

Exhibit No.:
Issue(s):
Witness/Type of Exhibit:
Sponsoring Party:
Case No.:

Rate of Return
Burdette/Direct
Public Counsel
GR-2002-356

DIRECT TESTIMONY

OF

MARK BURDETTE

Submitted on Behalf of
the Office of the Public Counsel

LACLEDE GAS COMPANY

Case No. GR-2002-356

June 20, 2002

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1 Advocates. Also, I attended The Basics of Regulation: Practical Skills for a Changing
2 Environment presented by the Center for Public Utilities, New Mexico State University.

3 Q. DO YOU HAVE ANY PROFESSIONAL AFFILIATIONS?

4 A. Yes. I am a member of the Society of Utility and Regulatory Financial Analysts (SURFA).

5 Q. DO YOU HOLD ANY PROFESSIONAL DESIGNATIONS?

6 A. Yes. I have been awarded the professional designation Certified Rate of Return Analyst
7 (CRRRA) by the Society of Utility and Regulatory Financial Analysts. This designation is
8 awarded based upon work experience and successful completion of a written examination.

9 Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE MISSOURI PUBLIC
10 SERVICE COMMISSION (MPSC OR THE COMMISSION)?

11 A. Yes.

12 Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

13 A. I will present a cost-of-capital analysis for the Laclede Gas Company (Laclede, the
14 Company). I will recommend and testify to the capital structure, embedded costs of long-
15 term debt, short term debt and preferred stock, a fair return on common equity, and the
16 overall weighted average cost of capital that should be allowed in this proceeding.

17 Q. HAVE YOU PREPARED SCHEDULES IN SUPPORT OF YOUR TESTIMONY?

18 A. Yes. I have prepared an analysis consisting of 11 schedules that is attached to this
19 testimony (MB-1 through MB-11). This analysis was prepared by me and is correct to the
20 best of my knowledge and belief.

ANALYSIS

Q. PLEASE DESCRIBE LACLEDE GAS COMPANY.

A. Laclede Gas Company has gone through a reorganization in which a holding company, the Laclede Group Inc., was formed. The Laclede Group became operational on 1 October 2001. From a Laclede press release dated 16 August 2001:

Under the new holding company structure, Laclede Gas would become a wholly owned subsidiary of The Laclede Group, Inc., but would continue to operate as a regulated natural gas distribution utility. Existing corporate subsidiaries of Laclede Gas — Laclede Energy Resources, Inc., Laclede Venture Corp., Laclede Development Company, Laclede Investment Corporation, Laclede Gas Family Services, Inc., and Laclede Pipeline Company — would become subsidiaries of The Laclede Group, Inc., and would remain unregulated. New subsidiaries may be formed as The Laclede Group enters into new ventures.

Within the Laclede Group Inc., Laclede Gas Company remains a wholly owned, regulated utility under the jurisdiction of the Missouri Public Service Commission. When available, the financial information I use for my analysis and present in this testimony is for Laclede Gas Company only, and not The Laclede Group on a consolidated basis. However, some information is for The Laclede Group. For example, on Schedule MB-1, I show historical capital structures for The Laclede Group. This information is for The Laclede Group, consolidated, because that is the manner in which The Value Line Investment Survey presents the information.

The Laclede Gas Company continues to provide the vast majority of The Laclede Group's revenues at this time (over 90% of operating revenues).

Q. DO COMMON EQUITY SHARES OF LACLEDE GAS COMPANY CONTINUE TO TRADE ON THE OPEN MARKET?

A. No. According to a press release from The Laclede Group Inc., dated 5 October 2001:

Common shares of stock that had been trading on the New York Stock Exchange under the Laclede Gas Company ticker symbol "LG" now are

1 being traded under the name of The Laclede Group, Inc., the holding
2 company that became operational Oct. 1, 2001, and which now uses that
3 ticker symbol (NYSE: LG).
4

5 Laclede Gas Company *does* continue to maintain long-term debt under the Laclede Gas
6 Company name.

7 Q. DID YOU INCLUDE AN ANALYSIS OF THE LACLEDE GROUP OR LACLEDE GAS
8 COMPANY AS PART OF YOUR ANALYSIS TO DETERMINE THE APPROPRIATE
9 RATE OF RETURN FOR THE MISSOURI-JURISDICTIONAL REGULATED
10 OPERATIONS OF LACLEDE GAS COMPANY?

11 A. Yes, I did include an analysis of The Laclede Group as part of my overall analysis.
12 Because The Laclede Group has publicly-traded common stock, I was able to utilize actual
13 market-based financial information for the company.

14 Q. WHY DID YOU INCLUDE THE LACLEDE GROUP IN YOUR ANALYSIS?

15 A. The Laclede Group has publicly-traded common stock, so actual market-based information
16 (such as analysts' growth rate forecasts and stock price) is available. When information is
17 available directly from the financial markets, I believe it is important to look at and consider
18 that information.

19 Q. DID YOU RELY SOLELY ON YOUR ANALYSIS OF THE LACLEDE GROUP OR
20 LACLEDE GAS COMPANY IN MAKING YOUR RECOMMENDATIONS FOR
21 LACLEDE GAS COMPANY IN THIS PROCEEDING?

22 A. No, I did not. My testimony includes an analysis of risk factors and application of the
23 Discounted Cash Flow Model and the Capital Asset Pricing Model for a group of five
24 publicly-traded local distribution companies with operations similar to Laclede Gas
25 Company.

1 Q. WHY DID YOU USE A PROXY GROUP IN YOUR ANALYSIS OF THE COST OF
2 COMMON EQUITY FOR LACLEDE GAS COMPANY?

3 A. A group of proxy companies can provide insight as to the reasonableness of any company-
4 specific return calculation. It can also provide a smoothing effect in calculations that might
5 be affected by aberrations in the financial or market information for a single company.

6 Q. HOW DOES THE USE OF PROXY COMPANY ANALYSIS PROVIDE INSIGHT AS TO
7 THE REASONABLENESS OF YOUR RECOMMENDATION?

8 A. Because of the basic financial concept of the risk-return trade-off, companies of similar risk
9 will face similar capital costs in the market. Although no two companies have exactly the
10 same overall risk profile, an analysis of other companies operating in the same industry and
11 facing similar risk profiles will allow a zone of reasonableness for returns to be developed.
12 The company-specific calculation of return can be compared against this multiple-company
13 zone of reasonableness. If my calculation of Laclede Gas Company's cost of common
14 equity was highly divergent from the results I obtained when analyzing other, similar-risk
15 LDCs, that would indicate a need to examine the reason(s) for that divergence. If my
16 calculation of Laclede's ROE is generally consistent with the ROEs calculated for the
17 similar-risk proxy companies, that indicates consistency within the market regarding the
18 risk-return trade-off and provides support for my recommendation.

19 Q. IS THE APPLICABILITY OF THIS RISK-RETURN COMPARISON DEPENDENT ON
20 THE PROPER SELECTION OF PROXY COMPANIES?

21 A. Certainly. Only companies of similar risk profiles are appropriate for the proxy group.
22 Some financial analysts attempt to select a group that is of generally different risk, then
23 make an ad hoc adjustment to calculated returns after the fact to account for those risk
24 differences. This method is highly subjective and introduces an opportunity for error that
25 simply isn't necessary. It also allows the analyst to manipulate his return recommendation
26 via his 'interpretation' of the risk differences and resulting adjustment.

1 For example, this type of unnecessary, subjective error exists when using electric
2 utility companies as a proxy group in the analysis of returns for a local distribution
3 company, then attempting to make an adjustment for the risk differences between gas and
4 electric utilities. Choosing comparable gas utilities in the first place avoids the subjective
5 error and the possibility of manipulation.

