and the seven comparable natural gas distribution companies, along with returns on year-end common equity for 1998. Of the seven comparable natural gas distribution companies reported earnings on year-end common equity, one falls 300 basis points below the recommended range of 9.00 to 10.00 percent, while two companies fall between 20 and 70 basis points above the proposed range. Furthermore, the companies that fell well below or slightly above the ROE range had market-to-book ratios ranging from 1.31 times to 1.53 times. This suggests that, all things remaining the same, a return on equity of at least 9.00 percent for Laclede should still produce a market-to-book value of over 1.0 times, which indicates favorable valuation from the market. Schedule 29 also shows that the average return on year-end common equity for the seven comparable companies of 10.81 percent is comparable to the return on year-end common equity of 10.8 percent reported for Laclede Gas for 1998.

Rate of Return for Laclede

Q. Please explain how the returns developed for each capital component are used in the ratemaking approach you have adopted to be applied to Laclede's Missouri natural gas distribution operations.

A. The cost of service ratemaking method was adopted in this case. This approach develops the public utility's revenue requirement. The cost of service (revenue requirement) is based on the following components: revenues, prudent operation costs, rate base and a return allowed on the rate base (see Schedule 30).

It is my responsibility to calculate and recommend a rate of return that should be authorized on the rate base of Laclede. Under the cost of service ratemaking approach, a weighted cost of capital in the range of 8.02 to 8.53 percent was developed for Laclede's Missouri natural gas distribution operations (see Schedule 31). This rate was calculated by applying an embedded cost of short-term debt of 5.37 percent, an embedded cost of long-term debt of 7.77 percent, an embedded cost of preferred stock of 4.96 percent and a return on common equity range of 9.00 to 10.00 percent to a capital structure consisting of 15.59 percent short-term debt, 32.98 percent long-term debt, 0.36 percent preferred stock and 51.07 percent common equity. Therefore, as I suggested earlier, I am recommending that Laclede Gas Company's Missouri natural gas distribution operations be allowed to earn a return on its original cost rate base in the range of 8.02 to 8.53 percent.

Through this analysis, I believe I have developed a fair and reasonable rate of return. My rate of return is based on a return on common equity range of 9.00 to 10.00 percent. My return range is based on the current and projected economic conditions.

This range is sufficient to assure confidence in the financial soundness of the utility and will be adequate, under efficient and economical management, to maintain and support its credit rating, as well as allow Laclede to raise the money necessary for the proper discharge of its public duties.

Furthermore, it is projected that economic conditions will continue in the future. In a recent article published in *Realtor Magazine*, it was stated that *The Wall Street Journal* has rated James F. Smith, the new chief economist for the National Association of Realtors, as one of the country's most accurate economic forecasters. The article further states that Smith successfully predicted that interest rates and inflation would continue to decline during the second half of 1998. Smith's current projection is as follows:

> Increased business productivity will propel continued economic expansion over the next two years without sparking inflation. That will keep interest rates low...By November 2002, 30-year fixed-rate mortgages will be at 5 percent or less...Then hang on for another 10-year ride of full-throttle growth...

Based on Smith's statements, we are experiencing a temporary market trend to hold down inflation. These statements would also suggest that we will be returning to an economic environment of low inflation, low interest rates and low unemployment that has been sustained over the last several years. Through my analysis, I believe I have developed a fair and reasonable return and, when applied to Laclede Gas Company's rate base, will allow Laclede the opportunity to earn the revenue requirement developed in this rate case.

Adjustments

Q. Are you sponsoring any adjustment to Staff's revenue requirement run?

A. Yes. I am sponsoring adjustment S-15.28 to the Income Statement. During May and June of 1995, Laclede issued 1,575,000 shares of common stock. In doing so, the Company incurred costs totaling $1,330,799. It is the Staff's position that these costs be recovered through rates as an above-the-line adjustment to operating expenses. I have recommended that these costs be amortized at a rate of $266,160 per year for five years, within the context of Case No. GR-96-193. This amortization began on September 10, 1996, with the effective date of the Commission's order in Case No. GR-96-193 and should run through September 9, 2001.

True-up Audit

Q. Is the Staff proposing a true-up audit in this case?

A. Yes. Laclede has requested a true-up audit in its direct case due to significant changes that are expected in its cost of service. Therefore, I am recommending a true-up audit be performed for the purpose of updating the capital structure and embedded cost of preferred stock, embedded cost of long-term debt and embedded cost of short-term debt through July 31, 1999. This would be in conjunction to those items recommended for true-up by Staff witness Arlene S. Westerfield of the Accounting Department in her direct testimony.

Q. Does this conclude your prepared direct testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the matter of Laclede Gas Company's tariff	)	
Sheets to Revise Natural Gas Rates	)	Case No. GR-99-315

AFFIDAVIT OF DAVID P. BROADWATER

STATE OF MISSOURI	)	
	)	ss
COUNTY OF COLE	)	

David P. Broadwater, of lawful age, on his oath states: that he has participated in the preparation of the foregoing written direct testimony in question and answer form, consisting of thirty-eight pages and thirty-one schedules to be presented in the above case; that the answers in the foregoing written direct testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

David P. Broadwater

Subscribed and sworn to before me this 25th day of June, 1999.

J. Kay Niemeier
Notary Public

J KAY NIEMEIER
NOTARY PUBLIC STATE OF MISSOURI
COLE COUNTY
MY COMMISSION EXP. FEB. 26,2000

My Commission expires ________________________ .

AN ANALYSIS OF THE COST OF CAPITAL

FOR

LACLEDE GAS COMPANY

CASE NO. GR-99-315

FILED
JUN 28 1999
Missouri Public
Service Commission

SCHEDULES

BY

DAVID P. BROADWATER

UTILITY SERVICES DIVISION

MISSOURI PUBLIC SERVICE COMMISSION

June 1999

LACLEDE GAS COMPANY
CASE NO. GR-99-315

List of Schedules

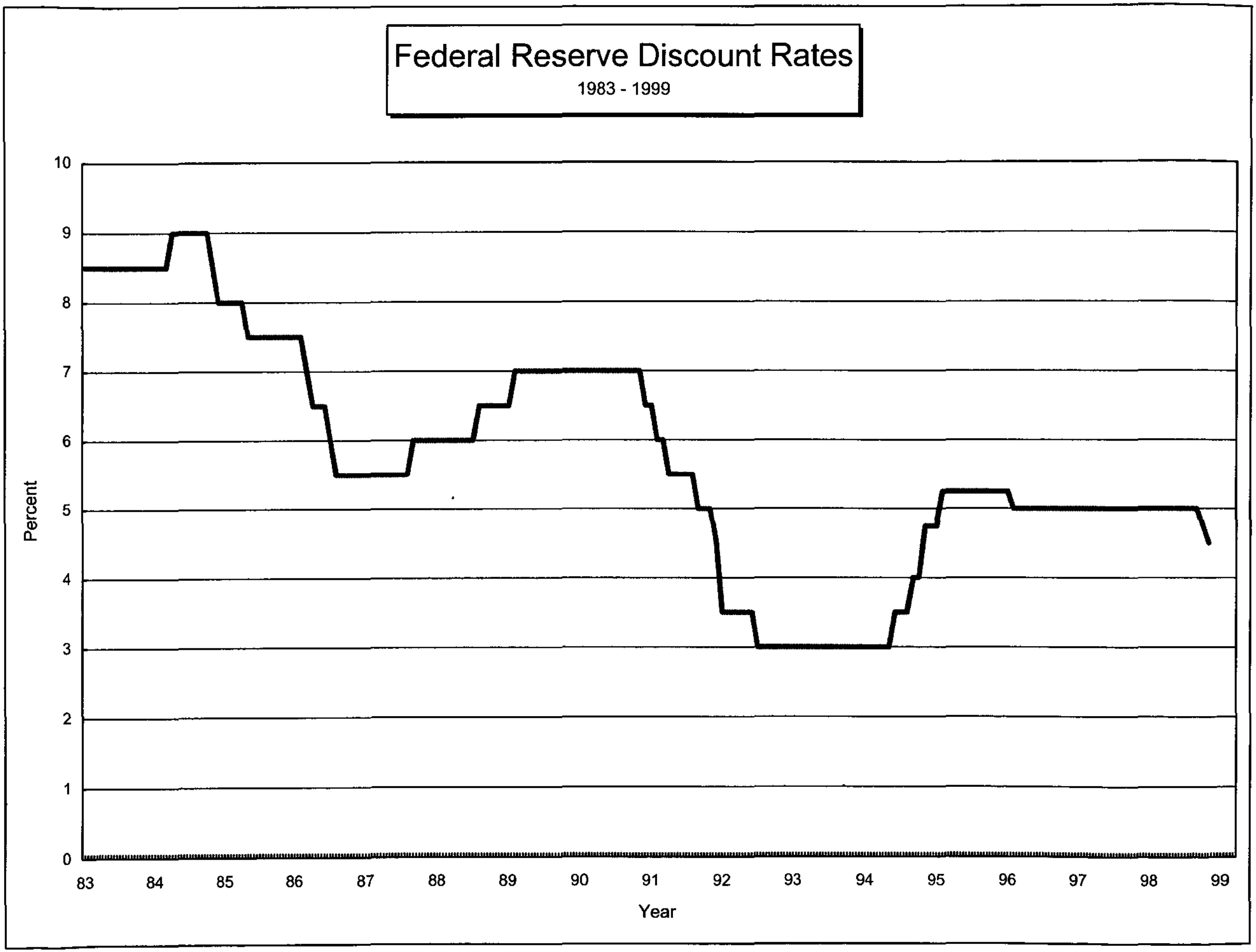
List of Schedules (continued)

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Federal Reserve Discount Rate Changes

Date	Discount Rate
01/01/82	12.00%
07/20	11.50%
08/02	11.00%
08/16	10.50%
08/27	10.00%
10/12	9.50%
11/22	9.00%
12/15	8.50%
01/01/83	8.50%
12/31	8.50%
04/09/84	9.00%
11/21	8.50%
12/24	8.00%
05/20/85	7.50%
03/07/86	7.00%
04/21	6.50%
07/11	6.00%
08/21	5.50%
09/04/87	6.00%
08/09/88	6.50%
02/24/89	7.00%
12/19/90	6.50%
02/01/91	6.00%
04/30	5.50%
09/13	5.00%
11/06	4.50%
12/20	3.50%
07/02/92	3.00%
01/01/93	3.00%
12/31	3.00%
05/17/94	3.50%
08/16	4.00%
11/15	4.75%
02/01/95	5.25%
01/31/96	5.00%
12/12/97	5.00%
01/09/98	5.00%
03/06/98	5.00%
10/15/98	4.75%
11/17/98	4.50%
3/12/99	4.50%

Sources: Federal Reserve Bulletin & The Wall Street Journal.


Federal Reserve Discount Rates
1983 - 1999
10
9
8
7
6
5
4
3
2
1
0
Percent
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
Year

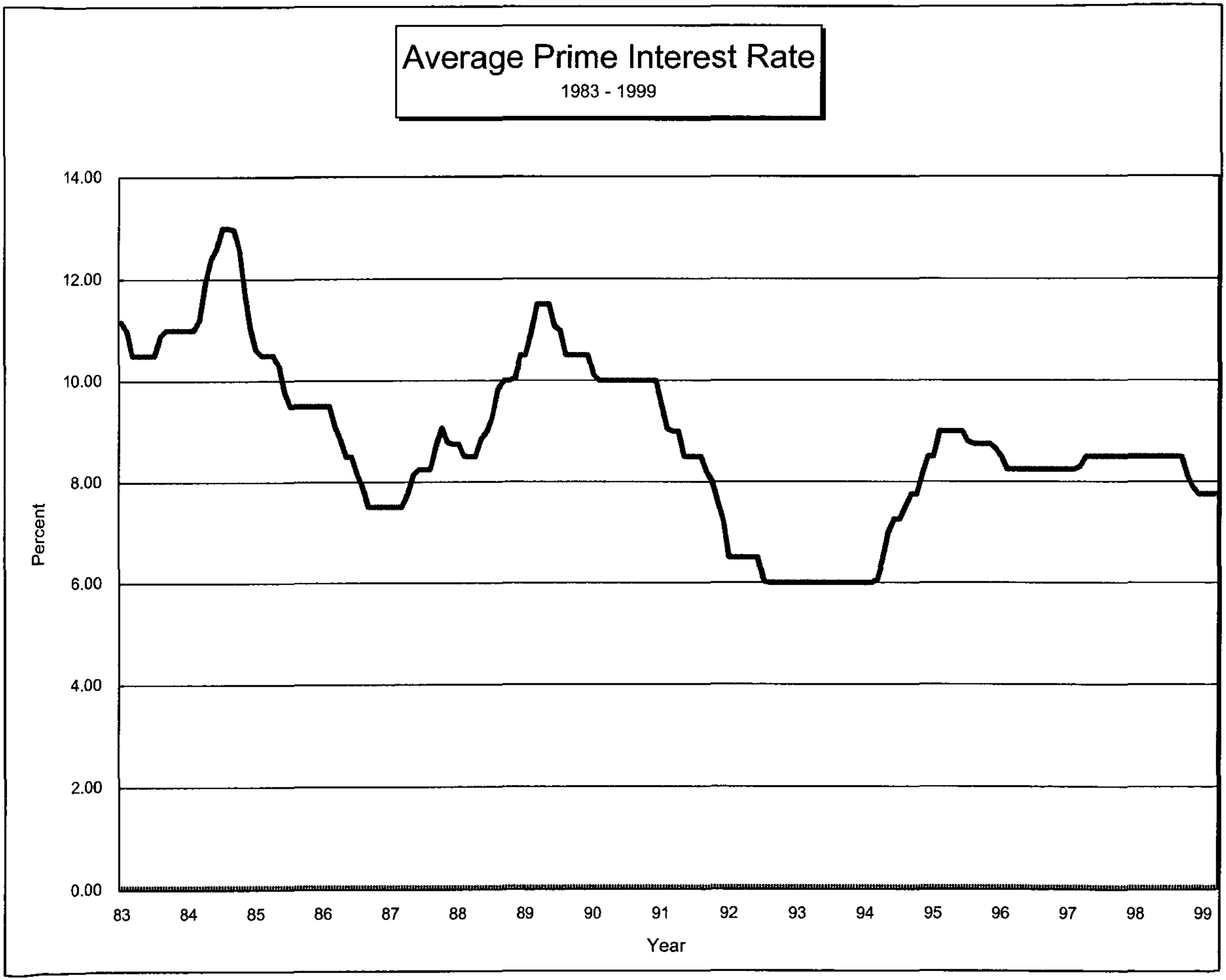
Schedule 2-2

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average Prime Interest Rates

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1984	11.00	Jan 1988	8.75	Jan 1992	6.50	Jan 1996	8.50
Feb	11.00	Feb	8.51	Feb	6.50	Feb	8.25
Mar	11.21	Mar	8.50	Mar	6.50	Mar	8.25
Apr	11.93	Apr	8.50	Apr	6.50	Apr	8.25
May	12.39	May	8.84	May	6.50	May	8.25
Jun	12.60	Jun	9.00	Jun	6.50	Jun	8.25
Jul	13.00	Jul	9.29	Jul	6.02	Jul	8.25
Aug	13.00	Aug	9.84	Aug	6.00	Aug	8.25
Sep	12.97	Sep	10.00	Sep	6.00	Sep	8.25
Oct	12.58	Oct	10.00	Oct	6.00	Oct	8.25
Nov	11.77	Nov	10.05	Nov	6.00	Nov	8.25
Dec	11.06	Dec	10.50	Dec	6.00	Dec	8.25
Jan 1985	10.61	Jan 1989	10.50	Jan 1993	6.00	Jan 1997	8.26
Feb	10.50	Feb	10.93	Feb	6.00	Feb	8.25
Mar	10.50	Mar	11.50	Mar	6.00	Mar	8.30
Apr	10.50	Apr	11.50	Apr	6.00	Apr	8.50
May	10.31	May	11.50	May	6.00	May	8.50
Jun	9.78	Jun	11.07	Jun	6.00	Jun	8.50
Jul	9.50	Jul	10.98	Jul	6.00	Jul	8.50
Aug	9.50	Aug	10.50	Aug	6.00	Aug	8.50
Sep	9.50	Sep	10.50	Sep	6.00	Sep	8.50
Oct	9.50	Oct	10.50	Oct	6.00	Oct	8.50
Nov	9.50	Nov	10.50	Nov	6.00	Nov	8.50
Dec	9.50	Dec	10.50	Dec	6.00	Dec	8.50
Jan 1986	9.50	Jan 1990	10.11	Jan 1994	6.00	Jan 1998	8.50
Feb	9.50	Feb	10.00	Feb	6.00	Feb	8.50
Mar	9.10	Mar	10.00	Mar	6.06	Mar	8.50
Apr	8.83	Apr	10.00	Apr	6.45	Apr	8.50
May	8.50	May	10.00	May	6.99	May	8.50
Jun	8.50	Jun	10.00	Jun	7.25	Jun	8.50
Jul	8.16	Jul	10.00	Jul	7.25	Jul	8.5
Aug	7.90	Aug	10.00	Aug	7.51	Aug	8.5
Sep	7.50	Sep	10.00	Sep	7.75	Sep	8.49
Oct	7.50	Oct	10.00	Oct	7.75	Oct	8.12
Nov	7.50	Nov	10.00	Nov	8.15	Nov	7.89
Dec	7.50	Dec	10.00	Dec	8.50	Dec	7.75
Jan 1987	7.50	Jan 1991	9.52	Jan 1995	8.50	Jan 1999	7.75
Feb	7.50	Feb	9.05	Feb	9.00	Feb	7.75
Mar	7.50	Mar	9.00	Mar	9.00	Mar	7.75
Apr	7.75	Apr	9.00	Apr	9.00		
May	8.14	May	8.50	May	9.00		
Jun	8.25	Jun	8.50	Jun	9.00		
Jul	8.25	Jul	8.50	Jul	8.80		
Aug	8.25	Aug	8.50	Aug	8.75		
Sep	8.70	Sep	8.20	Sep	8.75		
Oct	9.07	Oct	8.00	Oct	8.75		
Nov	8.78	Nov	7.58	Nov	8.75		
Dec	8.75	Dec	7.21	Dec	8.65		

Sources: Federal Reserve website, http://www.stls.frb.org/fred/data/irates/mprime.



Average Prime Interest Rate
1983 - 1999
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Percent
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
Year

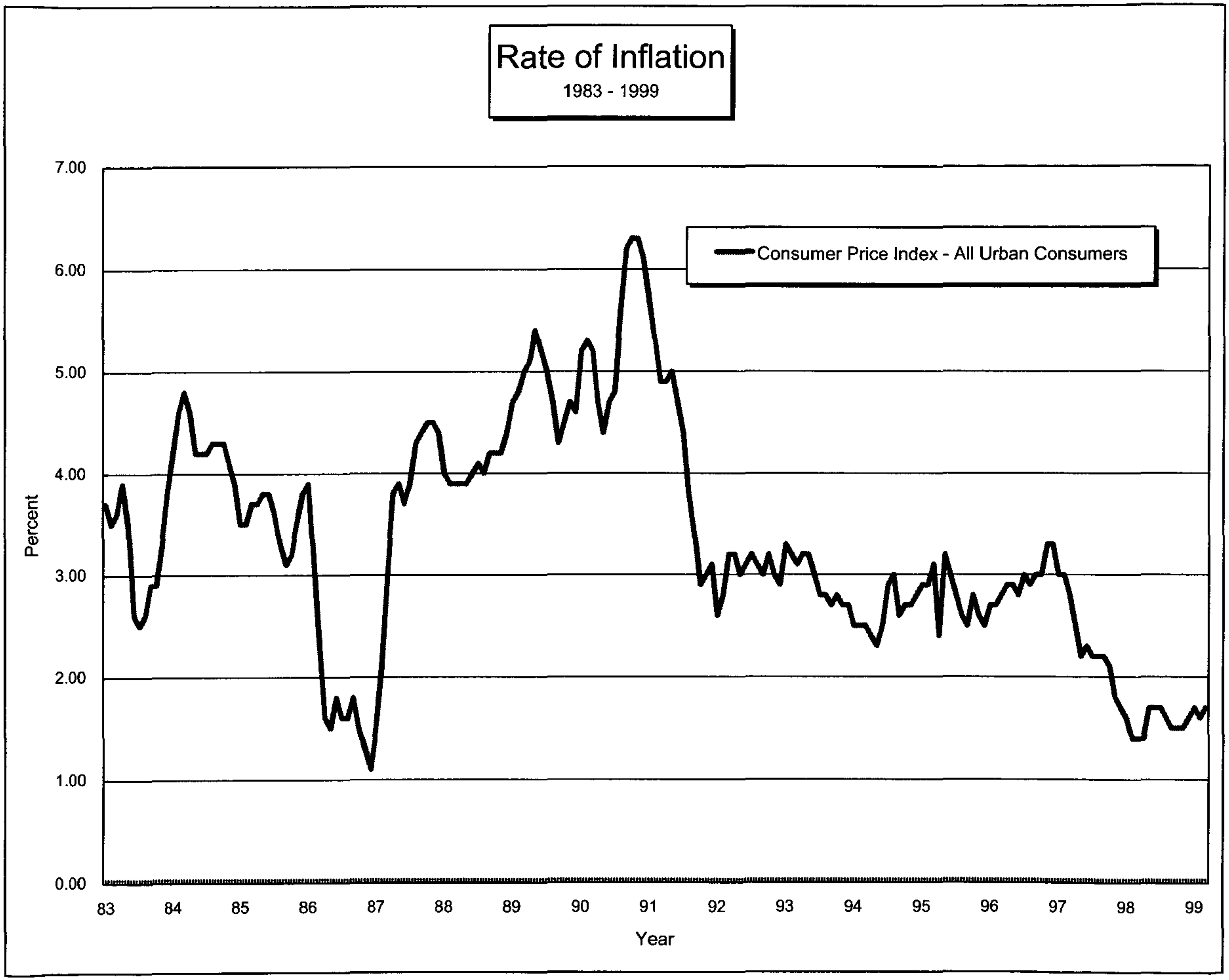
Schedule 3-2

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Rate of Inflation

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1984	4.20	Jan 1988	4.00	Jan 1992	2.60	Jan 1996	2.70
Feb	4.60	Feb	3.90	Feb	2.80	Feb	2.70
Mar	4.80	Mar	3.90	Mar	3.20	Mar	2.80
Apr	4.60	Apr	3.90	Apr	3.20	Apr	2.90
May	4.20	May	3.90	May	3.00	May	2.90
Jun	4.20	Jun	4.00	Jun	3.10	Jun	2.80
Jul	4.20	Jul	4.10	Jul	3.20	Jul	3.00
Aug	4.30	Aug	4.00	Aug	3.10	Aug	2.90
Sep	4.30	Sep	4.20	Sep	3.00	Sep	3.00
Oct	4.30	Oct	4.20	Oct	3.20	Oct	3.00
Nov	4.10	Nov	4.20	Nov	3.00	Nov	3.30
Dec	3.90	Dec	4.40	Dec	2.90	Dec	3.30
Jan 1985	3.50	Jan 1989	4.70	Jan 1993	3.30	Jan 1997	3.00
Feb	3.50	Feb	4.80	Feb	3.20	Feb	3.00
Mar	3.70	Mar	5.00	Mar	3.10	Mar	2.80
Apr	3.70	Apr	5.10	Apr	3.20	Apr	2.50
May	3.80	May	5.40	May	3.20	May	2.20
Jun	3.80	Jun	5.20	Jun	3.00	Jun	2.30
Jul	3.60	Jul	5.00	Jul	2.80	Jul	2.20
Aug	3.30	Aug	4.70	Aug	2.80	Aug	2.20
Sep	3.10	Sep	4.30	Sep	2.70	Sep	2.20
Oct	3.20	Oct	4.50	Oct	2.80	Oct	2.10
Nov	3.50	Nov	4.70	Nov	2.70	Nov	1.80
Dec	3.80	Dec	4.60	Dec	2.70	Dec	1.70
Jan 1986	3.90	Jan 1990	5.20	Jan 1994	2.50	Jan 1998	1.60
Feb	3.10	Feb	5.30	Feb	2.50	Feb	1.40
Mar	2.30	Mar	5.20	Mar	2.50	Mar	1.40
Apr	1.60	Apr	4.70	Apr	2.40	Apr	1.40
May	1.50	May	4.40	May	2.30	May	1.70
Jun	1.80	Jun	4.70	Jun	2.50	Jun	1.70
Jul	1.60	Jul	4.80	Jul	2.90	Jul	1.70
Aug	1.60	Aug	5.60	Aug	3.00	Aug	1.60
Sep	1.80	Sep	6.20	Sep	2.60	Sep	1.50
Oct	1.50	Oct	6.30	Oct	2.70	Oct	1.50
Nov	1.30	Nov	6.30	Nov	2.70	Nov	1.50
Dec	1.10	Dec	6.10	Dec	2.80	Dec	1.60
Jan 1987	1.50	Jan 1991	5.70	Jan 1995	2.90	Jan 1999	1.70
Feb	2.10	Feb	5.30	Feb	2.90	Feb	1.60
Mar	3.00	Mar	4.90	Mar	3.10	Mar	1.70
Apr	3.80	Apr	4.90	Apr	2.40		
May	3.90	May	5.00	May	3.20		
Jun	3.70	Jun	4.70	Jun	3.00		
Jul	3.90	Jul	4.40	Jul	2.80		
Aug	4.30	Aug	3.80	Aug	2.60		
Sep	4.40	Sep	3.40	Sep	2.50		
Oct	4.50	Oct	2.90	Oct	2.80		
Nov	4.50	Nov	3.00	Nov	2.60		
Dec	4.40	Dec	3.10	Dec	2.50		

Source: U.S. Department of Labor, Bureau of Labor Statistics website, http://stats.bls.gov/
Consumer Price Index - All Urban Consumers, Change for 12-Month Period.


Rate of Inflation
1983 - 1999
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Percent
Consumer Price Index - All Urban Consumers
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
Year

Schedule 4-2

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average Yields on Moody's Public Utility Bonds

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1984	13.40	Jan 1988	10.75	Jan 1992	8.67	Jan 1996	7.20
Feb	13.50	Feb	10.11	Feb	8.77	Feb	7.37
Mar	14.03	Mar	10.11	Mar	8.84	Mar	7.72
Apr	14.30	Apr	10.53	Apr	8.79	Apr	7.88
May	14.95	May	10.75	May	8.72	May	7.99
Jun	15.16	Jun	10.71	Jun	8.64	Jun	8.07
Jul	14.92	Jul	10.96	Jul	8.46	Jul	8.02
Aug	14.29	Aug	11.09	Aug	8.34	Aug	7.84
Sep	14.04	Sep	10.56	Sep	8.32	Sep	8.01
Oct	13.68	Oct	9.92	Oct	8.44	Oct	7.76
Nov	13.15	Nov	9.89	Nov	8.53	Nov	7.48
Dec	12.96	Dec	10.02	Dec	8.36	Dec	7.58
Jan 1985	12.88	Jan 1989	10.02	Jan 1993	8.23	Jan 1997	7.79
Feb	13.00	Feb	10.02	Feb	8.00	Feb	7.68
Mar	13.66	Mar	10.16	Mar	7.85	Mar	7.92
Apr	13.42	Apr	10.14	Apr	7.76	Apr	8.08
May	12.89	May	9.92	May	7.78	May	7.94
Jun	11.91	Jun	9.49	Jun	7.68	Jun	7.77
Jul	11.88	Jul	9.34	Jul	7.53	Jul	7.52
Aug	11.93	Aug	9.37	Aug	7.21	Aug	7.57
Sep	11.95	Sep	9.43	Sep	7.01	Sep	7.50
Oct	11.84	Oct	9.37	Oct	6.99	Oct	7.37
Nov	11.33	Nov	9.33	Nov	7.30	Nov	7.24
Dec	10.82	Dec	9.31	Dec	7.33	Dec	7.16
Jan 1986	10.66	Jan 1990	9.44	Jan 1994	7.31	Jan 1998	7.03
Feb	10.16	Feb	9.66	Feb	7.44	Feb	7.09
Mar	9.33	Mar	9.75	Mar	7.83	Mar	7.13
Apr	9.02	Apr	9.87	Apr	8.20	Apr	7.12
May	9.52	May	9.89	May	8.32	May	7.11
Jun	9.51	Jun	9.69	Jun	8.31	Jun	6.99
Jul	9.19	Jul	9.66	Jul	8.47	Jul	6.99
Aug	9.15	Aug	9.84	Aug	8.41	Aug	6.96
Sep	9.42	Sep	10.01	Sep	8.65	Sep	6.88
Oct	9.39	Oct	9.94	Oct	8.88	Oct	6.88
Nov	9.15	Nov	9.76	Nov	9.00	Nov	6.96
Dec	8.96	Dec	9.57	Dec	8.79	Dec	6.84
Jan 1987	8.77	Jan 1991	9.56	Jan 1995	8.77	Jan 1999	6.87
Feb	8.81	Feb	9.31	Feb	8.56	Feb	7.00
Mar	8.75	Mar	9.39	Mar	8.41	Mar	7.18
Apr	9.30	Apr	9.30	Apr	8.30		
May	9.82	May	9.29	May	7.93		
Jun	9.87	Jun	9.44	Jun	7.62		
Jul	10.01	Jul	9.40	Jul	7.73		
Aug	10.33	Aug	9.16	Aug	7.86		
Sep	11.00	Sep	9.03	Sep	7.62		
Oct	11.32	Oct	8.99	Oct	7.46		
Nov	10.82	Nov	8.93	Nov	7.40		
Dec	10.99	Dec	8.76	Dec	7.21		