6 Also, an analyst wishing to recommend a higher return on equity will select proxy
7 companies of higher risk, then attempt to make the argument that the company being
8 analyzed also faces this higher risk, thereby 'justifying' the higher recommendation.

9 10 **SUMMARY OF FINDINGS**

11 Q. PLEASE SUMMARIZE YOUR FINDINGS CONCERNING THE OVERALL COST OF
12 CAPITAL FOR THE LACLEDE GAS COMPANY.

13 A. Laclede Gas Company should be allowed an overall return of 7.88% to 8.06% on its net
14 original cost rate base. This return has been determined using Laclede Gas Company's
15 actual capital structure at 30 November 2001, which is the end of the test year in this case.
16 Selected historical financial information for Laclede and The Laclede Group is shown on
17 Schedule MB-1.

18 19 **CAPITAL STRUCTURE**

20 Q. HOW IS LACLEDE GAS COMPANY CURRENTLY CAPITALIZED?

21 A. On 30 November 2001, Laclede's capital structure consisted of 38.71% common equity (all
22 issued to and held by The Laclede Group), 0.25% preferred stock, 41.57% long term debt,
23 and 19.47% short-term debt. This capital structure was utilized for calculations and is
24 shown on schedule MB-2.

1 Q. IS THE CURRENT CAPITAL STRUCTURE CONSISTENT WITH HOW LACLEDE HAS
2 BEEN CAPITALIZED IN THE PAST?

3 A. The Laclede Group became operational on 1 October 2001, therefore, historical information
4 before that date is for The Laclede Gas Company, only. However, given that The Laclede
5 Gas Company still makes up the vast majority of The Laclede Group's operations (Laclede
6 Gas still provides over 90% of The Laclede Group's revenues), I believe the historical
7 capital structures are valid for comparison purposes at this point in time.

8 The Laclede Group's capital structures (*not* including short term debt) for the past
9 four years (as reported by Value Line) are shown on Schedule MB-1. Common equity
10 averaged 55.3% over that time. Historical common equity percentages only for The
11 Laclede Group are also shown on Schedule MB-3. As shown in the middle of Schedule
12 MB-2, if I remove short-term debt from my recommended regulatory capital structure, The
13 Laclede Group would have a common equity ratio of 48.07% as of 30 November 2001.

14 The common equity ratio has been variable over the past four years, ranging from a
15 high of 58.6% in 1998 to a low of 50.2% in 2001. If short term debt is not included as part
16 of the capital structure, The Laclede Group tends to have a relatively high common equity
17 ratio, and the current capital structure continues that trend. Also shown on Schedule MB-3
18 is a comparison of The Laclede Group's common equity ratio and The Value Line
19 Composite Index common equity ratio for the gas distribution industry.

20 Q. HOW DOES THE LACLEDE GROUP'S CURRENT CAPITAL STRUCTURE COMPARE
21 WITH OTHER GAS DISTRIBUTION UTILITIES?

22 A. The Laclede Group has a higher common equity ratio than the Value Line average for
23 LDCs, and a correspondingly lower ratio of long term debt, when short-term debt is
24 excluded from the calculations. According to Value Line Composite Statistics, the common
25 equity ratio for Natural Gas (Distribution) companies has averaged 46.4% for the four years

1 1998 through 2001 (the years data are available, see Schedule MB-3). Over these same
2 years, The Laclede Group's common equity ratio has averaged 55.3% (not including short
3 term debt). The 30 Natural Gas Distribution and Integrated Natural Gas Companies
4 covered by C.A. Turner Utility Reports have an average common equity ratio of 38%. Not
5 including short term debt, the higher level of common equity for The Laclede Group
6 indicates a relatively lower level of financial risk due to capital structure for shareholders
7 than the average LDC covered by Value Line and C.A. Turner.

8 However, Laclede Gas Company's actual financing program relies heavily on
9 short-term debt. This short-term debt somewhat offsets the higher average level of
10 common equity that The Laclede Group appears to have when STD is excluded. When
11 short-term debt is appropriately included in Laclede's capital structure, the Company's
12 common equity ratio is 38.71%, which places Laclede's overall financial risk in line with
13 the proxy group and the current state of the industry.

14 Q. HOW DOES LACLEDE'S CAPITAL STRUCTURE COMPARE WITH THE CAPITAL
15 STRUCTURE OF YOUR GROUP OF PROXY COMPANIES?

16 A. As shown on Schedule MB-3, over the past four years The Laclede Group has shown a
17 decreasing level of common equity each year, from 58.6% in 1998 to 50.2% in 2001, as
18 reported by Value Line. The five proxy companies (not including short term debt for any
19 of the companies) have a relatively stable level of common equity as a group. The common
20 equity of the group, and for individual companies, does not show the consistent year-to-
21 year decrease in common equity, as The Laclede Group does.

22 As of the end of 2001, as measured by Value Line, The Laclede Group's capital
23 structure contained similar levels of common equity, on average, as the group of proxy
24 companies. Not including short term debt, The Laclede Group's level of common equity as
25 of the end of the test year is slightly below the average of the proxy group.

1 Q. DURING YOUR DISCUSSION OF COMMON EQUITY RATIOS FOR THE LACLEDE
2 GROUP AND YOUR PROXY GROUP, YOU USED CAPITAL STRUCTURE
3 STATISTICS THAT DO NOT INCLUDE SHORT-TERM DEBT, YET YOU
4 RECOMMEND USING SHORT-TERM DEBT IN YOUR CAPITAL STRUCTURE.
5 COULD YOU PLEASE COMMENT ON THIS?

6 A. Yes. Not all financial resources calculate nor include short-term debt when reporting
7 capital structure information. However, the sources, such as Value Line, are consistent in
8 the manner in which they treat different companies. Therefore, it can be beneficial to look
9 at this information when comparing companies as long as you keep in mind what the
10 statistics actually represent. However, when analyzing Laclede Gas Company's actual
11 capital structure and level of financial risk for the purposes of determining an appropriate
12 cost of capital, short-term debt cannot be excluded because it does contribute to financial
13 risk.

14 Q. COULD YOU DEFINE RISK AND EXPAND ON THE CONCEPT OF RISK?

15 A. Yes. Risk can be defined as the possibility that actual earnings from an asset or an
16 investment may differ from expected earnings. The wider the range of possible earnings,
17 the greater the risk associated with that asset or investment.

18 Total risk can be divided into two categories: business risk and financial risk.

19 **Business risk** is the uncertainty (variability) associated with earnings due to
20 fundamental business conditions faced by the company, such as cyclical markets, weather-
21 sensitive sales, changing technology, unforeseen events, or competition. Business risk is
22 the *inherent riskiness of a firm's assets* due to the operations of the company and the
23 industry in which it operates. In other words, business risk is not connected to the way the
24 firm finances its assets.

25 **Financial risk** is the uncertainty associated with earnings available to common
26 shareholders due to debt and/or preferred stock being used to finance the firm's assets.

1 This additional risk stems from the fact that cash flows to common shareholders are
2 subordinate to a firm's required debt service (i.e. a firm must pay its debt service and any
3 preferred dividends before it can pay common dividends.) From a common shareholder's
4 perspective, a firm with less debt and preferred stock in its capital structure has fewer bills
5 to pay before it can allocate earnings to common dividends, and is therefore less risky.