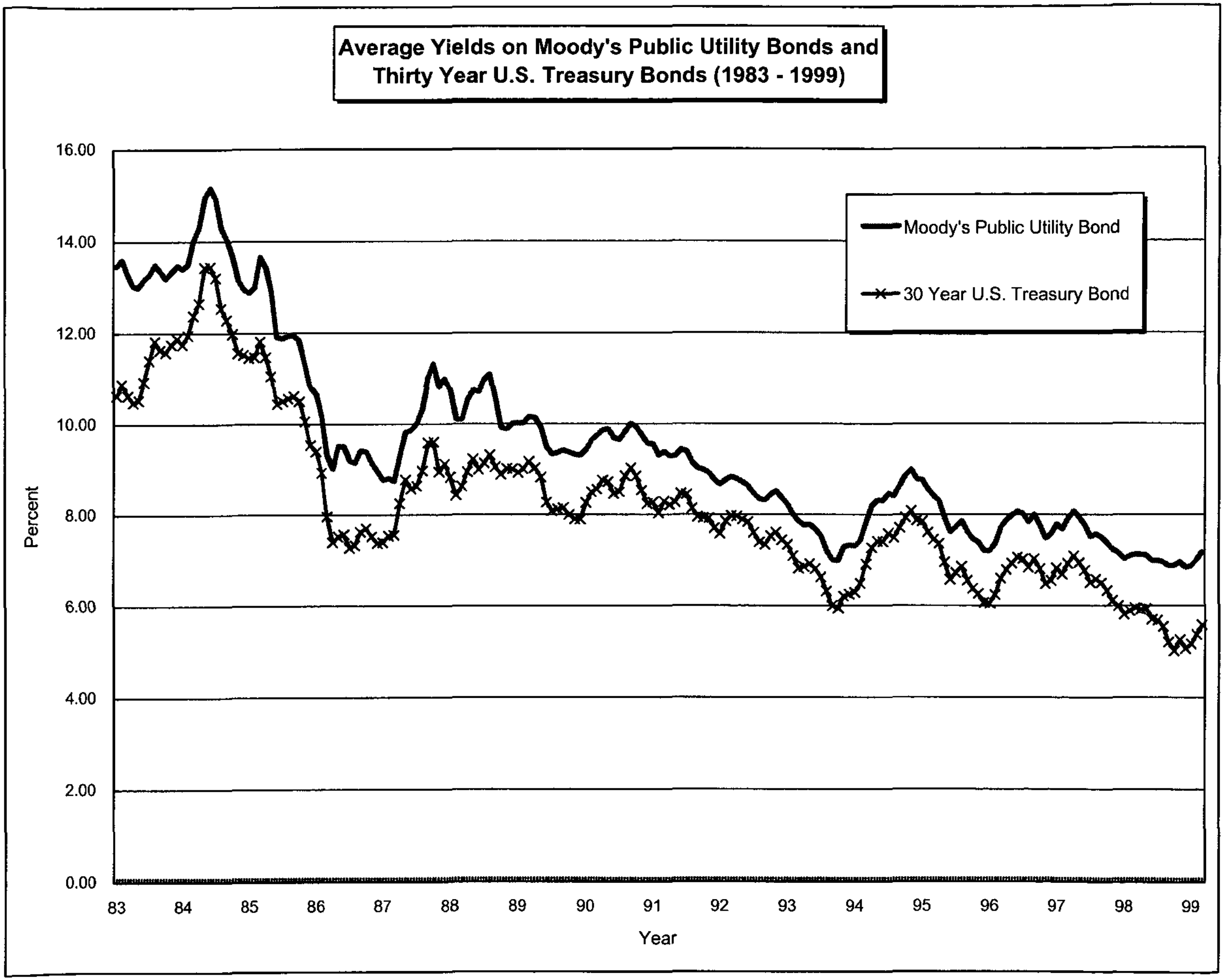
Source: Moody's Bond Record.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

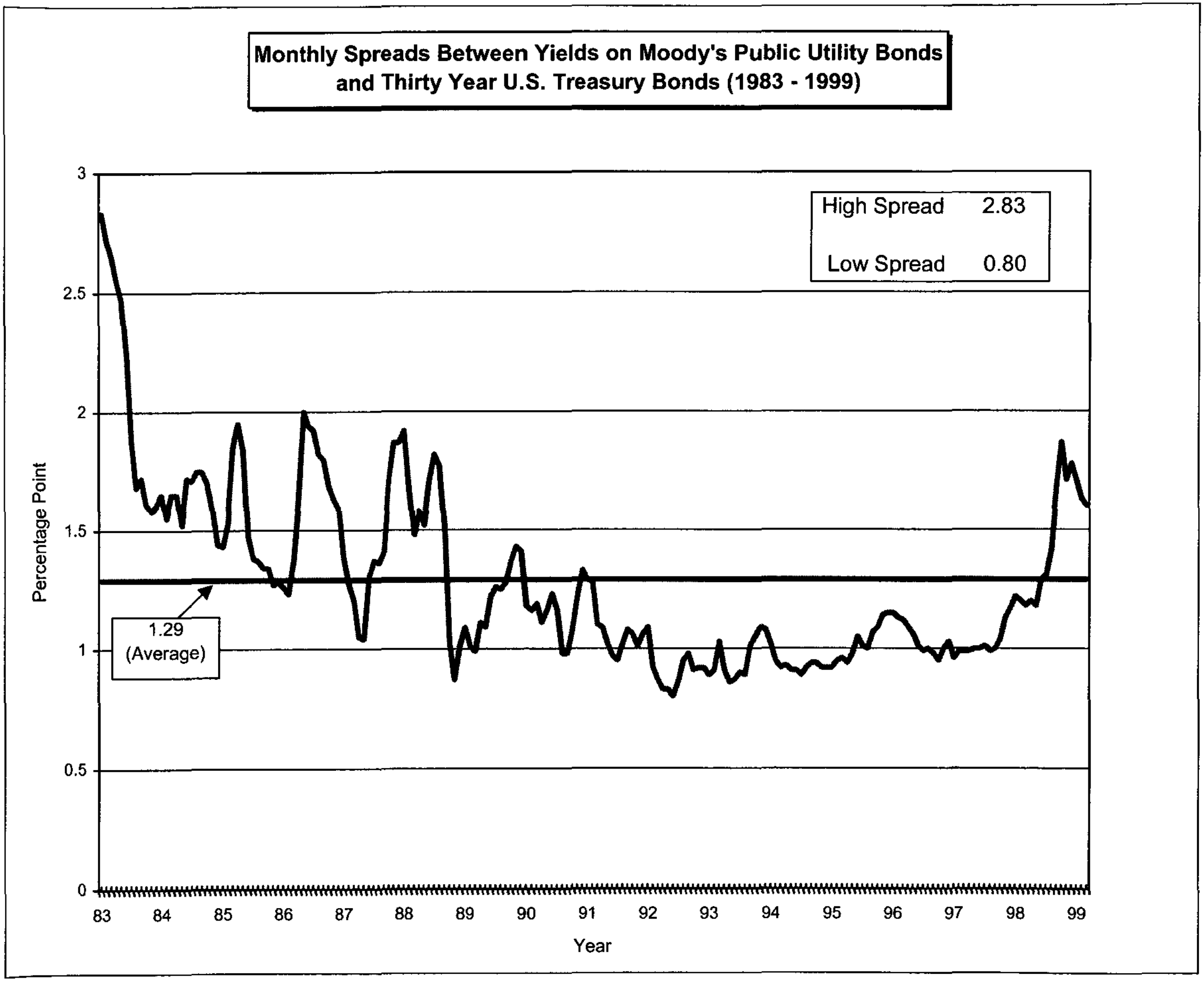
Average Yields on Thirty Year U.S. Treasury Bonds

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1984	11.75	Jan 1988	8.83	Jan 1992	7.58	Jan 1996	6.05
Feb	11.95	Feb	8.43	Feb	7.85	Feb	6.24
Mar	12.38	Mar	8.63	Mar	7.97	Mar	6.60
Apr	12.65	Apr	8.95	Apr	7.96	Apr	6.79
May	13.43	May	9.23	May	7.89	May	6.93
Jun	13.44	Jun	9.00	Jun	7.84	Jun	7.06
Jul	13.21	Jul	9.14	Jul	7.60	Jul	7.03
Aug	12.54	Aug	9.32	Aug	7.39	Aug	6.84
Sep	12.29	Sep	9.06	Sep	7.34	Sep	7.03
Oct	11.98	Oct	8.89	Oct	7.53	Oct	6.81
Nov	11.56	Nov	9.02	Nov	7.61	Nov	6.48
Dec	11.52	Dec	9.01	Dec	7.44	Dec	6.55
Jan 1985	11.45	Jan 1989	8.93	Jan 1993	7.34	Jan 1997	6.83
Feb	11.47	Feb	9.01	Feb	7.09	Feb	6.69
Mar	11.81	Mar	9.17	Mar	6.82	Mar	6.93
Apr	11.47	Apr	9.03	Apr	6.85	Apr	7.09
May	11.05	May	8.83	May	6.92	May	6.94
Jun	10.44	Jun	8.27	Jun	6.81	Jun	6.77
Jul	10.50	Jul	8.08	Jul	6.63	Jul	6.51
Aug	10.56	Aug	8.12	Aug	6.32	Aug	6.58
Sep	10.61	Sep	8.15	Sep	6.00	Sep	6.50
Oct	10.50	Oct	8.00	Oct	5.94	Oct	6.33
Nov	10.06	Nov	7.90	Nov	6.21	Nov	6.11
Dec	9.54	Dec	7.90	Dec	6.25	Dec	5.99
Jan 1986	9.40	Jan 1990	8.26	Jan 1994	6.29	Jan 1998	5.81
Feb	8.93	Feb	8.50	Feb	6.49	Feb	5.89
Mar	7.96	Mar	8.56	Mar	6.91	Mar	5.95
Apr	7.39	Apr	8.76	Apr	7.27	Apr	5.92
May	7.52	May	8.73	May	7.41	May	5.93
Jun	7.57	Jun	8.46	Jun	7.40	Jun	5.70
Jul	7.27	Jul	8.50	Jul	7.58	Jul	5.68
Aug	7.33	Aug	8.86	Aug	7.49	Aug	5.54
Sep	7.62	Sep	9.03	Sep	7.71	Sep	5.20
Oct	7.70	Oct	8.86	Oct	7.94	Oct	5.01
Nov	7.52	Nov	8.54	Nov	8.08	Nov	5.25
Dec	7.37	Dec	8.24	Dec	7.87	Dec	5.06
Jan 1987	7.39	Jan 1991	8.27	Jan 1995	7.85	Jan 1999	5.16
Feb	7.54	Feb	8.03	Feb	7.61	Feb	5.37
Mar	7.55	Mar	8.29	Mar	7.45	Mar	5.58
Apr	8.25	Apr	8.21	Apr	7.36		
May	8.78	May	8.27	May	6.95		
Jun	8.57	Jun	8.47	Jun	6.57		
Jul	8.64	Jul	8.45	Jul	6.72		
Aug	8.97	Aug	8.14	Aug	6.86		
Sep	9.59	Sep	7.95	Sep	6.55		
Oct	9.61	Oct	7.93	Oct	6.37		
Nov	8.95	Nov	7.92	Nov	6.26		
Dec	9.12	Dec	7.70	Dec	6.06		

Source: Federal Reserve Bulletin and Federal Reserve Website: www/stls.frb.org/fed1/data/irates/gs30.

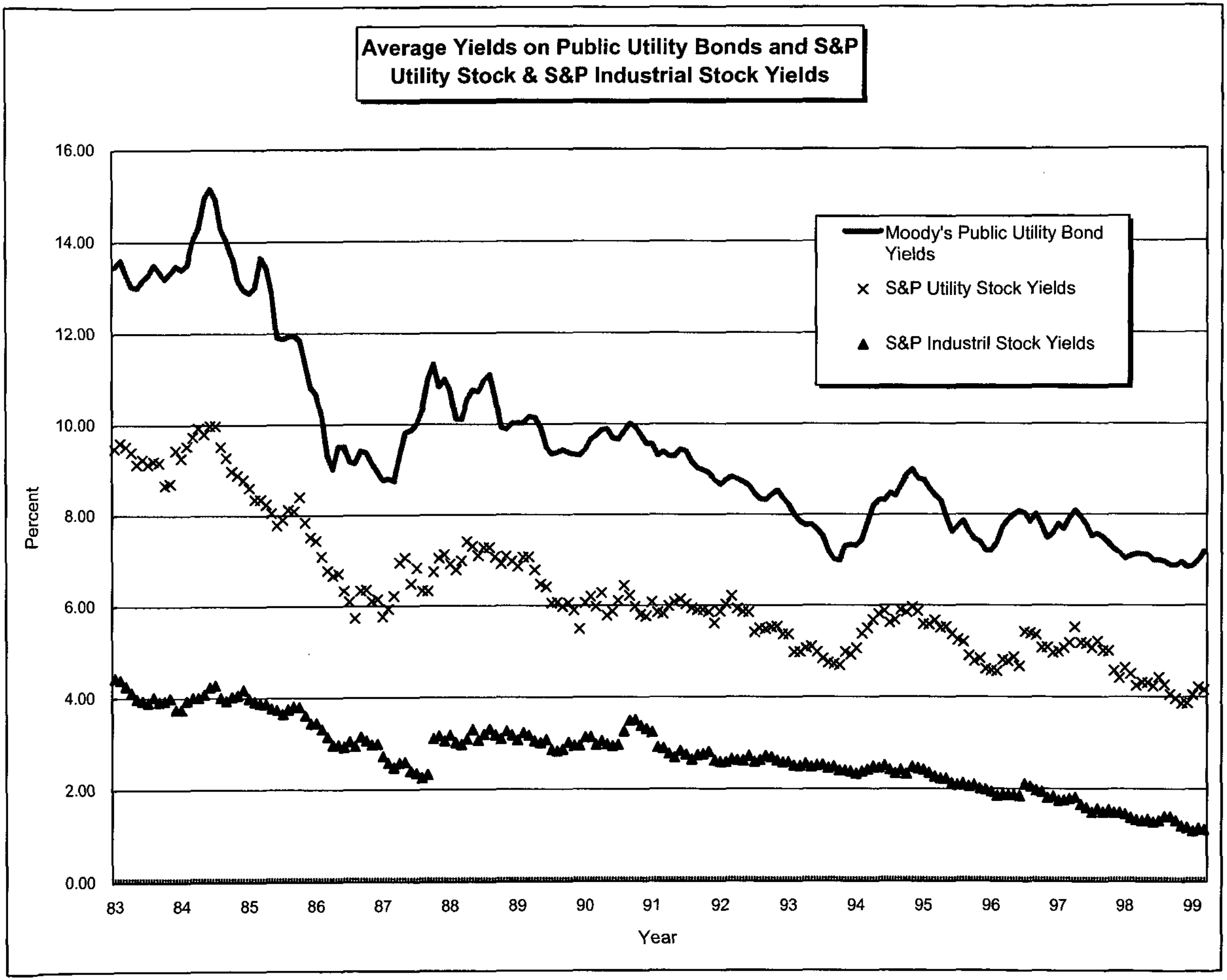

Average Yields on Moody's Public Utility Bonds and Thirty Year U.S. Treasury Bonds (1983 - 1999)
Moody's Public Utility Bond
30 Year U.S. Treasury Bond
Percent
Year
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99

Schedule 5-3



Monthly Spreads Between Yields on Moody's Public Utility Bonds and Thirty Year U.S. Treasury Bonds (1983 - 1999)
High Spread 2.83
Low Spread 0.80
1.29
(Average)
Percentage Point
3
2.5
2
1.5
1
0.5
0
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
Year

Schedule 5-4



Average Yields on Public Utility Bonds and S&P Utility Stock & S&P Industrial Stock Yields
Moody's Public Utility Bond Yields
S&P Utility Stock Yields
S&P Industril Stock Yields
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Percent
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
Year

Schedule 6

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Economic Estimates and Projections, 1999-2001

	Inflation Rate			Real GDP			Unemployment			3-Mo. T-Bill Rate			30-Yr. T-Bond Rate		
Source	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
Value Line's "Investment Survey" (2/19/99)	1.6%	2.2%	2.5%	1.5%	2.7%	2.5%	4.3%	4.4%	4.7%	4.5%	4.6%	4.6%	5.2%	5.4%	5.5%
Salomon Smith Barney "Market & Economic Outlook" (12/98)	1.6%	1.9%	N.A.	3.7%	2.1%	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Current rate	2.3%			4.1%			4.3%			4.28%			5..55%		

Notes: N.A. = Not Available.

Sources of Current Rates: Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers, 12-Month Period Ending April 30, 1999.
Federal Reserve website, http://www.stls.frb.org/fred/data/irates.html, April 30, 1999
Telescan, Wall Street City, May 27, 1999

SCHEDULE 7

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Historical Capital Structures for Laclede Gas Company

(Thousands of Dollars)

Capital Components	1994	1995	1996	1997	1998
Common Equity	$194,939.0	$227,253.0	$240,843.0	$250,387.0	$256,785.0
Preferred Stock	$1,960.0	$1,960.0	$1,960.0	$1,960.0	$1,960.0
Long-Term Debt	$154,211.0	$154,279.0	$179,346.0	$154,413.0	$179,238.0
Short-Term Debt	$53,500.0	$59,500.0	$59,600.0	$74,000.0	$98,500.0
Total	$404,610.0	$442,992.0	$481,749.0	$480,760.0	$536,483.0

Capital Structure	1994	1995	1996	1997	1998
Common Equity	48.18%	51.30%	49.99%	52.08%	47.86%
Preferred Stock	0.48%	0.44%	0.41%	0.41%	0.37%
Long-Term Debt	38.11%	34.83%	37.23%	32.12%	33.41%
Short-Term Debt	13.22%	13.43%	12.37%	15.39%	18.36%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Notes: The amount of Long-Term Debt includes Current Maturities.

Source: Laclede Gas Company's Stockholders Annual Reports.

Selected Financial Ratios for Laclede Gas Company

Financial Ratios	1994	1995	1996	1997	1998
Return on Year-End Common Equity	11.35%	9.15%	13.59%	12.93%	10.82%
Earnings Per Common Share	$1.42	$1.27	$1.87	$1.84	$1.58
Cash Dividends Per Common Share	$1.22	$1.24	$1.26	$1.30	$1.32
Common Dividend Payout Ratio	85.92%	97.64%	67.38%	70.65%	83.54%
Year-End Market Price Per Common Share	$21.250	$20.250	$24.250	$24.375	$23.062
Year-End Book Value Per Common Share	$12.44	$13.05	$13.72	$14.26	$14.57
Year-End Market to Book Ratio	1.71 x	1.55 x	1.77 x	1.71 X	1.58 X
Senior Debt Rating	AA-	AA-	AA-	AA-	AA-

Notes: Return on Year-End Common Equity = Net Income Applicable to Common Stock / Year-End Common Stockholders' Equity.

Common Dividend Payout Ratio = Cash Dividends Per Common Share / Earnings Per Common Share.

Year-End Market to Book Ratio = Year-End Market Price Per Common Share / Year-End Book Value Per Common Share.

All per share amounts reflect a two-for-one stock split effective February 11, 1994.

All per share amounts are as of September 30 fiscal year end.

Sources: Laclede Gas Company's Stockholders Annual Reports, Standard & Poor's Corporation's Utilities Rating Service, Financial Statistics and Telscan @ www.wallstreetcity.com

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Capital Structure as of March 31, 1999
for Laclede Gas Company

Capital Component	Amount in Dollars	Percentage of Capital
Common Stock Equity	$274,770,663	51.07%
Preferred Stock	$1,959,500	0.36%
Long-Term Debt	$177,421,759	32.98%
Short-Term Debt	$83,871,924	15.59%
Total Capitalization	$538,023,846	100.00%

Gas Distribution Utility Financial Ratio Benchmarks

Total Debt / Total Capital - Including Preferred Stock

	AA (Mean)	A (Mean)
Standard & Poor's Corporation's Utilities Rating Service Financial Statistics, September 30, 1998 (Average Business Position)	47.37%	50.13%

Notes: See Schedule 13 for the amount of Preferred Stock outstanding at March 31, 1999.

See Schedule 11-1 for the amount of Long-Term Debt outstanding at March 31, 1999.

See Schedule 12 for the average amount of Short-term Debt outstanding net of Construction Work in Progress.

Source: Laclede Gas Company's Response to Data Request Nos. 3801.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Embedded Cost of Long-Term Debt as of March 31, 1999 for Laclede Gas Company

Long-Term Debt	(1) Interest Rate	(2) Prinicipal Amount Outstanding (3/31/99)	(3) Annualized Cost to Company (1 * 2)
First Mortgage Bonds:			
6-1/4% Series due May 1, 2003	6.250%	$25,000,000	$1,562,500
8-1/2% Series due Novermber 15, 2004	8.500%	$25,000,000	$2,125,000
8-5/8% Series due May 15, 2006	8.625%	$40,000,000	$3,450,000
7-1/2% Series due November 1, 2007	7.500%	$40,000,000	$3,000,000
6-1/2% Series due November 15, 2010	6.500%	$25,000,000	$1,625,000
6-1/2% Series due October 15, 2012	6.500%	$25,000,000	$1,625,000
Less: Unamortized Net Premium or Discount Expense and Debt Issuance Expense		($2,578,241)	
Add: Annual Amortization of Net Premium or Discount Expense and Debt Issuance Expense			$396,497
Total		$177,421,759	$13,783,997

Embedded Cost of Long-Term Debt $= \dfrac{\$13,783,997}{\$177,421,759}$

$=$ **7.77%**

Notes: Principal Amount Outstanding as of March 31, 1999 includes Current Maturities.

See Schedule 11-2 for the amount of the Annual Amortization of Net Premium or Discount Expense and Debt Issuance Expense.

Source: Laclede Gas Company's response to Staff's Data Information Request Nos. 3802.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Annual Amortization of Net Premium or Discount Expense and Debt Issuance Expense as of March 31, 1999 for Laclede Gas Company

Long-Term Debt	Maturity Date	(1) Number of Months to Maturity (3/31/99)	(2) Unamortized Net Premium or Discount Expense and Debt Issuance Expense (3/31/99)	(3) Annual Amortization of Net Premium or Discount Expense and Debt Issuance Expense
First Mortgage Bonds:				
6-1/4% Series due May 1, 2003	5/1/03	53.0	$171,102	$38,740
8-1/2% Series due Novermber 15, 2004	11/15/04	71.5	$131,036	$21,992
8-5/8% Series due May 15, 2006	5/15/06	89.5	$336,873	$45,167
7-1/2% Series due November 1, 2007	11/1/07	107.0	$347,512	$38,973
6-1/2% Series due November 15, 2010	11/15/10	143.5	$156,255	$13,067
6-1/2% Series due October 15, 2012	11/15/10	143.5	$445,605	$37,263
Reacquired First Mortgage Bonds:				
9-3/4% Series due July 15, 1999	7/15/99	7.5	$20,162	$20,162
9% Series due May 1, 2011 (*)	5/1/03	53.0	$722,805	$163,654
9-5/8% Series due May 15, 2013	5/15/13	169.5	$246,891	$17,479
Total			**$2,578,241**	**$396,497**

Note: Column 3 = [(Column 2 / Column 1) * 12].

Debt issuance Expense includes Losses on Reacquired Debt.

Column 2 = Sum of unamortized net issuance expense and unamortized discount expense.

The Reacquired 9% Series due May 1, 2011, is being amortized over the life of the 6-1/4% Series due May 1, 2003, which was used to refinance the 9% Series due May 1, 2011.

Source: Laclede Gas Company's response to Staff's Data Information Request Nos. 3802 & 3804.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average Net Short-Term Debt Outstanding for Laclede Gas Company

	(1)	(2)	(3)
Month	Short-Term Debt (End of Month)	Construction Work-In Progress	Net Short-Term Debt
April 1998	$33,000,000	$10,580,902	$22,419,098
May	$63,000,000	$8,482,186	$54,517,814
June	$65,000,000	$8,073,592	$56,926,408
July	$79,500,000	$9,871,898	$69,628,102
August	$90,500,000	$11,076,229	$79,423,771
September	$98,500,000	$10,529,007	$87,970,993
October	$113,000,000	$11,790,280	$101,209,720
November	$129,500,000	$11,019,595	$118,480,405
December	$136,157,000	$11,340,555	$124,816,445
January 1999	$137,500,000	$12,131,073	$125,368,927
February	$104,250,000	$12,601,191	$91,648,809
March	$86,000,000	$11,947,402	$74,052,598
12 Month Average	$94,658,917	$10,786,993	$83,871,924

Notes: Column 3 = Column 1 - Column 2

Source: Laclede Gas Company's Month Ending General Ledgers and Data Request No. 3803.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Embedded Cost of Preferred Stock as of March 31, 1999
for Laclede Gas Company

Preferred Stock	(1) Dividend Rate	(2) Prinicipal Amount Outstanding (2/28/98)	(3) Annualized Cost to Company (1 * 2)
Redeemable Preferred Stock: Stated Par Value of $25 Per Share			
5% Series B	5.000%	$1,796,750	$89,838
4.56% Series C	4.560%	$162,750	$7,421
Less: Net Unamortized Premium and Issuance Expense		$0	
Total		**$1,959,500**	**$97,259**

Embedded Cost of Preferred Stock = $97,259 / $1,959,500

= **4.96%**

Note: The amount of Preferred Stock includes the amount redeemable within one year.

Source: Laclede Gas Company's response to Staff's Data Information Request No. 3802.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for Laclede Gas Company

Year	Dividends Per Share	Earnings Per Share	Book Value Per Share
1988	$1.10	$1.57	$11.44
1989	$1.15	$1.45	$11.74
1990	$1.18	$1.08	$11.75
1991	$1.20	$1.28	$11.83
1992	$1.20	$1.17	$11.79
1993	$1.22	$1.61	$12.19
1994	$1.22	$1.42	$12.44
1995	$1.24	$1.27	$13.05
1996	$1.26	$1.87	$13.72
1997	$1.30	$1.84	$14.26
1998	$1.32	$1.58	$14.57

Annual Compound Growth Rates

	DPS	EPS	BVPS
1988 - 1998	1.84%	0.06%	2.45%
1993 - 1998	1.59%	-0.38%	3.63%

Trend Line Growth Rates

	DPS	EPS	BVPS
1988 - 1998	1.54%	2.59%	2.49%
1993 - 1998	1.73%	3.10%	3.94%

	DPS	EPS	BVPS
Average of Historical Growth Rates:	1.67%	1.34%	3.13%
Standard Deviation:	0.12%	1.52%	0.67%

Source: The Company's Stockholder's Annual Reports.

Source: The Value Line Investment Survey: Ratings & Reports, March 26, 1999.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Historical and Projected Growth Rates for Laclede Gas Company

Historical Growth Rates	
Average DPS Annual Compound & Trend Line Growth	1.67%
Average EPS Annual Compound & Trend Line Growth	2.85%
Average BVPS Annual Compound & Trend Line Growth	3.13%
Average of Historical Growth Rates	**2.55%**

Projected Growth Rates from Outside Sources	
5 Year Growth Forecast (Mean) I/B/E/S Inc.'s Institutional Brokers Estimate System April 15, 1999	4.00%
5-Year Projected EPS Growth Rate Standard & Poor's Corporation's Earnings Guide May 1999	4.00%
Projected EPS Growth Rate (3 to 5 Years) Value Line's Ratings and Reports March 26, 1999	4.00%
Average of Projected Growth Rates	**4.00%**

Proposed Range of Growth for Laclede Gas Company	**3.25% to 4.00%**

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Monthly High / Low Average Dividend Yields for Laclede Gas Company

Month / Year	(1) High Stock Price	(2) Low Stock Price	(3) Average High / Low Price	(4) Expected Dividend (6/00)	(5) Projected Dividend Yield
Jan 1999	$27.000	$23.437	$25.219	$1.35	5.35%
Feb 1999	$24.187	$22.375	$23.281	$1.35	5.80%
Mar 1999	$23.687	$20.625	$22.156	$1.35	6.09%
Average					**5.75%**

Proposed Range of Dividend Yield: **5.75% - 6.00%**

Notes: Column 3 = [(Column 1 + Column 2) / 2].

Column 4 = Estimated Dividends Declared per share represents the average expected dividend for 1999 through 2000.

Column 5 = (Column 4 / Column 3).

Sources: Standards & Poor's Corporation's Security Owner's Stock Guide, Telscan On-Line Service and The Value Line Investment Survey: Ratings and Reports, March 26, 1999.

Average Risk Premium Above the Yields of "Aa" Rated Moody's Public Utility Bonds for Laclede Gas Company's Expected Returns on Common Equity

Mo/Year	LG's Expected ROE	"Aa" Rated Bonds Yields	LG's Risk Premium
Jan 1988	14.50%	10.52%	3.98%
Feb	14.50%	9.91%	4.59%
Mar	14.50%	9.92%	4.58%
Apr	14.00%	10.29%	3.71%
May	14.00%	10.53%	3.47%
Jun	14.00%	10.52%	3.48%
Jul	15.00%	10.76%	4.24%
Aug	15.00%	10.85%	4.15%
Sep	15.00%	10.34%	4.66%
Oct	14.50%	9.79%	4.71%
Nov	14.50%	9.80%	4.70%
Dec	14.50%	9.90%	4.60%
Jan 1989	14.00%	9.89%	4.11%
Feb	14.00%	9.93%	4.07%
Mar	14.00%	10.05%	3.95%
Apr	13.50%	10.02%	3.48%
May	13.50%	9.79%	3.71%
Jun	13.50%	9.37%	4.13%
Jul	13.50%	9.23%	4.27%
Aug	13.50%	9.27%	4.23%
Sep	13.50%	9.35%	4.15%
Oct	13.00%	9.28%	3.72%
Nov	13.00%	9.25%	3.75%
Dec	13.00%	9.25%	3.75%
Jan 1990	12.50%	9.39%	3.11%
Feb	12.50%	9.57%	2.93%
Mar	12.50%	9.60%	2.90%
Apr	11.00%	9.81%	1.19%
May	11.00%	9.83%	1.17%
Jun	11.00%	9.60%	1.40%
Jul	10.00%	9.61%	0.39%
Aug	10.00%	9.78%	0.22%
Sep	10.00%	9.87%	0.13%
Oct	10.00%	9.77%	0.23%
Nov	10.00%	9.59%	0.41%
Dec	10.00%	9.42%	0.58%
Jan 1991	12.50%	9.39%	3.11%
Feb	12.50%	9.16%	3.34%
Mar	12.50%	9.23%	3.27%
Apr	11.50%	9.14%	2.36%
May	11.50%	9.16%	2.34%
Jun	11.50%	9.28%	2.22%
Jul	11.50%	9.26%	2.24%
Aug	11.50%	9.06%	2.44%
Sep	11.50%	8.95%	2.55%
Oct	11.50%	8.92%	2.58%
Nov	11.50%	8.87%	2.63%
Dec	11.50%	8.71%	2.79%
Jan 1992	12.00%	8.63%	3.37%
Feb	12.00%	8.76%	3.24%
Mar	12.00%	8.82%	3.18%
Apr	12.00%	8.76%	3.24%
May	12.00%	8.69%	3.31%
Jun	12.00%	8.63%	3.37%
Jul	10.00%	8.45%	1.55%
Aug	10.00%	8.30%	1.70%
Sep	10.00%	8.28%	1.72%
Oct	10.00%	8.42%	1.58%
Nov	10.00%	8.51%	1.49%
Dec	10.00%	8.32%	1.68%
Jan 1993	13.00%	8.14%	4.86%
Feb	13.00%	7.92%	5.08%
Mar	13.00%	7.76%	5.24%
Apr	12.00%	7.64%	4.36%
May	12.00%	7.64%	4.36%
Jun	12.00%	7.54%	4.46%
Jul	13.00%	7.38%	5.62%
Aug	13.00%	7.07%	5.93%
Sep	13.00%	6.89%	6.11%
Oct	13.00%	6.89%	6.11%
Nov	13.00%	7.17%	5.83%
Dec	13.00%	7.18%	5.82%

Mo/Year	LG's Expected ROE	"Aa" Rated Bonds Yields	LG's Risk Premium
Jan 1994	12.50%	7.18%	5.32%
Feb	12.50%	7.34%	5.16%
Mar	12.50%	7.74%	4.76%
Apr	12.00%	8.12%	3.88%
May	12.00%	8.24%	3.76%
Jun	12.00%	8.21%	3.79%
Jul	11.50%	8.38%	3.12%
Aug	11.50%	8.32%	3.18%
Sep	11.50%	8.56%	2.94%
Oct	11.50%	8.78%	2.72%
Nov	11.50%	8.90%	2.60%
Dec	11.50%	8.69%	2.81%
Jan 1995	11.50%	8.66%	2.84%
Feb	11.50%	8.45%	3.05%
Mar	11.50%	8.29%	3.21%
Apr	10.00%	8.17%	1.83%
May	10.00%	7.80%	2.20%
Jun	10.00%	7.49%	2.51%
Jul	9.00%	7.60%	1.40%
Aug	9.00%	7.71%	1.29%
Sep	9.00%	7.48%	1.52%
Oct	9.00%	7.30%	1.70%
Nov	9.00%	7.22%	1.78%
Dec	9.00%	7.03%	1.97%
Jan 1996	9.00%	7.02%	1.98%
Feb	9.00%	7.20%	1.80%
Mar	9.00%	7.55%	1.45%
Apr	12.00%	7.70%	4.30%
May	12.00%	7.79%	4.21%
Jun	12.00%	7.87%	4.13%
Jul	13.00%	7.83%	5.17%
Aug	13.00%	7.66%	5.34%
Sep	13.00%	7.84%	5.16%
Oct	14.00%	7.60%	6.40%
Nov	14.00%	7.32%	6.68%
Dec	14.00%	7.44%	6.56%
Jan 1997	12.00%	7.68%	4.32%
Feb	12.00%	7.60%	4.40%
Mar	12.00%	7.84%	4.16%
Apr	12.00%	8.00%	4.00%
May	12.00%	7.85%	4.15%
Jun	12.00%	7.68%	4.32%
Jul	12.00%	7.43%	4.57%
Aug	12.00%	7.46%	4.54%
Sep	12.00%	7.43%	4.57%
Oct	12.50%	7.28%	5.22%
Nov	12.50%	7.15%	5.35%
Dec	12.50%	7.07%	5.43%
Jan 1998	12.00%	6.94%	5.06%
Feb	12.00%	6.99%	5.01%
Mar	12.00%	7.04%	4.96%
Apr	11.50%	7.02%	4.48%
May	11.50%	7.02%	4.48%
Jun	11.50%	6.91%	4.59%
Jul	10.50%	6.91%	3.59%
Aug	10.50%	6.87%	3.63%
Sep	10.50%	6.78%	3.72%
Oct	10.00%	6.79%	3.21%
Nov	10.00%	6.89%	3.11%
Dec	10.00%	6.78%	3.22%
Jan 1999	12.00%	6.82%	5.18%
Feb	12.00%	6.94%	5.06%
Mar	12.00%	7.11%	4.89%

Summary Information	(1988-1999)
Average Risk Premium: (Jan 1988 -March 1999)	**3.55%**
High Risk Premium: (November 1996)	**6.68%**
Low Risk Premium: (September 1990)	**0.13%**

Sources: The Value Line Investment Survey: Ratings & Reports, Moody's Bond Record and Moody's Public Utility News Reports.