6 Q. PLEASE SHOW THE CAPITAL STRUCTURE THAT YOU RECOMMEND.

7 A. I recommend the following capital structure be used in this proceeding (also shown on
8 Schedule MB-2):

<u>Component</u>	<u>Percent</u>
Common Equity	38.71%
Preferred Stock	0.25%
Long-term debt	41.57%
Short-term debt	<u>19.47%</u>
Total	100.00%

15
16 **INCLUSION OF SHORT TERM DEBT IN THE CAPITAL STRUCTURE**

17 Q. DO YOU HAVE SPECIFIC CRITERIA TO DETERMINE WHETHER TO INCLUDE
18 SHORT TERM DEBT IN A COMPANY'S CAPITAL STRUCTURE?

19 A. Yes. When determining whether to include short term debt, I consider the level of short
20 term debt in the capital structure (less construction work in progress (CWIP) amounts) and
21 whether the level of short term debt is consistent. Laclede Gas Company not only has a
22 significant portion of its capital structure as short term debt on 30 November 2001
23 (\$119,616,400 average daily balance for the month, net of CWIP), but maintains a
24 significant level throughout the year. The *lowest* average-daily balance for any month in
25 the test year is over \$84 million in July 2001.

I included \$132,021,695 of short term debt in Laclede's 30 November 2001 capital structure, which is 19.47% of the total. This amount is the twelve-month average level of short term debt (average daily balance for each month, less CWIP) for the test year.

Q. IS THERE SUPPORT IN FINANCIAL LITERATURE FOR INCLUSION OF SHORT TERM DEBT IN CAPITAL STRUCTURE?

A. Yes. Standard & Poor's Corporate Finance Criteria states:

Traditional measures of focusing on long-term debt have lost much of their significance, since companies rely increasingly on short-term borrowings. It is now commonplace to find permanent layers of short-term debt, which finance not only seasonal working capital but also an ongoing portion of the asset base. [S&P Corporate Ratings Criteria, 2002 Internet Version]

Laclede's short term debt is consistently a significant part of the capital structure, and is therefore appropriately included.

EMBEDDED COST RATES

Q. WHAT IS THE APPROPRIATE EMBEDDED COST RATE FOR LACLEDE'S PREFERRED STOCK?

A. The embedded cost rate is 4.96% for Laclede's preferred stock. Calculation of the embedded cost of preferred stock is shown on Schedule MB-4.

Q. WHAT IS THE APPROPRIATE EMBEDDED COST RATE FOR LACLEDE'S LONG TERM DEBT?

A. The embedded cost rate is 7.58% for Laclede's long term debt, as provided by the Company in response to OPC data request 2002.

Q. WHAT IS THE APPROPRIATE EMBEDDED COST RATE FOR LACLEDE'S SHORT TERM DEBT?

A. The embedded cost rate is 4.85% for Laclede's short term debt. Calculation of the embedded cost of short term debt is shown on Schedule MB-5.

COST OF COMMON EQUITY

Q. WHAT IS YOUR RECOMMENDED COST OF COMMON EQUITY FOR LACLEDE GAS COMPANY?

A. Laclede Gas Company should be allowed a return on common equity of 9.75% to 10.2%.

Q. PLEASE EXPLAIN IN DETAIL HOW YOU ARRIVED AT YOUR RECOMMENDED COST OF COMMON EQUITY FOR LACLEDE.

A. I relied primarily on a Discounted Cash Flow (DCF) analysis applied to a group of five proxy companies to calculate a cost of common equity for Laclede. I also applied the same DCF model to The Laclede Group. A comparison of risk measures for Laclede and the group is shown on Schedule MB-6.

The reasonableness of my DCF calculations was substantiated by performing a Capital Asset Pricing Model (CAPM) analysis on the proxy group and on The Laclede Group.

DISCOUNTED CASH FLOW MODEL AND DCF COST OF EQUITY

Q. PLEASE DESCRIBE THE STANDARD DISCOUNTED CASH FLOW (DCF) MODEL YOU USED TO ARRIVE AT THE APPROPRIATE COST OF EQUITY CAPITAL.

A. The model is represented by the following equation:

$$k = D/P + g$$

where "k" is the cost of equity capital (i.e. investors' required return), "D/P" is the current dividend yield (dividend (D) divided by the stock price (P)) and "g" is the expected sustainable growth rate.

If future dividends are expected to grow at a constant rate (i.e., the constant growth assumption) and dividends, earnings and stock price are expected to increase in proportion to each other, the sum of the current dividend yield (D/P) and the expected growth rate (g) equals the required rate of return, or the cost of equity, to the firm. This form of the DCF

1 model is commonly used in the regulatory arena and is known as the constant growth, or
2 Gordon, DCF model. The constant growth DCF model is based on the following
3 assumptions:

- 4 1) A constant rate of growth,
- 5 2) The constant growth will continue for an infinite period,
- 6 3) The dividend payout ratio remains constant,
- 7 4) The discount rate must exceed the growth rate, and
- 8 5) The stock price grows proportionately to the growth rate.

9 Although all of these assumptions do not always hold in a technical sense, the relaxation of
10 these assumptions does not make the model unreliable.

11 The DCF model is based on two basic financial principals. First; the current market
12 price of any financial asset, including a share of stock, is equivalent to the value of all
13 expected future cash flows associated with that asset discounted back to the present at the
14 appropriate discount rate. The discount rate that equates anticipated future cash flows and
15 the current market price is defined as the rate of return or the company's cost of equity
16 capital.

17 Cash flows associated with owning a share of common stock can take two forms:
18 selling the stock and dividends. Just as the current value of a share of stock is a function of
19 future cash flows (dividends), the *future* price of the stock at any time is also a function of
20 future dividends. When a share of stock is sold, what is given up is the right to receive all
21 future dividends. Therefore, the DCF model, using expected future dividends as the cash
22 flows, is appropriate regardless of how long the investor plans to hold the stock.
23 Determination of a holding period and an associated terminal price is unnecessary. The
24 irrelevance of investors' time horizons is emphasized by Brealey and Myers:

1 How far out could we look? In principle the horizon period H could be
2 infinitely distant. Common Stocks do not expire of old age. Barring such
3 corporate hazards as bankruptcy or acquisition, they are immortal. As H
4 approaches infinity, the present value of the terminal price ought to
5 approach zero.... We can, therefore, forget about the terminal price entirely
6 and express today's price as the present value of a perpetual stream of cash
7 dividends. (Principles of Corporate Financing, Fourth Edition, page 52).
8

9 The other basic financial principal on which the DCF is grounded is the "time value of
10 money." Investors view a dollar received today as being worth more than a dollar received
11 in the future because a dollar today can immediately be invested. Therefore, future cash
12 flows are discounted. The rate used by investors to discount future cash flows to the
13 present is the discount rate or opportunity cost of capital.
14

15 **DETERMINATION OF DCF SUSTAINABLE GROWTH**

16 Q. TO WHAT DOES THE GROWTH COMPONENT OF THE DCF FORMULA REFER?

17 A. The growth rate variable, g , in the traditional DCF model is the dividend growth rate
18 investors expect to continue into the *indefinite future* (i.e., the sustainable growth rate).
19 This is not necessarily the same growth rate that a company or analysts expect over the next
20 one year or even the next five years. The sustainable growth rate is rarely the highest
21 growth rate calculated for the company.

22 Q. HOW IS THE SUSTAINABLE GROWTH RATE DETERMINED?

23 A. Sustainable growth is determined by analyzing various historical and projected growth rates
24 for the Company. These growth rates might be calculated from raw data or taken from
25 financial resources such as Value Line Investment Survey. The growth rates analyzed can
26 include historical and projected growth rates of, for example, earnings per share (EPS),
27 dividends per share (DPS) and book value per share (BVPS). Analysts also consider

1 retention growth (both historical and projected), which is a calculation of the level of
2 earnings the company retains and does not pay out in dividends.

3 Q. COULD YOU DESCRIBE THE VARIOUS PARAMETERS AND METHODS WHICH
4 CAN BE USED TO CALCULATE SUSTAINABLE GROWTH?

5 A. Yes. Methods sometimes used for determining the investor-expected sustainable growth
6 rate utilized in the DCF model include: 1) *historical* growth rates, and 2) analysts'
7 *projections* of expected growth rates. Three commonly-employed historical growth
8 parameters are: 1) earnings per share (EPS), 2) dividends per share (DPS), and 3) book
9 value per share (BVPS). Additionally, analysts' projections of future growth in earnings
10 per share, dividends per share, and book value per share are sometimes used as an estimate
11 of the sustainable growth rate.