Capital Asset Pricing Model (CAPM) Cost of Equity Estimates for Laclede Gas Company

LG's Cost of Common Equity	=	Risk Free Rate	+		LG's Beta	*	Market Risk Premium (1926 - 1995)	
9.08%	=	5.01%	+	(	0.55	*	7.40%	)
9.65%	=	5.58%	+	(	0.55	*	7.40%	)

Capital Asset Pricing Model

The capital asset pricing model (CAPM) describes the relationship between a security's investment risk and its market rate of return. This relationship identifies the rate of return which investors expect a security to earn so that its market return is comparable with the market returns earned by other securities that have similar risk. The general form of the CAPM is as follows:

Cost of Common Equity = Risk Free Rate + [Beta * Market Risk Premium]

where:

The Risk Free Rate reflects the level of return which can be achieved without accepting any risk. The Risk Free Rate is represented by the yield on 30-Year U.S. Treasury Bonds. The appropriate rate was determined to be the high / low range of 5.58% to 5.01% for the six-month period ending March 31, 1999. as published on the Federal Reserve website, http://www.stls.frb.org/fred/data/irates/gs30.

The Beta represents the relative movement and relative risk between a particular stock and the market. The appropriate Beta for Laclede Gas Company was determined to be 0.55 as published in The Value Line Investment Survey: Ratings & Reports, March 26, 1999.

The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium was determined to be 7.40% as calculated in Ibbotson Associates, Inc's Stocks, Bonds, Bills, and Inflation: 1998 Yearbook, p. 33.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Pro Forma Pre-Tax Interest Coverage Ratios for Laclede Gas Company

		9.00%	9.50%	10.00%
1.	Common Equity (Schedule 10)	$274,770,663	$274,770,663	$274,770,663
2.	Earnings Allowed (ROE * [1])	$24,729,360	$26,103,213	$27,477,066
3.	Preferred Dividends (Schedule 13)	$97,259	$97,259	$97,259
4.	Net Income Available ([2] + [3])	$24,826,619	$26,200,472	$27,574,325
5.	Tax Multiplier (1 / { 1 - Tax Rate })	1.6296	1.6296	1.6296
6.	Pre-Tax Earnings ([4] * [5])	$40,457,294	$42,696,116	$44,934,939
7.	Annual Interest Costs [$13,783,997 + ($83,871,924 * 5.372%)/12]	$14,158,464	$14,158,464	$14,158,464
8.	Avail. for Coverage ([6] + [7])	$54,615,758	$56,854,580	$59,093,403
9.	**Pro Forma Pre-Tax Interest Coverage** ([8] / [7])	**3.86 x**	**4.02 x**	**4.17 x**

Utility Financial Ratio Benchmarks - Pretax Interest Coverage (x)

	AA	A
Standard & Poor's Corporation's Utilities Rating Service Financial Statistics September 30, 1998 Avg. Business Position (Mean)	4.12x	3.83x

NOTE: Item 7 = (Total from Column 3 on Schedule 11-1) + (Net Short-term debt from Schedule 12 * Average Interst Rate on ST Debt)

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Criterion for Selecting Natural Gas Distribution Companies

Natural Gas Distribution Company	(1) Publicly Traded	(2) Information Printed In Value Line	(3) Pre-Tax Interest Coverage as 12/31/98 >2.7 x	(4) Long-Term Debt to Total Capital as of 12/31/98 < 50%	(5) Distribution Revenues to Total Revenues > 90%	(6) Positive DPS Annual Compound Growth Rate (1988 - 1998)	(7) No Missouri Operations	(8) **Natural Gas Distribution Company** Met All Criteria
AGL Resources, Inc. (AGL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Atmos Energy Corporation	Yes	Yes	Yes	No				
Berkshire Gas Company	Yes	No						
Cascade Natural Gas Corporation	Yes	Yes	No					
Colonial Gas Company (CLG)	Yes	Yes	Yes	Yes	Yes	No		
Connecticut Energy Corporation (CNE)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Corning Natural Gas Corporation	Yes	No						
CTG Resources, Inc. (Conn. Natural Gas)	Yes	Yes	No					
Delta Natural Gas Company, Inc.	Yes	No						
Energy West Inc.	Yes	No						
EnergyNorth, Inc. (EI)	Yes	Yes	No					
EnergySouth, Inc. (ENSI)	Yes	Yes	Yes	Yes	Yes	No		
Fall River Gas Company	Yes	No						
Indiana Energy, Inc. (IEI)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Laclede Gas Company (LG)	Yes	Yes	Yes	Yes	Yes	Yes	No	
New Jersey Resources Corporation	Yes	Yes	Yes	No				
North Carolina Natural Gas Corp.	Yes	No						
Northwest Natural Gas Company (NWNG)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NUI Corporation	Yes	Yes	No					
Pennsylvania Enterprises, Inc.	Yes	No						
Peoples Energy Corporation (PGL)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Piedmont Natural Gas Company, Inc. (PNY)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Providence Energy Corporation	Yes	Yes	No					
Public Service Co. of North Carolina, Inc.	Yes	No						
Roanoke Gas Company	Yes	No						
South Jersey Industries, Inc.	Yes	Yes	No					
Southern Union Company	Yes	Yes	No					
Washington Gas Light Company	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yankee Energy System, Inc. (YES)	Yes	Yes	No					

Sources: Columns 1, 3 & 5 = Edward Jones & Co.'s Natural Gas Industry Summary: Monthly Financial & Common Stock Information, March 31, 1999.
Columns 2, 3, 4 & 6 = The Value Line Investment Survey: Ratings & Reports, March 26,1999. (Only some data in Column came from ValueLine.)

N.A. = Not Available

Seven Comparable Natural Gas Distribution Companies for Laclede Gas Company

Number	Ticker Symbol	Company Name
1	ATG	AGL Resources, Inc.
2	CNE	Connecticut Energy Corporation
3	IEI	Indiana Energy, Inc.
4	NWNG	Northwest Natural Gas Company
5	PGL	Peoples Energy Corporation
6	PNY	Piedmont Natural Gas Company, Inc.
7	WGL	Washington Gas Light Company

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Seven Comparable Natural Gas Distribution Companies

	Dividends Per Share		Earnings Per Share		Book Value Per Share	
Company Name	1988	1998	1988	1998	1988	1998
AGL Resources, Inc.	$0.88	$1.08	$1.13	$1.41	$8.72	$11.42
Connecticut Energy Corporation	$1.17	$1.33	$1.49	$1.78	$12.04	$17.22
Indiana Energy, Inc.	$0.56	$0.90	$0.92	$1.33	$6.00	$10.16
Northwest Natural Gas Company	$1.05	$1.22	$1.33	$1.02	$11.25	$16.85
Peoples Energy Corporation	$1.50	$1.91	$2.31	$2.25	$15.09	$21.03
Piedmont Natural Gas Company, Inc.	$0.72	$1.28	$1.19	$1.96	$8.25	$14.91
Washington Gas Light Company	$0.94	$1.20	$1.26	$1.54	$9.96	$13.86

Annual Compound Growth Rates

	DPS	EPS	BVPS
Company Name	1988 - 1998	1988 - 1998	1988 - 1998
AGL Resources, Inc.	2.07%	2.24%	2.73%
Connecticut Energy Corporation	1.29%	1.79%	3.64%
Indiana Energy, Inc.	4.86%	3.75%	5.41%
Northwest Natural Gas Company	1.51%	-2.62%	4.12%
Peoples Energy Corporation	2.45%	-0.26%	3.37%
Piedmont Natural Gas Company, Inc.	5.92%	5.12%	6.10%
Washington Gas Light Company	2.47%	2.03%	3.36%
Average	**2.94%**	**1.72%**	**4.11%**
Standard Deviation	1.63%	2.35%	1.12%

Source: The Value Line Investment Survey: Ratings & Reports, March 26, 1999.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Historical and Projected Growth Rates for the Seven Comparable Natural Gas Distribution Companies

Company Name	(1) Average Positive Historical Annual Growth Rate	(2) Projected 5 Year Growth IBES (Mean)	(3) Projected 5 Year EPS Growth (S&P)	(4) Projected 3-5 Year EPS Growth Value Line	(5) Average Projected Growth	(6) Historical & Projected Growth
AGL Resources, Inc.	2.35%	4.66%	5.00%	5.50%	5.05%	3.70%
Connecticut Energy Corporation	2.24%	7.20%	7.00%	4.00%	6.07%	5.37%
Indiana Energy, Inc.	4.67%	6.05%	6.00%	6.00%	6.02%	3.51%
Northwest Natural Gas Company	1.01%	4.42%	4.00%	4.50%	4.31%	3.08%
Peoples Energy Corporation	1.85%	4.64%	5.00%	3.50%	4.38%	5.05%
Piedmont Natural Gas Company, Inc.	5.71%	6.10%	6.00%	7.00%	6.37%	4.49%
Washington Gas Light Company	2.62%	4.75%	5.00%	4.50%	4.75%	3.84%
Average	**2.92%**	**5.40%**	**5.43%**	**5.00%**	**5.28%**	**4.15%**

Notes: Column 5 = [(Column 2 + Column 3 + Column 4 / 3].

Column 6 = [(Column 1 + Column 5) / 2].

Sources: Column 1 = Average of 10 Year Annual Compound Growth Rates from Schedule 22.

Column 2 = I/B/E/S Inc.'s Institutional Brokers Estimate System, Utility Industry/Company Long-term Growth Report, May 20, 1999.

Column 3 = Standard & Poor's Corporation's Earnings Guide, May 1999.

Column 4 = Value Line's Value Screen II, March 26, 1999.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average High / Low Stock Price for January 1, 1999 through March 31, 1999 for the Seven Comparable Natural Gas Distribution Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	--- January 1999 ---		--- February 1999 ---		--- March 1999 ---		Average High/Low Stock Price
Company Name	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	(1/1 - 3/31)
AGL Resources, Inc.	$23.375	$19.812	$20.062	$18.312	$20.000	$17.562	$19.854
Connecticut Energy Corporation	$31.000	$26.500	$27.875	$24.875	$26.875	$24.812	$26.990
Indiana Energy, Inc.	$24.625	$22.187	$22.312	$19.125	$21.750	$18.937	$21.489
Northwest Natural Gas Company	$27.000	$23.375	$24.812	$22.125	$25.500	$21.000	$23.969
Peoples Energy Corporation	$40.250	$33.562	$34.750	$31.750	$36.000	$32.625	$34.823
Piedmont Natural Gas Company, Inc.	$36.625	$30.000	$34.812	$28.625	$34.937	$32.875	$32.979
Washington Gas Light Company	$27.375	$23.437	$24.750	$22.250	$25.000	$21.312	$24.021

Notes: Column 7 = [(Column 1 + Column 2 + Column 3 + Column 4 + Column 5 + Column 6 / 6].

Sources: Standard & Poor's Corporation's Security Owner's Stock Guide and Telscan's Wall Street City.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Estimated Costs of Common Equity for the Seven Comparable Natural Gas Distribution Companies

	(1)	(2)	(3)	(4)	(5)
Company Name	Expected Dividend (6/99)	Average High/Low Stock Price 1/1-3/31	Projected Dividend Yield	Average Projected Growth Rate	Estimated Cost of Common Equity
AGL Resources, Inc.	$1.08	$19.854	5.44%	5.05%	10.49%
Connecticut Energy Corporation	$1.35	$26.990	5.00%	6.07%	11.07%
CTG Resources, Inc.	$0.94	$21.489	4.37%	6.02%	10.39%
New Jersey Resources Corporation	$1.23	$23.969	5.13%	4.31%	9.44%
Peoples Energy Corporation	$1.95	$34.823	5.60%	4.38%	9.98%
Piedmont Natural Gas Company, Inc.	$1.36	$32.979	4.12%	6.37%	10.49%
Washington Gas Light Company	$1.22	$24.021	5.08%	4.75%	9.83%
Average			**4.96%**	**5.28%**	**10.24%**

Notes: Column 1 = Estimated Dividends Declared per share represents the average projected dividends for 1999 and 2000.

Column 3 = (Column 1 / Column 2).

Column 5 = (Column 3 + Column 4).

Sources: Column 1 = The Value Line Investment Survey: Ratings & Reports, March 26, 1999.

Column 2 = Schedule 24.

Column 4 = Schedule 23.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average Risk Premium Above the Yields of "Baa" Rated Moody's Public Utility Bonds for AGL Resources, Inc.'s Expected Returns on Common Equity

Mo/Year	AGL's Expected ROE	"Baa" Rated Bonds Yields	AGL's Risk Premium
Jan 1988	12.00%	11.34%	0.66%
Feb	12.00%	10.65%	1.35%
Mar	12.00%	10.69%	1.31%
Apr	13.00%	11.23%	1.77%
May	13.00%	11.38%	1.62%
Jun	13.00%	11.27%	1.73%
Jul	13.00%	11.52%	1.48%
Aug	13.00%	11.69%	1.31%
Sep	13.00%	11.13%	1.87%
Oct	14.00%	10.31%	3.69%
Nov	14.00%	10.35%	3.65%
Dec	14.00%	10.44%	3.56%
Jan 1989	12.50%	10.38%	2.12%
Feb	12.50%	10.38%	2.12%
Mar	12.50%	10.50%	2.00%
Apr	11.00%	10.49%	0.51%
May	11.00%	10.29%	0.71%
Jun	11.00%	9.80%	1.20%
Jul	10.50%	9.64%	0.86%
Aug	10.50%	9.64%	0.86%
Sep	10.50%	9.70%	0.80%
Oct	10.50%	9.64%	0.86%
Nov	10.50%	9.64%	0.86%
Dec	10.50%	9.60%	0.90%
Jan 1990	12.50%	9.74%	2.76%
Feb	12.50%	9.96%	2.54%
Mar	12.50%	10.06%	2.44%
Apr	12.00%	10.13%	1.87%
May	12.00%	10.16%	1.84%
Jun	12.00%	9.96%	2.04%
Jul	12.50%	9.92%	2.58%
Aug	12.50%	10.12%	2.38%
Sep	12.50%	10.32%	2.18%
Oct	12.00%	10.28%	1.72%
Nov	12.00%	10.12%	1.88%
Dec	12.00%	9.96%	2.04%
Jan 1991	11.50%	9.96%	1.54%
Feb	11.50%	9.68%	1.82%
Mar	11.50%	9.74%	1.76%
Apr	11.50%	9.64%	1.86%
May	11.50%	9.64%	1.86%
Jun	11.50%	9.79%	1.71%
Jul	11.50%	9.69%	1.81%
Aug	11.50%	9.47%	2.03%
Sep	11.50%	9.34%	2.16%
Oct	10.50%	9.32%	1.18%
Nov	10.50%	9.28%	1.22%
Dec	10.50%	9.07%	1.43%
Jan 1992	11.50%	8.98%	2.52%
Feb	11.50%	9.09%	2.41%
Mar	11.50%	9.16%	2.34%
Apr	11.00%	9.11%	1.89%
May	11.00%	9.01%	1.99%
Jun	11.00%	8.90%	2.10%
Jul	11.00%	8.69%	2.31%
Aug	11.00%	8.58%	2.42%
Sep	11.00%	8.54%	2.46%
Oct	11.00%	8.46%	2.54%
Nov	11.00%	8.86%	2.14%
Dec	11.00%	8.69%	2.31%
Jan 1993	11.50%	8.57%	2.93%
Feb	11.50%	8.31%	3.19%
Mar	11.50%	8.10%	3.40%
Apr	11.50%	8.11%	3.39%
May	11.50%	8.18%	3.32%
Jun	11.50%	8.05%	3.45%
Jul	11.50%	7.94%	3.56%
Aug	11.50%	7.59%	3.91%
Sep	11.50%	7.35%	4.15%
Oct	10.50%	7.27%	3.23%
Nov	10.50%	7.69%	2.81%
Dec	10.50%	7.73%	2.77%

Mo/Year	AGL's Expected ROE	"Baa" Rated Bonds Yields	AGL's Risk Premium
Jan 1994	11.00%	7.66%	3.34%
Feb	11.00%	7.76%	3.24%
Mar	11.00%	8.11%	2.89%
Apr	10.50%	8.47%	2.03%
May	10.50%	7.61%	2.89%
Jun	10.50%	8.64%	1.86%
Jul	11.00%	8.80%	2.20%
Aug	11.00%	8.74%	2.26%
Sep	11.00%	8.98%	2.02%
Oct	11.00%	9.24%	1.76%
Nov	11.00%	9.35%	1.65%
Dec	11.00%	9.16%	1.84%
Jan 1995	11.00%	9.15%	1.85%
Feb	11.00%	8.93%	2.07%
Mar	11.00%	8.78%	2.22%
Apr	12.00%	8.67%	3.33%
May	12.00%	8.30%	3.70%
Jun	12.00%	8.01%	3.99%
Jul	11.50%	8.11%	3.39%
Aug	11.50%	8.24%	3.26%
Sep	11.50%	7.98%	3.52%
Oct	12.50%	7.82%	4.68%
Nov	12.50%	7.81%	4.69%
Dec	12.50%	7.63%	4.87%
Jan 1996	13.00%	7.64%	5.36%
Feb	13.00%	7.78%	5.22%
Mar	13.00%	8.15%	4.85%
Apr	13.50%	8.32%	5.18%
May	13.50%	8.45%	5.05%
Jun	13.50%	8.51%	4.99%
Jul	14.00%	8.44%	5.56%
Aug	14.00%	8.25%	5.75%
Sep	14.00%	8.41%	5.59%
Oct	14.00%	8.15%	5.85%
Nov	14.00%	7.87%	6.13%
Dec	14.00%	7.98%	6.02%
Jan 1997	14.50%	8.18%	6.32%
Feb	14.50%	8.02%	6.48%
Mar	14.50%	8.26%	6.24%
Apr	14.00%	8.42%	5.58%
May	14.00%	8.28%	5.72%
Jun	14.00%	8.12%	5.88%
Jul	14.00%	7.87%	6.13%
Aug	14.00%	7.92%	6.08%
Sep	14.00%	7.79%	6.21%
Oct	13.50%	7.67%	5.83%
Nov	13.50%	7.49%	6.01%
Dec	13.50%	7.41%	6.09%
Jan1998	11.50%	7.28%	4.22%
Feb	11.50%	7.36%	4.14%
Mar	11.50%	7.37%	4.13%
Apr	11.00%	7.37%	3.63%
May	11.00%	7.34%	3.66%
Jun	11.00%	7.21%	3.79%
Jul	10.50%	7.23%	3.27%
Aug	10.50%	7.20%	3.30%
Sep	10.50%	7.13%	3.37%
Oct	10.50%	7.13%	3.37%
Nov	10.50%	7.31%	3.19%
Dec	10.50%	7.24%	3.26%
Jan 1999	12.00%	7.30%	4.70%
Feb	12.00%	7.41%	4.59%
Mar	12.00%	7.55%	4.45%

Summary Information	(1988 - 1999)
Average Risk Premium: (Jan 1988 - March 1999)	**3.09%**
High Risk Premium: (Feb 1997)	**6.48%**
Low Risk Premium: (April 1989)	**0.51%**

Sources: The Value Line Investment Survey: Ratings & Reports, Moody's Bond Record and Moody's Public Utility News Reports

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average Risk Premium Above the Yields of "A" Rated Moody's Public Utility Bonds for Connecticut Energy Corporation's Expected Returns on Common Equity

Mo/Year	CNE's Expected ROE	"A" Rated Bonds Yields	CNE's Risk Premium
Jan 1988	0.00%	10.76%	NM
Feb	0.00%	10.10%	NM
Mar	0.00%	10.09%	NM
Apr	0.00%	10.54%	NM
May	0.00%	10.81%	NM
Jun	0.00%	10.79%	NM
Jul	0.00%	11.04%	NM
Aug	0.00%	11.17%	NM
Sep	0.00%	10.61%	NM
Oct	0.00%	10.01%	NM
Nov	0.00%	9.90%	NM
Dec	0.00%	10.06%	NM
Jan 1989	0.00%	10.08%	NM
Feb	0.00%	10.07%	NM
Mar	0.00%	10.23%	NM
Apr	11.50%	10.18%	1.32%
May	11.50%	9.99%	1.51%
Jun	11.50%	9.64%	1.86%
Jul	12.00%	9.50%	2.50%
Aug	12.00%	9.52%	2.48%
Sep	12.00%	9.58%	2.42%
Oct	12.00%	9.54%	2.46%
Nov	12.00%	9.51%	2.49%
Dec	12.00%	9.44%	2.56%
Jan 1990	12.00%	9.56%	2.44%
Feb	12.00%	9.76%	2.24%
Mar	12.00%	9.85%	2.15%
Apr	11.50%	9.92%	1.58%
May	11.50%	10.00%	1.50%
Jun	11.50%	9.80%	1.70%
Jul	10.50%	9.75%	0.75%
Aug	10.50%	9.92%	0.58%
Sep	10.50%	10.12%	0.38%
Oct	10.50%	10.05%	0.45%
Nov	10.50%	9.90%	0.60%
Dec	10.50%	9.73%	0.77%
Jan 1991	9.50%	9.71%	-0.21%
Feb	9.50%	9.47%	0.03%
Mar	9.50%	9.55%	-0.05%
Apr	8.50%	9.46%	-0.96%
May	8.50%	9.44%	-0.94%
Jun	8.50%	9.59%	-1.09%
Jul	10.50%	9.55%	0.95%
Aug	10.50%	9.29%	1.21%
Sep	10.50%	9.16%	1.34%
Oct	10.00%	9.12%	0.88%
Nov	10.00%	9.05%	0.95%
Dec	10.00%	8.88%	1.12%
Jan 1992	11.00%	8.84%	2.16%
Feb	11.00%	8.93%	2.07%
Mar	11.00%	8.97%	2.03%
Apr	11.00%	8.93%	2.07%
May	11.00%	8.87%	2.13%
Jun	11.00%	8.78%	2.22%
Jul	11.00%	8.57%	2.43%
Aug	11.00%	8.44%	2.56%
Sep	11.00%	8.40%	2.60%
Oct	11.00%	8.54%	2.46%
Nov	11.00%	8.63%	2.37%
Dec	11.00%	8.43%	2.57%
Jan 1993	11.50%	8.27%	3.23%
Feb	11.50%	8.04%	3.46%
Mar	11.50%	7.90%	3.60%
Apr	12.00%	7.81%	4.19%
May	12.00%	7.86%	4.14%
Jun	12.00%	7.75%	4.25%
Jul	13.00%	7.54%	5.46%
Aug	13.00%	7.25%	5.75%
Sep	13.00%	7.04%	5.96%
Oct	11.50%	7.03%	4.47%
Nov	11.50%	7.30%	4.20%
Dec	11.50%	7.34%	4.16%
Jan 1994	11.00%	7.33%	3.67%
Feb	11.00%	7.42%	3.58%
Mar	11.00%	7.85%	3.15%
Apr	10.50%	8.22%	2.28%
May	10.50%	8.33%	2.17%
Jun	10.50%	8.31%	2.19%
Jul	11.00%	8.47%	2.53%
Aug	11.00%	8.41%	2.59%
Sep	11.00%	8.64%	2.36%
Oct	10.50%	8.86%	1.64%
Nov	10.50%	8.98%	1.52%
Dec	10.50%	8.76%	1.74%
Jan 1995	11.00%	8.73%	2.27%
Feb	11.00%	8.52%	2.48%
Mar	11.00%	8.37%	2.63%
Apr	10.50%	8.27%	2.23%
May	10.50%	7.91%	2.59%
Jun	10.50%	7.60%	2.90%
Jul	10.50%	7.70%	2.80%
Aug	10.50%	7.83%	2.67%
Sep	10.50%	7.62%	2.88%
Oct	10.50%	7.46%	3.04%
Nov	10.50%	7.43%	3.07%
Dec	10.50%	7.23%	3.27%
Jan 1996	11.00%	7.22%	3.78%
Feb	11.00%	7.37%	3.63%
Mar	11.00%	7.73%	3.27%
Apr	11.00%	7.89%	3.11%
May	11.00%	7.98%	3.02%
Jun	11.00%	8.06%	2.94%
Jul	11.00%	8.02%	2.98%
Aug	11.00%	7.84%	3.16%
Sep	11.00%	8.01%	2.99%
Oct	10.50%	7.77%	2.73%
Nov	10.50%	7.49%	3.01%
Dec	10.50%	7.59%	2.91%
Jan 1997	10.50%	7.77%	2.73%
Feb	10.50%	7.64%	2.86%
Mar	10.50%	7.87%	2.63%
Apr	10.00%	8.03%	1.97%
May	10.00%	7.89%	2.11%
Jun	10.00%	7.72%	2.28%
Jul	10.00%	7.48%	2.52%
Aug	10.00%	7.51%	2.49%
Sep	10.00%	7.47%	2.53%
Oct	10.00%	7.35%	2.65%
Nov	10.00%	7.25%	2.75%
Dec	10.00%	7.16%	2.84%
Jan 1998	11.00%	7.04%	3.96%
Feb	11.00%	7.12%	3.88%
Mar	11.00%	7.16%	3.84%
Apr	11.00%	7.16%	3.84%
May	11.00%	7.16%	3.84%
Jun	11.00%	7.03%	3.97%
Jul	11.00%	7.03%	3.97%
Aug	11.00%	7.00%	4.00%
Sep	11.00%	6.93%	4.07%
Oct	11.00%	6.96%	4.04%
Nov	11.00%	7.03%	3.97%
Dec	11.00%	6.91%	4.09%
Jan 1999	11.50%	6.97%	4.53%
Feb	11.50%	7.09%	4.41%
Mar	11.50%	7.26%	4.24%

Summary Information	(1988 - 1999)
Average Positive Risk Premium: (Jan 1988 - March 1999)	**2.58%**
High Risk Premium: (Sep 1993)	**5.96%**
Low Risk Premium: (Jun 1991)	**-1.09%**

Notes: NM – Not Meaningful because Value Line did not follow Connecticut Energy until April of 1989. and Moody's Public Utility News Reports.

Sources: The Value Line Investment Survey: Ratings & Reports, Moody's Bond Record

SCHEDULE 26-2

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average Risk Premium Above the Yields of "A" Rated Moody's Public Utility Bonds for Indiana Energy Inc. Expected Returns on Common Equity