12 As a matter of completeness, I utilized **all** of the above-mentioned techniques for
13 measuring growth in order to calculate a sustainable growth rate. A summary of growth
14 rate calculations is shown on Schedule MB-7, page 1.

15 Q. DID YOU USE ANY OTHER METHODS OF CALCULATING GROWTH?

16 A. Yes, I did. I calculated both historical and projected retention growth. It is important to
17 recognize the fundamentals of long-term investor-expected growth when developing a
18 sustainable growth rate. Future dividends will be generated by future earnings and the
19 primary source of growth in future earnings is the reinvestment of present earnings back
20 into the firm. This reinvestment of earnings also contributes to the growth in book value.
21 Furthermore, it is the earned return on reinvested earnings and existing capital (i.e., book
22 value) that ultimately determines the basic level of future cash flows. Therefore, one proxy
23 for the future growth rate called for in the DCF formula is found by multiplying the future
24 expected earned return on book equity (r) by the percentage of earnings expected to be
25 retained in the business (b). This calculation, known as the " $b \cdot r$ " method, or *retention*

1 growth rate, results in one measure of the sustainable growth rate called for in the
2 Discounted Cash Flow formula. While the retention growth rate can be calculated using
3 historical data on earnings retention and equity returns, this information is relevant only to
4 the extent that it provides a meaningful basis for determining the future sustainable growth
5 rate. Consequently, projected data on earnings retention and return on book equity are
6 generally more representative of investors' expectations.

7 Q. CAN YOU PROVIDE AN EXAMPLE THAT ILLUSTRATES THE FUNDAMENTALS
8 OF RETENTION GROWTH AS A PROXY FOR SUSTAINABLE GROWTH?

9 A. Yes. To better understand the principles of sustainable growth, it is helpful to compare the
10 growth in a utility's cash flows to the fundamental causes of growth in an individual's
11 passbook account. For an individual who has \$1,000 in a passbook account paying 5.0%
12 interest, earnings will be \$50 for the first year. If this individual leaves 100% of the
13 earnings in the passbook account (retention ratio equals 100%), the account balance at the
14 end of the first year will be \$1,050. Total earnings in the second year will be \$52.50
15 (\$1,050 x 5.0%), and the growth rate of the account in year two is 5.0% [100%(b) x 5%(r)].
16 On the other hand, if the individual withdraws \$30 of the earnings from the first year and
17 reinvests only \$20 (retention ratio equals 40%) earnings in the second year will be only
18 \$51.00 (\$1,020 x 5.0%), with growth equaling 2.0% [(\$1,020-\$1,000)/\$1,000 = 2.0% =
19 40%(b) x 5%(r)]. In both cases, the return, along with the level of earnings retained, dictate
20 future earnings.

21 These exact principles regarding growth apply to a utility's common stock. When
22 earnings are retained, they are available for additional investment and, as such, generate
23 future growth. When earnings are distributed in the form of dividends, they are unavailable
24 for reinvestment in those assets that would ultimately produce future growth. Either way,

1 for both a utility's common stock or an individual's passbook account, the level of earnings
2 retained, along with the rate of return, determine the level of sustainable growth.

3 Q. ARE THERE ANY OTHER FACTORS THAT INFLUENCE INVESTOR-EXPECTED
4 SUSTAINABLE GROWTH?

5 A. Yes. Stock financing will cause investors to expect additional growth if a company is
6 expected to issue new shares at a price above book value. The excess of market price over
7 book value would benefit current shareholders, increasing their per share book equity.
8 Therefore, if stock financing is expected at prices above book value, shareholders will
9 expect their book value to increase, and that adds to the growth expectation stemming from
10 earnings retention, or "b*r" growth. A more thorough explanation of "external" growth is
11 included in Appendix (I). This external growth factor has been included in all historical
12 and projected retention growth rate calculations for the group of comparable utilities.

13 Q. DID YOU EXCLUDE ANY OF YOUR CALCULATED GROWTH RATES FROM THE
14 DETERMINATION OF AVERAGES?

15 A. Yes, I did. I excluded the projected retention growth rate of 9.99% for NICOR, Inc. The
16 calculation of this growth rate is based on projected returns on common equity of 19% and
17 21.5%. This level of return is simply out of line with the risk of a regulated gas distribution
18 utility, which causes any potential growth rate to be well out of line with regulated utilities.

19 Q. IS THE HISTORICAL GROWTH RATE IN DIVIDENDS PER SHARE AN
20 APPROPRIATE PROXY FOR DETERMINING THE SUSTAINABLE GROWTH RATE?

21 A. Not usually. The historical growth rate in dividends per share will tend to overstate
22 (understate) the sustainable growth rate when the dividend payout ratio has increased
23 (decreased) over the measurement period. For an extended discussion and illustration of
24 this phenomenon, please see Appendix I.

SUSTAINABLE GROWTH ANALYSIS

Q. DID YOU RELY ON DATA FROM LACLEDE OR THE LACLEDE GROUP ONLY TO ARRIVE AT A RECOMMENDATION OF SUSTAINABLE GROWTH?

A. No. I analyzed a group of utilities with similar characteristics and risk profiles to Laclede Gas Company to provide some insight as to the reasonableness of the sustainable growth rate calculated for Laclede. Schedule MB-6 shows a comparison of some risk factors for Laclede and my group of proxy companies.

Appendix G, attached to this testimony, describes the selection criteria used to develop a group of LDCs with risk characteristics similar to those of Laclede. The following companies met the selection criteria: 1) AGL Resources; 2) NICOR; 3) N.W. Natural Gas; 4) Piedmont Natural Gas, Inc.; and 5) WGL Holdings. Schedule MB-7, pages 2-7 contain growth rate calculations for The Laclede Group and the group of comparison companies. These calculations are summarized on Schedule MB-7, page 1.

Q. WHAT GROWTH RATE PARAMETERS HAVE YOU EXAMINED IN ORDER TO ESTABLISH INVESTOR-EXPECTED GROWTH FOR LACLEDE GAS COMPANY?

A. The following growth parameters have been reviewed for Laclede: 1) my calculations of historical compound growth in earnings, dividends, and book value based on data from Value Line; 2) average of five-year and ten-year historical growth in EPS, DPS, and BVPS; 3) projected growth rate in EPS, DPS, and BVPS; 4) historical retention growth rate; and 5) projected retention growth rate.

As mentioned previously, for completeness all of the above-mentioned techniques for measuring growth were utilized in order to calculate a sustainable growth rate.

Q. PLEASE SUMMARIZE YOUR HISTORICAL AND PROJECTED GROWTH RATE ANALYSIS FOR YOUR GROUP OF PROXY COMPANIES.

A. The following table outlines the results of the analysis of growth rates for the proxy group. The high average growth rate is 6.90% (projected EPS) and the low average growth rate is

2.60% (projected DPS). The overall average of all growth rates for all five companies is 3.77% (Schedule MB-7, page 1).

PROXY GROUP GROWTH RATE SUMMARY:

	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>
Historical Compound Growth	1.46%	2.92%	4.03%
Historical Value Line Growth	2.30%	2.90%	4.20%
Projected Growth	6.61%	2.70%	4.80%
	<u>Historical</u>	<u>Projected</u>	
Retention Growth	4.02%	5.65%	

Q. WHAT GROWTH RATE DO YOU CONSIDER TO BE REFLECTIVE OF THE INVESTOR-EXPECTED GROWTH FOR YOUR PROXY COMPANIES?

A. I would expect a sustainable growth rate for this group of gas utilities to be in the range of approximately 5.0% to 5.5%.