Mo/Year	IEI's Expected ROE	"A" Rated Bonds Yields	IEI's Risk Premium
Jan 1988	14.00%	10.76%	3.24%
Feb	14.00%	10.10%	3.90%
Mar	14.00%	10.09%	3.91%
Apr	14.00%	10.54%	3.46%
May	14.00%	10.81%	3.19%
Jun	14.00%	10.79%	3.21%
Jul	14.00%	11.04%	2.96%
Aug	16.00%	11.17%	4.83%
Sep	16.00%	10.61%	5.39%
Oct	16.00%	10.01%	5.99%
Nov	15.00%	9.90%	5.10%
Dec	15.00%	10.06%	4.94%
Jan 1989	13.00%	10.08%	2.92%
Feb	14.00%	10.07%	3.93%
Mar	14.00%	10.23%	3.77%
Apr	14.00%	10.18%	3.82%
May	14.00%	9.99%	4.01%
Jun	14.00%	9.64%	4.36%
Jul	14.00%	9.50%	4.50%
Aug	13.00%	9.52%	3.48%
Sep	13.00%	9.58%	3.42%
Oct	13.00%	9.54%	3.46%
Nov	15.00%	9.51%	5.49%
Dec	15.00%	9.44%	5.56%
Jan 1990	12.00%	9.56%	2.44%
Feb	12.00%	9.76%	2.24%
Mar	12.00%	9.85%	2.15%
Apr	12.00%	9.92%	2.08%
May	11.00%	10.00%	1.00%
Jun	11.00%	9.80%	1.20%
Jul	11.00%	9.75%	1.25%
Aug	12.00%	9.92%	2.08%
Sep	12.00%	10.12%	1.88%
Oct	12.00%	10.05%	1.95%
Nov	12.50%	9.90%	2.60%
Dec	12.50%	9.73%	2.77%
Jan 1991	13.00%	9.71%	3.29%
Feb	12.00%	9.47%	2.53%
Mar	12.00%	9.55%	2.45%
Apr	12.00%	9.46%	2.54%
May	10.50%	9.44%	1.06%
Jun	10.50%	9.59%	0.91%
Jul	10.50%	9.55%	0.95%
Aug	10.50%	9.29%	1.21%
Sep	10.50%	9.16%	1.34%
Oct	10.50%	9.12%	1.38%
Nov	10.00%	9.05%	0.95%
Dec	10.00%	8.88%	1.12%
Jan 1992	10.00%	8.84%	1.16%
Feb	13.00%	8.93%	4.07%
Mar	13.00%	8.97%	4.03%
Apr	13.00%	8.93%	4.07%
May	10.50%	8.87%	1.63%
Jun	10.50%	8.78%	1.72%
Jul	10.50%	8.57%	1.93%
Aug	10.00%	8.44%	1.56%
Sep	10.00%	8.40%	1.60%
Oct	10.00%	8.54%	1.46%
Nov	10.50%	8.63%	1.87%
Dec	10.50%	8.43%	2.07%
Jan 1993	10.50%	8.27%	2.23%
Feb	13.00%	8.04%	4.96%
Mar	13.00%	7.90%	5.10%
Apr	13.00%	7.81%	5.19%
May	12.50%	7.86%	4.64%
Jun	12.50%	7.75%	4.75%
Jul	12.50%	7.54%	4.96%
Aug	11.50%	7.25%	4.25%
Sep	11.50%	7.04%	4.46%
Oct	11.50%	7.03%	4.47%
Nov	11.50%	7.30%	4.20%
Dec	11.50%	7.34%	4.16%
Jan 1994	11.50%	7.33%	4.17%
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Mar	11.00%	7.85%	3.15%
Apr	11.00%	8.22%	2.78%
May	11.50%	8.33%	3.17%
Jun	11.50%	8.31%	3.19%
Jul	11.50%	8.47%	3.03%
Aug	11.50%	8.41%	3.09%
Sep	11.50%	8.64%	2.86%
Oct	12.00%	8.86%	3.14%
Nov	12.00%	8.98%	3.02%
Dec	12.00%	8.76%	3.24%
Jan 1995	11.50%	8.73%	2.77%
Feb	11.50%	8.52%	2.98%
Mar	11.50%	8.37%	3.13%
Apr	11.00%	8.27%	2.73%
May	11.00%	7.91%	3.09%
Jun	11.00%	7.60%	3.40%
Jul	11.00%	7.70%	3.30%
Aug	11.00%	7.83%	3.17%
Sep	11.00%	7.62%	3.38%
Oct	11.50%	7.46%	4.04%
Nov	11.50%	7.43%	4.07%
Dec	11.50%	7.23%	4.27%
Jan 1996	12.00%	7.22%	4.78%
Feb	12.00%	7.37%	4.63%
Mar	12.00%	7.73%	4.27%
Apr	14.00%	7.89%	6.11%
May	14.00%	7.98%	6.02%
Jun	14.00%	8.06%	5.94%
Jul	13.50%	8.02%	5.48%
Aug	13.50%	7.84%	5.66%
Sep	13.50%	8.01%	5.49%
Oct	15.50%	7.77%	7.73%
Nov	15.50%	7.49%	8.01%
Dec	15.50%	7.59%	7.91%
Jan 1997	13.00%	7.77%	5.23%
Feb	13.00%	7.64%	5.36%
Mar	13.00%	7.87%	5.13%
Apr	13.00%	8.03%	4.97%
May	13.00%	7.89%	5.11%
Jun	13.00%	7.72%	5.28%
Jul	13.00%	7.48%	5.52%
Aug	13.00%	7.51%	5.49%
Sep	13.00%	7.47%	5.53%
Oct	13.00%	7.35%	5.65%
Nov	13.00%	7.25%	5.75%
Dec	13.00%	7.16%	5.84%
Jan 1998	12.50%	7.04%	5.46%
Feb	12.50%	7.12%	5.38%
Mar	12.50%	7.16%	5.34%
Apr	14.50%	7.16%	7.34%
May	14.50%	7.16%	7.34%
Jun	14.50%	7.03%	7.47%
Jul	13.00%	7.03%	5.97%
Aug	13.00%	7.00%	6.00%
Sep	13.00%	6.93%	6.07%
Oct	13.00%	6.96%	6.04%
Nov	13.00%	7.03%	5.97%
Dec	13.00%	6.91%	6.09%
Jan 1999	14.00%	6.97%	7.03%
Feb	14.00%	7.09%	6.91%
Mar	14.00%	7.26%	6.74%

Sources: The Value Line Investment Survey: Ratings & Reports, Moody's Bond Record and Moody's Public Utility News Reports.

Summary Information	(1988 - 199
Average Risk Premium: (Jan 1988 - March 1999)	**3.95%**
High Risk Premium: (Nov 1996)	**8.01%**
Low Risk Premium: (June 1991)	**0.91%**

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average Risk Premium Above the Yields of "A" Rated Moody's Public Utility Bonds for Northwest Natural Gas Company's Expected Returns on Common Equity

Mo/Year	NWNG's Expected ROE	"A" Rated Bonds Yields	NWNG's Risk Premium
Jan 1988	12.00%	10.76%	1.24%
Feb	12.00%	10.10%	1.90%
Mar	12.00%	10.09%	1.91%
Apr	12.00%	10.54%	1.46%
May	11.50%	10.81%	0.69%
Jun	11.50%	10.79%	0.71%
Jul	11.50%	11.04%	0.46%
Aug	12.00%	11.17%	0.83%
Sep	12.00%	10.61%	1.39%
Oct	12.00%	10.01%	1.99%
Nov	12.50%	9.90%	2.60%
Dec	12.50%	10.06%	2.44%
Jan 1989	12.50%	10.08%	2.42%
Feb	13.00%	10.07%	2.93%
Mar	13.00%	10.23%	2.77%
Apr	13.00%	10.18%	2.82%
May	13.50%	9.99%	3.51%
Jun	13.50%	9.64%	3.86%
Jul	13.50%	9.50%	4.00%
Aug	13.00%	9.52%	3.48%
Sep	13.00%	9.58%	3.42%
Oct	13.00%	9.54%	3.46%
Nov	12.50%	9.51%	2.99%
Dec	12.50%	9.44%	3.06%
Jan 1990	12.50%	9.56%	2.94%
Feb	12.50%	9.76%	2.74%
Mar	12.50%	9.85%	2.65%
Apr	12.50%	9.92%	2.58%
May	12.00%	10.00%	2.00%
Jun	12.00%	9.80%	2.20%
Jul	12.00%	9.75%	2.25%
Aug	12.00%	9.92%	2.08%
Sep	12.00%	10.12%	1.88%
Oct	12.00%	10.05%	1.95%
Nov	11.50%	9.90%	1.60%
Dec	11.50%	9.73%	1.77%
Jan 1991	12.50%	9.71%	2.79%
Feb	12.50%	9.47%	3.03%
Mar	12.50%	9.55%	2.95%
Apr	12.50%	9.46%	3.04%
May	11.50%	9.44%	2.06%
Jun	11.50%	9.59%	1.91%
Jul	11.50%	9.55%	1.95%
Aug	12.00%	9.29%	2.71%
Sep	12.00%	9.16%	2.84%
Oct	12.00%	9.12%	2.88%
Nov	12.50%	9.05%	3.45%
Dec	12.50%	8.88%	3.62%
Jan 1992	12.50%	8.84%	3.66%
Feb	12.00%	8.93%	3.07%
Mar	12.00%	8.97%	3.03%
Apr	12.00%	8.93%	3.07%
May	11.00%	8.87%	2.13%
Jun	11.00%	8.78%	2.22%
Jul	11.00%	8.57%	2.43%
Aug	9.00%	8.44%	0.56%
Sep	9.00%	8.40%	0.60%
Oct	9.00%	8.54%	0.46%
Nov	7.50%	8.63%	-1.13%
Dec	7.50%	8.43%	-0.93%
Jan 1993	7.50%	8.27%	-0.77%
Feb	12.00%	8.04%	3.96%
Mar	12.00%	7.90%	4.10%
Apr	12.00%	7.81%	4.19%
May	12.50%	7.86%	4.64%
Jun	12.50%	7.75%	4.75%
Jul	12.50%	7.54%	4.96%
Aug	13.00%	7.25%	5.75%
Sep	13.00%	7.04%	5.96%
Oct	13.00%	7.03%	5.97%
Nov	13.50%	7.30%	6.20%
Dec	13.50%	7.34%	6.16%
Jan 1994	12.50%	7.33%	5.17%
Feb	12.50%	7.42%	5.08%
Mar	12.50%	7.85%	4.65%
Apr	12.50%	8.22%	4.28%
May	11.50%	8.33%	3.17%
Jun	11.50%	8.31%	3.19%
Jul	11.50%	8.47%	3.03%
Aug	9.50%	8.41%	1.09%
Sep	9.50%	8.64%	0.86%
Oct	10.50%	8.86%	1.64%
Nov	10.50%	8.98%	1.52%
Dec	10.50%	8.76%	1.74%
Jan 1995	11.50%	8.73%	2.77%
Feb	11.50%	8.52%	2.98%
Mar	11.50%	8.37%	3.13%
Apr	11.00%	8.27%	2.73%
May	11.00%	7.91%	3.09%
Jun	11.00%	7.60%	3.40%
Jul	10.50%	7.70%	2.80%
Aug	10.50%	7.83%	2.67%
Sep	10.50%	7.62%	2.88%
Oct	10.50%	7.46%	3.04%
Nov	10.50%	7.43%	3.07%
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May	11.50%	7.98%	3.52%
Jun	11.50%	8.06%	3.44%
Jul	11.50%	8.02%	3.48%
Aug	11.50%	7.84%	3.66%
Sep	11.50%	8.01%	3.49%
Oct	12.00%	7.77%	4.23%
Nov	12.00%	7.49%	4.51%
Dec	12.00%	7.59%	4.41%
Jan 1997	12.00%	7.77%	4.23%
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Sep	9.50%	6.93%	2.57%
Oct	9.50%	6.96%	2.54%
Nov	9.50%	7.03%	2.47%
Dec	9.50%	6.91%	2.59%
Jan 1999	11.00%	6.97%	4.03%
Feb	11.00%	7.09%	3.91%
Mar	11.00%	7.26%	3.74%

Sources: The Value Line Investment Survey: Ratings & Reports, Moody's Bond Record and Moody's Public Utility News Reports

Summary Information	(1988 - 1999)
Average Risk Premium: (Jan 1988 - March 1999)	**3.04%**
High Risk Premium: (Nov 1993)	**6.20%**
Low Risk Premium: (Nov 1992)	**-1.13%**

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average Risk Premium Above the Yields of "A" Rated Moody's Public Utility Bonds for Peoples Energy Corporation's Expected Returns on Common Equity

Mo/Year	PGL's Expected ROE	"A" Rated Bonds Yields	PGL's Risk Premium
Jan 1988	14.50%	10.76%	3.74%
Feb	14.50%	10.10%	4.40%
Mar	14.50%	10.09%	4.41%
Apr	14.50%	10.54%	3.96%
May	14.50%	10.81%	3.69%
Jun	14.50%	10.79%	3.71%
Jul	15.50%	11.04%	4.46%
Aug	15.50%	11.17%	4.33%
Sep	15.50%	10.61%	4.89%
Oct	15.50%	10.01%	5.49%
Nov	15.50%	9.90%	5.60%
Dec	15.50%	10.06%	5.44%
Jan 1989	15.00%	10.08%	4.92%
Feb	15.00%	10.07%	4.93%
Mar	15.00%	10.23%	4.77%
Apr	15.00%	10.18%	4.82%
May	15.00%	9.99%	5.01%
Jun	15.00%	9.64%	5.36%
Jul	14.00%	9.50%	4.50%
Aug	14.00%	9.52%	4.48%
Sep	14.00%	9.58%	4.42%
Oct	15.00%	9.54%	5.46%
Nov	15.00%	9.51%	5.49%
Dec	15.00%	9.44%	5.56%
Jan 1990	14.00%	9.56%	4.44%
Feb	14.00%	9.76%	4.24%
Mar	14.00%	9.85%	4.15%
Apr	14.00%	9.92%	4.08%
May	14.00%	10.00%	4.00%
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Jul	13.50%	9.75%	3.75%
Aug	13.50%	9.92%	3.58%
Sep	13.50%	10.12%	3.38%
Oct	13.50%	10.05%	3.45%
Nov	13.50%	9.90%	3.60%
Dec	13.50%	9.73%	3.77%
Jan 1991	14.00%	9.71%	4.29%
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Jul	12.50%	7.54%	4.96%
Aug	12.50%	7.25%	5.25%
Sep	12.50%	7.04%	5.46%
Oct	11.50%	7.03%	4.47%
Nov	11.50%	7.30%	4.20%
Dec	11.50%	7.34%	4.16%

Mo/Year	PGL's Expected ROE	"A" Rated Bonds Yields	PGL's Risk Premium
Jan 1994	12.00%	7.33%	4.67%
Feb	12.00%	7.42%	4.58%
Mar	12.00%	7.85%	4.15%
Apr	12.50%	8.22%	4.28%
May	12.50%	8.33%	4.17%
Jun	12.50%	8.31%	4.19%
Jul	11.50%	8.47%	3.03%
Aug	11.50%	8.41%	3.09%
Sep	11.50%	8.64%	2.86%
Oct	11.50%	8.86%	2.64%
Nov	11.50%	8.98%	2.52%
Dec	11.50%	8.76%	2.74%
Jan 1995	11.00%	8.73%	2.27%
Feb	11.00%	8.52%	2.48%
Mar	11.00%	8.37%	2.63%
Apr	10.00%	8.27%	1.73%
May	10.00%	7.91%	2.09%
Jun	10.00%	7.60%	2.40%
Jul	9.50%	7.70%	1.80%
Aug	9.50%	7.83%	1.67%
Sep	9.50%	7.62%	1.88%
Oct	9.50%	7.46%	2.04%
Nov	9.50%	7.43%	2.07%
Dec	9.50%	7.23%	2.27%
Jan 1996	12.00%	7.22%	4.78%
Feb	12.00%	7.37%	4.63%
Mar	12.00%	7.73%	4.27%
Apr	12.00%	7.89%	4.11%
May	12.00%	7.98%	4.02%
Jun	12.00%	8.06%	3.94%
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Oct	15.00%	7.77%	7.23%
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Jan 1997	12.00%	7.77%	4.23%
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Jul	12.50%	7.48%	5.02%
Aug	12.50%	7.51%	4.99%
Sep	12.50%	7.47%	5.03%
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Nov	14.00%	7.25%	6.75%
Dec	14.00%	7.16%	6.84%
Jan 1998	12.50%	7.04%	5.46%
Feb	12.50%	7.12%	5.38%
Mar	12.50%	7.16%	5.34%
Apr	11.50%	7.16%	4.34%
May	11.50%	7.16%	4.34%
Jun	11.50%	7.03%	4.47%
Jul	11.00%	7.03%	3.97%
Aug	11.00%	7.00%	4.00%
Sep	11.00%	6.93%	4.07%
Oct	11.00%	6.96%	4.04%
Nov	11.00%	7.03%	3.97%
Dec	11.00%	6.91%	4.09%
Jan 1999	12.00%	6.97%	5.03%
Feb	12.00%	7.09%	4.91%
Mar	12.00%	7.26%	4.74%

Summary Information	(1988 - 1999)
Average Risk Premium: (Jan 1988 - March 1999)	**4.07%**
High Risk Premium: (Nov 1996)	**7.51%**
Low Risk Premium: (Aug 1995)	**1.67%**

Sources: The Value Line Investment Survey: Ratings & Reports, Moody's Bond Record and Moody's Public Utility News Reports.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average Risk Premium Above the Yields of "A" Rated Moody's Public Utility Bonds for Piedmont Natural Gas Company's Expected Returns on Common Equity