Q. PLEASE SUMMARIZE YOUR HISTORICAL AND PROJECTED GROWTH RATE ANALYSIS FOR THE LACLEDE GROUP.

A. The following table outlines the results of the analysis of growth rates for The Laclede Group found on Schedule MB-7, page 2. As mentioned previously, public growth rate information is not available for Laclede Gas Company only because the company does not have publicly-traded stock. The overall average of all analyzed growth rates for The Laclede Group is 2.11%.

Growth rate summary for The Laclede Group:

	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>
Historical Compound Growth	-2.35%	1.42%	2.47%
Historical Value Line Growth	0.75%	1.50%	3.00%
Projected Growth	5.00%	1.50%	3.00%
	<u>Historical</u>	<u>Projected</u>	
Retention Growth	2.19%	4.77%	

1 Q. WHAT GROWTH RATE DO YOU CONSIDER TO BE REFLECTIVE OF THE
2 INVESTOR-EXPECTED GROWTH FOR LACLEDE GAS COMPANY?

3 A. I believe a growth rate of approximately 4.0% to 4.4% is a reasonable representation of
4 investors' expectations for Laclede's sustainable growth rate.

5 Q. PLEASE EXPLAIN IN MORE DETAIL HOW THE HISTORICAL GROWTH RATES OF
6 EARNINGS, DIVIDENDS, AND BOOK VALUE WERE DETERMINED.

7 A. Historical rates of growth in earnings per share (EPS), dividends per share (DPS), and book
8 value per share (BVPS) were analyzed using two methods. First, compound growth rates
9 were calculated for five-year periods ending 1998, 1999 and 2000. These three five-year
10 compound growth rates were then averaged and are labeled "Ave. Compound Gr." on line
11 16 of Schedule MB-7, pages 2-7.

12 The second measure of historical growth was taken from Value Line. The
13 historical rates of growth furnished by Value Line are included in this analysis because:

14 1) The Value Line growth rates are readily available for investor use;

15 2) The Value Line rates of growth reflect both a five-year and ten-year time frame;

16 and

17 3) The Value Line rates are measured from an average of three base years to an
18 average of three ending years, smoothing the results and limiting the impact of nonrecurring
19 events.

20 The Value Line growth rates are found on line 19 of Schedule MB-7, pages 2-7.

21 Q. PLEASE DISCUSS YOUR ANALYSIS OF PROJECTED GROWTH RATE DATA.

22 A. Projected growth rates in EPS, DPS, and BVPS were taken from Value Line and are found
23 on line 30 of Schedule MB-7, pages 2-7. Projected growth in EPS was also taken from
24 First Call Corporation (line 32). If First Call did not issue a projection for a particular
25 company, that space contains n/a. Information from First Call is available to the average

investor. The projected growth in EPS found on line 36 is the average of earnings growth projections furnished by Value Line and First Call. Value Line's projected growth in dividends and book value are listed again on line 36.

Q. PLEASE DISCUSS YOUR ANALYSIS OF HISTORICAL AND PROJECTED RETENTION GROWTH RATES.

A. Historical retention growth was determined using the product of return (r) and retention rate (b) for the years 1996-2000, and the average was calculated (line 10, final column). The projected retention growth data, found on lines 25-27 of Schedule MB-7, pages 2-7 is based on information from Value Line. Projected retention growth was calculated for 2001, 2002 and the period 2004-06. An average of these growth rates was calculated and compared to the growth rate for the 2004-06 period alone.

Investors' expectations regarding growth from external sources (i.e. sales of additional stock at prices above book value) has been included in the determination of both historical and projected growth (lines 13 and 33, respectively).

CALCULATION OF DCF STOCK PRICE AND DIVIDEND YIELD

Q. WHAT IS THE APPROPRIATE STOCK PRICE TO USE IN THE DISCOUNTED CASH FLOW MODEL?

A. The DCF calls for a current (spot) price of stock.

Q. WHAT IS THE APPROPRIATE DIVIDEND YIELD TO USE IN THE DCF?

A. The appropriate dividend yield to use in the DCF is the *expected* dividend yield calculated from a current stock price and the *expected* dividend.

1 Q. HAVE YOU CALCULATED THE DIVIDEND YIELDS FOR THE PROXY GROUP?

2 A. Yes. The average expected dividend yield for my proxy group is 4.56%. The calculations
3 are shown on Schedule MB-8, page 1. For the group, the high dividend yield was 4.96%
4 (WGL Holdings) and the low was 4.10% (NICOR).

5 Q. WHAT IS THE APPROPRIATE DIVIDEND YIELD FOR LACLEDE GAS COMPANY?

6 A. I chose to use a dividend yield for Laclede of 5.80%. This is the actual expected dividend
7 yield for The Laclede Group based on an expected 2003 dividend of \$1.38 and The Laclede
8 Group's recent six-week average stock price of \$23.81. The expected dividend yield is
9 5.17% using the same \$1.38 expected 2003 dividend and a 3-month daily average stock
10 price of \$26.67 (calculated on Schedule MB-8, page 2).

11 I chose to use the dividend yield of 5.80% for Laclede because it is based on the
12 most recent stock price information.

13 Q. PLEASE EXPLAIN YOUR CALCULATION OF THE DIVIDEND YIELD.

14 A. Dividend yield is equal to the expected dividend divided by current stock price. Schedule
15 MB-8, page 1 shows the average stock prices for a recent six-week period, the expected
16 2003 dividends (as taken from Value Line), and the calculation of the dividend yields for
17 The Laclede Group and the group of proxy companies.

18 I primarily used a six-week period for determining the average stock price because
19 I believe that period of time is long enough to avoid daily fluctuations and recent enough so
20 that the stock price captured is representative of current expectations. The stock price for
21 each company is the average of the Friday closing price from 5/03/02 through 6/07/02.
22 This time period accurately reflects investor's current expectations for the companies'
23 stock. Non-current stock prices simply do not capture investor's current expectations and
24 are inappropriate to use in the DCF.

For comparison purposes, using the same \$1.38 expected 2003 dividend, I calculated a 3-month daily-average stock price of \$26.67, which gave a dividend yield of 5.17%. The dividend yield calculation is shown on Schedule MB-8, page 1. The average stock price calculation is shown on Schedule MB-8, page 2.

DCF COST OF EQUITY

Q. WHAT IS THE DCF COST-OF-EQUITY RANGE FOR LACLEDE GAS COMPANY?

A. I believe Laclede's DCF cost of common equity is between 9.80% and 10.2%, which is based on a dividend yield of 5.80% and an investor-expected sustainable growth rate in a range of 4.0% to 4.4%. These calculations are shown on Schedule MB-9.

Q. PLEASE EXPLAIN HOW YOU DETERMINED THIS RANGE.

A. I analyzed a group of five proxy companies that are similar in risk to The Laclede Gas Company. I also analyzed The Laclede Group. The following table shows the DCF cost of common equity for my proxy group using the low-, average- and high-average **projected** growth rates:

	<u>Dividend Yield</u>	<u>Growth</u>	<u>Cost of Equity</u>
Low	4.56%	2.70%	7.26%
Average	4.56%	4.94%	9.50%
High	4.56%	6.61%	11.07%

The DCF cost of equity capital for the proxy group is found on Schedule MB-9.

The following table, using data from Schedule MB-9, outlines the cost of equity range for The Laclede Group using my calculated growth rates and dividend yield:

	<u>Dividend Yield</u>	<u>Growth</u>	<u>Cost of Equity</u>
Average	5.80%	2.11%	7.91%
High	5.80%	5.00%	10.80%

Using **projected** growth rates, The Laclede Group's range for DCF cost of common equity is as follows:

	<u>Dividend Yield</u>	<u>Growth</u>	<u>Cost of Equity</u>
Average	5.80%	3.57%	9.37%
High	5.80%	5.00%	10.80%

I do not believe that Laclede Gas Company can sustain a growth rate equal to the highest projected growth rates for either the proxy group or The Laclede Group. For that reason, the top of my DCF cost of equity range is below my highest calculated DCF cost of equity.

Q. IS THE COST OF EQUITY CALCULATED FOR YOUR PROXY GROUP RELEVANT TO THE REASONABLENESS OF YOUR RECOMMENDATION FOR LACLEDE?

A. Yes. The group of LDCs in my proxy group are similar in risk to Laclede and should have similar capital costs in the market. Although Laclede and the comparison group differ in respect to both dividend yield and sustainable growth rate, overall DCF calculations produce similar results.

For example, combining Laclede's dividend yield of 5.80% with its average projected growth rate of 3.57% gives a DCF cost of equity of 9.37%. Combining the proxy group's average dividend yield of 4.56% with the group's average projected growth rate of 4.94% produces a DCF cost of common equity of 9.50% (these calculations are shown on Schedule MB-9). The DCF cost of equity for the proxy group is 11.07% using the high average projected growth rate. The DCF cost of equity for The Laclede Group is 10.80% using the high projected growth rate. This result is consistent with the theory of the DCF, given the equivalent levels of risk between the companies.

CAPITAL ASSET PRICING MODEL

Q. PLEASE DESCRIBE THE CAPITAL ASSET PRICING MODEL YOU USED TO SUBSTANTIATE YOUR RECOMMENDED RETURN ON COMMON EQUITY.

A. The Capital Asset Pricing Model (CAPM) is described by the following equation:

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

where,

K = the cost of common equity for the security being analyzed,

R_f = the risk free rate,

β = beta = the company or industry-specific beta risk measure,

R_m = market return, and

$(R_m - R_f)$ = market premium.

The formula states that the cost of common equity is equal to the risk free rate of interest, plus, beta multiplied by the difference between the return on the market and the risk free rate (the market premium).

The formula says that the cost of common equity is equal to the risk free rate plus some proportion of the market premium - that proportion being equal to beta. The market overall has a beta of 1.0. Firms with beta less than 1.0 are assumed to be less risky than the market; firms with beta greater than 1.0 are assumed to be more risky than the market. The appropriate beta to use in the CAPM formula is the beta that represents the risk of the company (or project) being analyzed. Laclede Gas Company's beta is 0.55. Betas for my group of comparison companies are all 0.6. Gas utilities are generally viewed as relatively safe investments, and this is reflected in beta values below 1.0.

1 Q. HOW DID YOU ARRIVE AT THE VALUES OF THE RISK FREE RATE AND THE
2 MARKET RETURN (OR MARKET PREMIUM) USED IN YOUR ANALYSIS?

3 A. The 5.30% risk free rate I utilized for my CAPM analysis is the average of the 10-year and
4 30-year U.S. Government bond rates as reported by the Value Line Investment Survey (14
5 June 2002). The 7.30% value I used for the market premium ($R_m - R_f$) is equal to the
6 market premium calculated by Ibbotson and Associates, calculated using arithmetic means.

7 Q. DO YOU SUBSCRIBE TO THE CAPM AS AN ACCURATE MEASURE OF MARKET-
8 BASED COST OF EQUITY?

9 A. I believe the CAPM - and its dependence on the single risk measure, beta - has limitations
10 in its ability to accurately take into account the risk factors faced by a company, and
11 therefore that company's cost of equity. However, some investors continue to rely on the
12 CAPM. Therefore, I included the analysis as a check on and to provide support for my
13 DCF analysis.

14
15 **CAPM COST OF EQUITY**

16 Q. WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

17 A. As can be seen on Schedule MB-10, I performed a CAPM analysis on Laclede and the
18 group of five comparison LDCs. The CAPM cost of common equity for The Laclede
19 Group is 9.31%. The average CAPM cost of common equity for the group is 9.68%. I
20 considered the results of my CAPM analysis in setting the low end of my recommended
21 range of ROE for Laclede Gas Company.

OVERALL WEIGHTED AVERAGE COST OF CAPITAL (RATE OF RETURN)

Q. WHAT OVERALL, OR WEIGHTED AVERAGE, COST OF CAPITAL IS INDICATED BY YOUR ANALYSIS?

A. The weighted average cost of capital (WACC) I calculated for Laclede is 7.88% using a cost of equity of 9.75% (Schedule MB-11) and 8.06% using an ROE of 10.2%. I would note that the weighted average cost of capital for Laclede is lower than it would be if the Company did not carry such a large percentage of short term debt in it's capital structure. Any comparisons of my current ROR recommendation to past Laclede RORs or other companies' RORs must take this fact into consideration.

Q. WHAT PRE-TAX COVERAGE RATIO IS IMPLIED BY YOUR RECOMMENDATION?

A. Based on a WACC of 7.88% and an assumed tax factor of 1.62308, the pre-tax coverage ratio (for both long AND short term debt) is approximately 2.51 times. The derivation of pre-tax coverage is shown on Schedule MB-11. The coverage increases to 2.58 times at an ROE of 10.20%.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

APPENDIX A

DEVELOPMENT & PURPOSES OF REGULATION

Q. WHY ARE PUBLIC UTILITIES REGULATED?

A. The nature of public utility services generally requires a monopolistic mode of operation. Only a limited number of companies (and quite often only one) are normally allowed to provide a particular utility service in a specific geographic area. Public utilities are often referred to as "natural" monopolies; a state created by such powerful economies of scale or scope that only one firm can or should provide a given service. Even when a utility is not a pure monopoly, it still has substantial market power over at least some of its customers.

In order to secure the benefits arising from monopolistic-type operations, utilities are generally awarded an exclusive franchise (or certificate of public convenience) by the appropriate governmental body. Since an exclusive franchise generally protects a firm from the effects of competition, it is critical that governmental control over the rates and services provided by public utilities is exercised. Consequently, a primary objective of utility regulation is to produce market results that closely approximate the conditions that would be obtained if utility rates were determined competitively. Based on this competitive standard, utility regulation must: 1) secure safe and adequate service; 2) establish rates sufficient to provide a utility with the opportunity to cover all reasonable costs, including a fair rate of return on the capital employed; and 3) restrict monopoly-type profits.

APPENDIX B

CALCULATION OF THE WEIGHTED AVERAGE COST OF CAPITAL

Q. PLEASE EXPLAIN HOW THE WEIGHTED AVERAGE COST OF CAPITAL IS USED IN TRADITIONAL RATEMAKING AND HOW IT IS DERIVED.

A. The basic standard of rate regulation is the revenue-requirement standard, often referred to as the rate base-rate of return standard. Simply stated, a regulated firm must be permitted to set rates which will cover operating costs and provide an opportunity to earn a reasonable rate of return on assets devoted to the business. A utility's total revenue requirement can be expressed as the following formula:

$$R = O + (V - D + A)r$$

where R = the total revenue required,

O = cost of operations,

V = the gross value of the property,

D = the accrued depreciation, and

A = other rate base items,

r = the allowed rate of return/weighted average cost of capital.