Mo/Year	PNY's Expected ROE	"A" Rated Bonds Yields	PNY's Risk Premium
Jan 1988	15.00%	10.76%	4.24%
Feb	15.00%	10.10%	4.90%
Mar	15.00%	10.09%	4.91%
Apr	16.50%	10.54%	5.96%
May	16.50%	10.81%	5.69%
Jun	16.50%	10.79%	5.71%
Jul	16.50%	11.04%	5.46%
Aug	16.50%	11.17%	5.33%
Sep	16.50%	10.61%	5.89%
Oct	15.50%	10.01%	5.49%
Nov	15.50%	9.90%	5.60%
Dec	15.50%	10.06%	5.44%
Jan 1989	14.50%	10.08%	4.42%
Feb	14.50%	10.07%	4.43%
Mar	14.50%	10.23%	4.27%
Apr	14.00%	10.18%	3.82%
May	14.00%	9.99%	4.01%
Jun	14.00%	9.64%	4.36%
Jul	14.50%	9.50%	5.00%
Aug	14.50%	9.52%	4.98%
Sep	14.50%	9.58%	4.92%
Oct	14.00%	9.54%	4.46%
Nov	14.00%	9.51%	4.49%
Dec	14.00%	9.44%	4.56%
Jan 1990	13.00%	9.56%	3.44%
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May	13.00%	10.00%	3.00%
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Aug	12.50%	9.92%	2.58%
Sep	12.50%	10.12%	2.38%
Oct	13.50%	10.05%	3.45%
Nov	13.50%	9.90%	3.60%
Dec	13.50%	9.73%	3.77%
Jan 1991	13.50%	9.71%	3.79%
Feb	13.50%	9.47%	4.03%
Mar	13.50%	9.55%	3.95%
Apr	10.00%	9.46%	0.54%
May	10.00%	9.44%	0.56%
Jun	10.00%	9.59%	0.41%
Jul	9.50%	9.55%	-0.05%
Aug	9.50%	9.29%	0.21%
Sep	9.50%	9.16%	0.34%
Oct	8.50%	9.12%	-0.62%
Nov	8.50%	9.05%	-0.55%
Dec	8.50%	8.88%	-0.38%
Jan 1992	11.50%	8.84%	2.66%
Feb	11.50%	8.93%	2.57%
Mar	11.50%	8.97%	2.53%
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Dec	13.00%	7.16%	5.84%
Jan 1998	13.00%	7.04%	5.96%
Feb	13.00%	7.12%	5.88%
Mar	13.00%	7.16%	5.84%
Apr	13.00%	7.16%	5.84%
May	13.00%	7.16%	5.84%
Jun	13.00%	7.03%	5.97%
Jul	13.50%	7.03%	6.47%
Aug	13.50%	7.00%	6.50%
Sep	13.50%	6.93%	6.57%
Oct	13.50%	6.96%	6.54%
Nov	13.50%	7.03%	6.47%
Dec	13.50%	6.91%	6.59%
Jan 1999	13.50%	6.97%	6.53%
Feb	13.50%	7.09%	6.41%
Mar	13.50%	7.26%	6.24%

Summary Information	(1988 - 1999)
Average Risk Premium: (Jan 1988 - March 1999)	4.19%
High Risk Premium: (September 1993)	6.96%
Low Risk Premium: (October 1991)	-0.62%

Sources: The Value Line Investment Survey: Ratings & Reports, Moody's Bond Record and Moody's Public Utility News Reports.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Average Risk Premium Above the Yields of "Aa" Rated Moody's Public Utility Bonds for Washington Gas Light Company's Expected Returns on Common Equity

Mo/Year	WGL's Expected ROE	"Aa" Rated Bonds Yields	WGL's Risk Premium
Jan 1988	11.50%	10.52%	0.98%
Feb	11.50%	9.91%	1.59%
Mar	11.50%	9.92%	1.58%
Apr	12.00%	10.29%	1.71%
May	12.00%	10.53%	1.47%
Jun	12.00%	10.52%	1.48%
Jul	11.50%	10.76%	0.74%
Aug	11.50%	10.85%	0.65%
Sep	11.50%	10.34%	1.16%
Oct	11.50%	9.79%	1.71%
Nov	11.50%	9.80%	1.70%
Dec	11.50%	9.90%	1.60%
Jan 1989	11.50%	9.89%	1.61%
Feb	11.50%	9.93%	1.57%
Mar	11.50%	10.05%	1.45%
Apr	11.50%	10.02%	1.48%
May	11.50%	9.79%	1.71%
Jun	11.50%	9.37%	2.13%
Jul	11.00%	9.23%	1.77%
Aug	11.00%	9.27%	1.73%
Sep	11.00%	9.35%	1.65%
Oct	11.50%	9.28%	2.22%
Nov	11.50%	9.25%	2.25%
Dec	11.50%	9.25%	2.25%
Jan 1990	12.50%	9.39%	3.11%
Feb	12.50%	9.57%	2.93%
Mar	12.50%	9.60%	2.90%
Apr	12.00%	9.81%	2.19%
May	12.00%	9.83%	2.17%
Jun	12.00%	9.60%	2.40%
Jul	12.00%	9.61%	2.39%
Aug	12.00%	9.78%	2.22%
Sep	12.00%	9.87%	2.13%
Oct	12.00%	9.77%	2.23%
Nov	12.00%	9.59%	2.41%
Dec	12.00%	9.42%	2.58%
Jan 1991	13.00%	9.39%	3.61%
Feb	13.00%	9.16%	3.84%
Mar	13.00%	9.23%	3.77%
Apr	11.50%	9.14%	2.36%
May	11.50%	9.16%	2.34%
Jun	11.50%	9.28%	2.22%
Jul	11.50%	9.26%	2.24%
Aug	11.50%	9.06%	2.44%
Sep	11.50%	8.95%	2.55%
Oct	11.00%	8.92%	2.08%
Nov	11.00%	8.87%	2.13%
Dec	11.00%	8.71%	2.29%
Jan 1992	12.50%	8.63%	3.87%
Feb	12.50%	8.76%	3.74%
Mar	12.50%	8.82%	3.68%
Apr	12.00%	8.76%	3.24%
May	12.00%	8.69%	3.31%
Jun	12.00%	8.63%	3.37%
Jul	12.00%	8.45%	3.55%
Aug	12.00%	8.30%	3.70%
Sep	12.00%	8.28%	3.72%
Oct	12.00%	8.42%	3.58%
Nov	12.00%	8.51%	3.49%
Dec	12.00%	8.32%	3.68%
Jan 1993	12.00%	8.14%	3.86%
Feb	12.00%	7.92%	4.08%
Mar	12.00%	7.76%	4.24%
Apr	12.50%	7.64%	4.86%
May	12.50%	7.64%	4.86%
Jun	12.50%	7.54%	4.96%
Jul	13.00%	7.38%	5.62%
Aug	13.00%	7.07%	5.93%
Sep	13.00%	6.89%	6.11%
Oct	12.50%	6.89%	5.61%
Nov	12.50%	7.17%	5.33%
Dec	12.50%	7.18%	5.32%

Mo/Year	WGL's Expected ROE	"Aa" Rated Bonds Yields	WGL's Risk Premium
Jan 1994	11.50%	7.18%	4.32%
Feb	11.50%	7.34%	4.16%
Mar	11.50%	7.74%	3.76%
Apr	12.00%	8.12%	3.88%
May	12.00%	8.24%	3.76%
Jun	12.00%	8.21%	3.79%
Jul	12.50%	8.38%	4.12%
Aug	12.50%	8.32%	4.18%
Sep	12.50%	8.56%	3.94%
Oct	12.00%	8.78%	3.22%
Nov	12.00%	8.90%	3.10%
Dec	12.00%	8.69%	3.31%
Jan 1995	11.00%	8.66%	2.34%
Feb	11.00%	8.45%	2.55%
Mar	11.00%	8.29%	2.71%
Apr	11.00%	8.17%	2.83%
May	11.00%	7.80%	3.20%
Jun	11.00%	7.49%	3.51%
Jul	11.50%	7.60%	3.90%
Aug	11.50%	7.71%	3.79%
Sep	11.50%	7.48%	4.02%
Oct	11.50%	7.30%	4.20%
Nov	11.50%	7.22%	4.28%
Dec	11.50%	7.03%	4.47%
Jan 1996	12.00%	7.02%	4.98%
Feb	12.00%	7.20%	4.80%
Mar	12.00%	7.55%	4.45%
Apr	13.00%	7.70%	5.30%
May	13.00%	7.79%	5.21%
Jun	13.00%	7.87%	5.13%
Jul	14.00%	7.83%	6.17%
Aug	14.00%	7.66%	6.34%
Sep	14.00%	7.84%	6.16%
Oct	14.50%	7.60%	6.90%
Nov	14.50%	7.32%	7.18%
Dec	14.50%	7.44%	7.06%
Jan 1997	14.50%	7.68%	6.82%
Feb	14.50%	7.60%	6.90%
Mar	14.50%	7.84%	6.66%
Apr	12.50%	8.00%	4.50%
May	12.50%	7.85%	4.65%
Jun	12.50%	7.68%	4.82%
Jul	13.00%	7.43%	5.57%
Aug	13.00%	7.46%	5.54%
Sep	13.00%	7.43%	5.57%
Oct	13.50%	7.28%	6.22%
Nov	13.50%	7.15%	6.35%
Dec	13.50%	7.07%	6.43%
Jan 1998	13.50%	6.94%	6.56%
Feb	13.50%	6.99%	6.51%
Mar	13.50%	7.04%	6.46%
Apr	12.00%	7.02%	4.98%
May	12.00%	7.02%	4.98%
Jun	12.00%	6.91%	5.09%
Jul	12.00%	6.91%	5.09%
Aug	12.00%	6.87%	5.13%
Sep	12.00%	6.78%	5.22%
Oct	11.50%	6.79%	4.71%
Nov	11.50%	6.89%	4.61%
Dec	11.50%	6.78%	4.72%
Jan 1999	10.50%	6.82%	3.68%
Feb	10.50%	6.94%	3.56%
Mar	10.50%	7.11%	3.39%

Summary Information	(1988 - 1999)
Average Risk Premium: (Jan 1988 - March 1999)	**3.74%**
High Risk Premium: (Nov 1996)	**7.18%**
Low Risk Premium: (Aug 1988)	**0.65%**

Sources: The Value Line Investment Survey: Ratings & Reports, Moody's Bond Record and Moody's Public Utility News Reports

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Risk Premium Costs of Equity Estimates
for the Seven Comparable Natural Gas Distribution Industry Companies

	(1)	(2)	(3)	(4)
Company Name	Bond Rating	Appropriate Yeild	Equity Premium	Cost of Common Equity
AGL Resources, Inc.	BBB+	7.55%	3.09%	10.64%
Connecticut Energy Corporation	A-	7.26%	2.58%	9.84%
Indiana Energy, Inc.	A+	7.26%	3.95%	11.21%
Northwest Natural Gas Company	A	7.26%	3.04%	10.30%
Peoples Energy Corporation	A+	7.26%	4.07%	11.33%
Piedmont Natural Gas Company, Inc.	A	7.26%	4.19%	11.45%
Washington Gas Light Company	AA-	7.11%	3.74%	10.85%
Average				**10.80%**

NOTES:

Column 1 = The bond rating is from Standard & Poor's Corporation Utilities Rating Service, Financial Statistics, September 30, 1998 and Standard and Poor's Corporation Utilities and Perspectives, May 24, 1999.

Column 2 = The appropriate yield is equal to the rate quoted in Moody's Bond Record for Thirty-Year Public Utility Bonds given the bond rating for the Company, March 1999

Column 3 = The equity premium represents the average difference between the Company's expected return on common equity as reported in The Value Line Investment Survey: Ratings & Report and the average yield on equally rated Moody's Public Utility Bonds from January 1988 through March 1999. (See Schedules 26-1 through 26-7)

Column 4 = Column 2 + Column 3.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Capital Asset Pricing Model (CAPM) Costs of Common Equity Estimates for the Seven Natural Gas Distribution Companies

	(1)	(2)	(3)	(4)	(5)	(6)
Company Name	Risk Free Rate (Low)	Risk Free Rate (High)	Company's Value Line Beta	Market Risk Premium	CAPM Cost of Common Equity (Low)	CAPM Cost of Common Equity (High)
AGL Resources, Inc.	5.01%	5.58%	0.65	7.40%	9.82%	10.39%
Connecticut Energy Corporation	5.01%	5.58%	0.60	7.40%	9.45%	10.02%
Indiana Energy, Inc.	5.01%	5.58%	0.60	7.40%	9.45%	10.02%
Northwest Natural Gas Company	5.01%	5.58%	0.60	7.40%	9.45%	10.02%
Peoples Energy Corporation	5.01%	5.58%	0.75	7.40%	10.56%	11.13%
Piedmont Natural Gas Company, Inc.	5.01%	5.58%	0.60	7.40%	9.45%	10.02%
Washington Gas Light Company	5.01%	5.58%	0.60	7.40%	9.45%	10.02%
Average			**0.63**		**9.66%**	**10.23%**

Notes: Column 5 = [Column 1 + (Column 3 * Column 4)] .

Column 6 = [Column 2 + (Column 3 * Column 4)] .

Sources: Column 1&2 = The Risk Free Rate which is equal to the six month high and low of the 30-year U.S. Treasury Rate as quoted in Salomon Smith Barney's Bond Market Roundup: Abstract, on July 31, 1998.

Column 3 = Beta is a measure of the movement and relative risk on an individual stock to the market as a whole as reported by The Value Line Survey: Ratings & Reports, March 26, 1999.

Column 4 = The Market Risk Premium is the amount over the Risk Free Rate that is demanded by investors for holding a portfolio of equal risk to the market and was reported by Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 1998 Yearbook.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Total Debt to Total Capital Ratios, Market-to-Book Values and Returns on Common Equity for the Seven Comparable Natural Gas Distribution Companies

Company Name	Total Debt to Total Capital Ratio (1998)	Market-to-Book Value (1998)	Return on Year-End Common Equity (1998)
AGL Resources, Inc.	47.50%	1.53 X	11.30%
Connecticut Energy Corporation	45.90%	1.39 X	10.20%
Indiana Energy, Inc.	37.50%	1.83 X	13.20%
Northwest Natural Gas Company	44.00%	1.31 X	6.00%
Peoples Energy Corporation	41.10%	1.53 X	10.70%
Piedmont Natural Gas Company, Inc.	44.70%	2.35 X	13.20%
Washington Gas Light Company	40.30%	1.55 X	11.10%
Average	**43.00%**	**1.64 X**	**10.81%**
Laclede Gas Company	**40.90%**	**1.42 X**	**10.80%**

Sources: The Value Line Investment Survey: Ratings & Reports, March 26, 1999, and Companies' Stockholders Annual Reports. and Edward Jones' Financial and Common Stock Information: Natural Gas Industry, March 31, 1999.

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Public Utility Revenue Requirement

or

Cost of Service

The formula for the revenue requirement of a public utility may be stated as follows :

Equatic **Revenue Requirement = Cost of Service**

or

Equatic **R R = O + (V - D) R**

The symbols in the second equation are represented by the following factors :

R = Revenue Requirement

= Prudent Operating Costs, including Depreciation and T:

= Gross Valuation of the Property Serving the Public

= Accumulated Depreciation

(V - C = Rate Base (Net Valuation)

(V - D) = Return Amount ($$) or Earnings Allowed on Rate Base

= i L + d P + k E or Overall Rate of Return (%)

= Embedded Cost of Debt

= Proportion of Debt in the Capital Structure

= Embedded Cost of Preferred Stock

= Proportion of Preferred Stock in the Capital Structure

= Required Return on Common Equity (ROE)

= Proportion of Common Equity in the Capital Structure

LACLEDE GAS COMPANY
CASE NO. GR-99-315

Weighted Cost of Capital as of March 31, 1999 for Laclede Gas Company

Capital Component	Percentage of Capital	Embedded Cost	Weighted Cost of Capital Using Common Equity Return of: 9.00%	9.50%	10.00%
Common Stock Equity	51.07%	—	4.60%	4.85%	5.11%
Preferred Stock	0.36%	4.96%	0.02%	0.02%	0.02%
Long-Term Debt	32.98%	7.77%	2.56%	2.56%	2.56%
Short-Term Debt	15.59%	5.37%	0.84%	0.84%	0.84%
Total	100.00%		**8.02%**	**8.27%**	**8.53%**

Notes: See Schedule 10 for the Capital Structure Ratios

See Schedule 13 for the Embedded Cost of Preferred Stock

See Schedule 11-1 for the Embedded Cost of Long-Term Debt.

Laclede's Embedded Cost of Short-Term Debt is the average Short-Term Debt Interest Rate Paid for the 12 month Period Ended March 31, 1999, and was taken from the Company's Response to Staff's Data Information Request No. 3803.