This formula indicates that the process of determining the total revenue requirement for a public utility involves three major steps. First, allowable operating costs must be ascertained. Second, the net depreciated value of the tangible and intangible property, or net investment in property, of the enterprise must be determined. This net value, or investment (V - D), along with other allowable items is referred to as the rate base. Finally, a "fair rate of return" or weighted average cost of capital (WACC) must be determined. This rate, expressed as a percentage, is multiplied by the rate base. The weighted average cost of capital (WACC) is applied to the rate base (V-D+A) since it is generally recognized

1 the rate base is financed with the capital structure and these two items are normally similar
2 in size. The allowed rate of return, or WACC, is typically defined as follows:

3
$$r = i(D/C) + l(P/C) + k(E/C)$$

4 where i = embedded cost of debt capital,

5 D = amount of debt capital,

6 l = embedded cost of preferred stock,

7 P = amount of preferred stock,

8 k = cost of equity capital,

9 E = amount of equity capital, and

10 C = amount of total capital.

11 This formula indicates that the process of determining WACC involves separate
12 determinations for each type of capital utilized by a utility. Under the weighted cost
13 approach, a utility company's total invested capital is expressed as 100 percent and is
14 divided into percentages that represent the capital secured by the issuance of long-term
15 debt, preferred stock, common stock, and sometimes short-term debt. This division of total
16 capital by reference to its major sources permits the analyst to compute separately the cost
17 of both debt and equity capital. The cost rate of each component is weighted by the
18 appropriate percentage that it bears to the overall capitalization. The sum of the weighted
19 cost rates is equal to the overall or weighted average cost of capital and is used as the basis
20 for the fair rate of return that is ultimately applied to rate base.

APPENDIX C

ECONOMIC PRINCIPLES OF REGULATION

Q. BRIEFLY DESCRIBE THE ECONOMIC RATIONALE FOR RATE BASE-RATE OF RETURN REGULATION.

A. Rate base-rate of return regulation is based, in part, on basic economic and financial theory that applies to both regulated and unregulated firms.

Although it is well recognized that no form of economic regulation can ever be a perfect substitution for competition in determining market prices for goods and services, there is nearly unanimous acceptance of the principle that regulation should act as a substitute for competition in utility markets. (Parcell, The Cost of Capital Manual p.1-4).

It is the interaction of competitive markets forces that holds the prices an unregulated firm can charge for its products or services in line with the actual costs of production. In fact, competition between companies is generally viewed as the mechanism that allows consumers to not only purchase goods and services at prices consistent with the costs of production but also allows consumers to receive the highest quality product. Since regulated utilities are franchised monopolies generally immune to competitive market forces, a primary objective of utility regulation is to produce results that closely approximate the conditions that would exist if utility rates were determined in a competitive atmosphere.

Under basic financial theory, it is generally assumed the goal for all firms is the maximization of shareholder wealth. Additionally, capital budgeting theory indicates that, in order to achieve this goal, an unregulated firm should invest in any project which, given a certain level of risk, is expected to earn a rate of return at or above its weighted average cost of capital.

1 Competition, in conjunction with the wealth maximization goal, induces firms to
2 increase investment as long as the expected rate of return on an investment is greater than
3 the cost of capital. Competitive equilibrium is achieved when the rate of return on the last
4 investment project undertaken just equals the cost of capital. When competitive
5 equilibrium is achieved, the price ultimately received for goods or services reflects the full
6 costs of production. Therefore, not only does competition automatically drive unregulated
7 firms to minimize their capital costs (investment opportunities are expanded and
8 competitive position is enhanced when capital costs can be lowered), it also ensures that the
9 marginal return on investment just equals the cost of capital.

10 Given that regulation is intended to emulate competition and that, under
11 competition, the marginal return on investment should equal the cost of capital, it is crucial
12 for regulators to set the authorized rate of return equal to the actual cost. If this is
13 accomplished, the marginal return on prudent and necessary investment just equals cost and
14 the forces of competition are effectively emulated.

APPENDIX D

LEGAL REQUIREMENT FOR A FAIR RATE OF RETURN

Q. IS THERE A JUDICIAL REQUIREMENT RELATED TO THE DETERMINATION OF THE APPROPRIATE RATE OF RETURN FOR A REGULATED UTILITY?

A. Yes. The criteria established by the U.S. Supreme Court closely parallels economic thinking on the determination of an appropriate rate of return under the cost of service approach to regulation. The judicial background to the regulatory process is largely contained in two seminal decisions handed down in 1923 and 1944. These decisions are,

Bluefield Water Works and Improvement
Company v. Public Service Commission,
262 U.S. 679 (1923), and

FPC v. Hope Natural Gas Co., 320 U.S.
591 (1944)

In the Bluefield Case, the Court states,

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 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.

Together, Hope and Bluefield have established the following standards,

- 1). A utility is entitled to a return similar to that available to other enterprises with similar risks;

1 2). A utility is entitled to a return level reasonably sufficient to assure financial
2 soundness and support existing credit, as well as raise new capital; and

3 3). A fair return can change along with economic conditions and capital markets.

4 Furthermore, in Hope, the Court makes clear that regulation does not guarantee utility
5 profits and, in Permian Basin Area Rate Cases, 390 US 747 (1968), that, while investor
6 interests (profitability) are certainly pertinent to setting adequate utility rates, those interests
7 do not exhaust the relevant considerations.

APPENDIX E

REGULATION IN MISSOURI

Q. WHAT IS THE ORIGIN AND RATIONALE FOR THE REGULATION OF PUBLIC UTILITIES IN THE STATE OF MISSOURI?

A. All investor owned public utilities operating in the state of Missouri are subject to the Public Service Commission Act, as amended. The Public Service Commission Act was initially passed by the Forty-Seventh General Assembly on April 15, 1913. (Laws of 1913 pp.557-651, inclusive).

In State ex rel Kansas City v. Kansas City Gas Co. 163 S.W. 854 (Mo.1914), the case of first impression pertaining to the Public Service Commission Act, the Missouri Supreme Court described the rationale for the regulation of public utilities in Missouri as follows:

That act (Public Service Commission Act) is an elaborate law bottomed on the police power. It evidences a public policy hammered out on the anvil of public discussion. It apparently recognizes certain generally accepted economic principles and conditions, to wit: That a public utility (like gas, water, car service, etc.) is in its nature a monopoly; that competition is inadequate to protect the public, and, if it exists, is likely to become an economic waste; that regulation takes the place of and stands for competition; that such regulation to command respect from patron or utility owner, must be in the name of the overlord, the state, and, to be effective, must possess the power of intelligent visitation and the plenary supervision of every business feature to be finally (however invisible) reflected in rates and quality of service. (Kansas City Gas Co. at 857-58).

The General Assembly has determined that the provisions of the Public Service Commission Act "shall be liberally construed with a view to the public welfare, efficient facilities and substantial justice between patrons and public utilities" (See: 386.610 RSMo 1978). Pursuant to the above legislative directive, when developing the cost of equity capital for a public utility operating in Missouri, it is appropriate to do so with a view

- 1 toward the public welfare; giving the utility an amount that will allow for efficient use of its
- 2 facilities and the proper balance of interests between the ratepayers and the utility.

APPENDIX F

MARKET-TO-BOOK RATIO ILLUSTRATION

Q. COULD YOU PROVIDE AN EXAMPLE ILLUSTRATING THE IMPORTANCE OF MARKET-TO-BOOK RATIOS AND THEIR RELATIONSHIP TO THE COST OF EQUITY CAPITAL?

A. Yes. Assume that a utility's equity has a book value of \$10 per share and that, for simplicity, this utility pays out all its earnings in dividends. If regulators allow the utility a 12% return, investors will expect the company to earn (and pay out) \$1.20 per share. If investors require a 12% return on this investment, they will be willing to provide a market price of \$10 per share for this stock ($\$1.20 \text{ dividends} / \$10 \text{ market price} = 12\%$). In that case, the allowed/expected return is equal to the cost of capital and the market price is equal to the book value.

Now, assume the investors' required return is 10%. Investors would be drawn to a utility stock in a risk class for which they require a 10% return but was expected to pay out a 12% return. The increased demand by investors would result in an increase in the market price of the stock until the total share yield equaled the investors' required return. In our example, that point would be \$12 per share ($\$1.20 \text{ dividends} / \$12 \text{ market price} = 10\%$). As such, the allowed/expected return (12%) is greater than the required return (10%) and the per share market price (\$12/share) exceeds book value (\$10/share), producing a market-to-book ratio greater than one ($\$12 / \$10 = 1.20$). Consequently, when the market-to-book ratio for a given utility is greater than one, the earned or projected return on book equity is greater than the cost of capital.

APPENDIX G

DEVELOPMENT OF A COMPARISON GROUP

Q. PLEASE EXPLAIN HOW YOU DEVELOPED A GROUP OF GAS UTILITIES WITH FINANCIAL RISK CHARACTERISTICS SIMILAR TO LACLEDE.

A. The following selection criteria have been used to develop a group of comparable gas utilities:

- 1). Publicly traded company;
- 2). No Missouri-regulated operations;
- 3). Greater than 75% of total revenues from regulated sales of gas;
- 4). Market capitalization rated "Small Cap" or "Mid Cap" by Value Line;
- 5). Standard & Poor's Bond Rating greater than BBB+;
- 6). Covered by Value Line;

The following companies met the selection criteria: 1) AGL Resources; 2) NICOR; 3) N.W. Natural Gas; 4) Piedmont Natural Gas, Inc.; and 5) WGL Holdings.

Q. HAVE YOU MADE ANY RISK EVALUATIONS FOR THE COMPARISON GROUP?

A. Yes. As shown on Schedule MB-6, I have examined several measures that typically act as indicators of relative risk.

The beta coefficient;

Fixed charge coverage;

Value Line Safety rating;

Bond Rating from Standard & Poor's;

Average common equity ratio;

Value Line Financial Strength.

Also, many of the selection criteria also act as risk measures, such as the level of revenues from regulated gas operations.

1 Q. WHAT CONCLUSIONS CAN BE DRAWN FROM THIS ANALYSIS?

2 A. Generally, the level of overall, or total, risk for the industry companies is representative of
3 the risks faced by Laclede as a regulated natural gas distributor.

APPENDIX H

EFFICIENT NATURE OF THE CAPITAL MARKETS

Q. IS THE DISCOUNTED CASH FLOW MODEL INHERENTLY CAPABLE OF ADJUSTING FOR THE LEVEL OF REAL OR PERCEIVED RISKINESS TO A GIVEN SECURITY?

A. Yes. It is impossible for any one analyst to systematically interpret the impact that each and every risk variable facing an individual firm has on the cost of equity capital to that firm. Fortunately, this type of risk-by-risk analysis is not necessary when determining the appropriate variables to be plugged into the DCF formula.

As stated earlier, the DCF model can correctly identify the cost of equity capital to a firm by adding the current dividend yield (D/P) to the correct determination of investor-expected growth (g). Thus, the difficult task of determining the cost of equity capital is made easier, in part, by the relative ease of locating dividend and stock price information and the efficient nature of the capital markets.

Q. PLEASE EXPLAIN THAT STATEMENT.

A. The DCF model is based on the assumption that investors (1) calculate intrinsic values for stocks on the basis of their interpretation of available information concerning future cash flows and risk, (2) compare the calculated intrinsic value for each stock with its current market price, and (3) make buy or sell decisions based on whether a stock's intrinsic value is greater or less than its market price.

Only if its market price is equal to or lower than its intrinsic value as calculated by the marginal investor will a stock be demanded by that investor. If a stock sells at a price significantly above or below its calculated intrinsic value, buy or sell orders will quickly push the stock towards market equilibrium. The DCF model takes on the following form when used by investors to calculate the intrinsic value of a given security,

1 $P^{\wedge} = D/k-g$

2 where P^{\wedge} = the intrinsic value of the security,

3 D = the current dividend,

4 g = the expected growth rate, and

5 k = the required return on the security

6 Since the required rate of return for any given investor is based on both the perceived
7 riskiness of the security and return opportunities available in other segments of the market,
8 it can be easily demonstrated that when perceived riskiness is increased, the investors'
9 required return is also increased and the market value of the investment falls as it is valued
10 less by the marginal investor. Returning to the form of the DCF model used to determine
11 the cost of equity capital to the firm,

12 $k = D/P + g$

13 we see that the required return rises as an increase in the perceived risk associated with a
14 given security drives the price down. Within this context, the DCF formula incorporates all
15 known information, including information regarding risks, into the cost of equity capital
16 calculation. This is known as the "efficient market" hypothesis.

17 Q. IS THE "EFFICIENT MARKET" HYPOTHESIS SUPPORTED IN THE FINANCIAL
18 LITERATURE?

19 A. Yes. Modern investment theory maintains that the U.S. capital markets are efficient and, at
20 any point in time, the prices of publicly traded stocks and bonds reflect all available
21 information about those securities. Additionally, as new information is discovered, security
22 prices adjust virtually instantaneously. This implies that, at any given time, security prices
23 reflect "real" or intrinsic values. This point is further clarified by Brealey and Myers in
24 Principles of Corporate Finance, Fourth Edition:

1 When economists say that the security market is efficient, they are not
2 talking about whether the filing is up-to-date or whether the desktops are
3 tidy. They mean that information is widely and cheaply available to
4 investors and that all relevant and ascertainable information is already
5 reflected in security prices. (pg. 290)

6
7 Suppose, e.g., that you wish to sell an antique painting at an auction but
8 you have no idea of its value. Can you be sure of receiving a fair price?
9 The answer is that you can if the auction is sufficiently competitive. In
10 other words, you need to satisfy yourself that it is to be properly conducted
11 (that includes no collusion among bidders), that there is no substantial cost
12 involved in submitting a bid, and that the auction is attended by a
13 reasonable number of skilled potential bidders, each of whom has access to
14 the available information. In this case, no matter how ignorant *you* may be,
15 competition among experts will ensure that the price you realize fully
16 reflects the value of the painting.

17 In just the same way, competition among investment analysts will
18 lead to a stock market in which prices at all times reflect true value. But
19 what do we mean by *true value*? It is a potentially slippery phrase. True
20 value does not mean ultimate *future* value -- we do not expect investors to
21 be fortune-tellers. It means an equilibrium price which incorporates *all* the
22 information available to investors at that time. That was our definition of
23 an efficient market. (pg. 293-294)

APPENDIX I

**DETERMINATION OF RETENTION (BR + SV) GROWTH &
SUSTAINABLE GROWTH VS. EARNINGS AND DIVIDEND GROWTH RATES**

Q. PREVIOUSLY YOU STATED THAT IT IS CRITICAL TO UNDERSTAND THE SOURCES OF GROWTH WHEN DEVELOPING A SUSTAINABLE GROWTH RATE RECOMMENDATION. PLEASE PROVIDE AN EXAMPLE THAT ILLUSTRATES HOW SUSTAINABLE GROWTH IS MEASURED.

A. To understand how investors develop a growth rate expectation, it is helpful to look at an illustration that shows how expected growth is measured. To do this, assume that a hypothetical utility has a first period common equity, or book value per share of \$20.00; the investor-expected return on that equity is 12 percent; and the stated company policy is to pay out 50 percent of earnings in dividends. The first period earnings per share are expected to be \$2.40 (\$20 per share book equity x 12% equity) and the expected dividend is \$1.20. The amount of earnings not paid out to shareholders (\$1.20), referred to as retained earnings, raises the book value of the equity to \$21.20 in the second period. The following table continues the hypothetical for a three-year period and illustrates the underlying determinants of growth.

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Gr.</u>
Book Value	\$20.00	\$21.20	\$22.47	6.00%
Equity Return	12%	12%	12%	
Earnings/Sh.	\$2.40	\$2.54	\$2.67	6.00%
Payout Ratio	50%	50%	50%	
Dividend/Sh.	\$1.20	\$1.27	\$1.34	6.00%

As can be seen, earnings, dividends, and book value all grow at the same rate when the payout ratio and return on equity remain stable. Moreover, key to this growth is the amount of earnings retained or reinvested in the firm and the return on equity.

1 Letting "b" equal the retention ratio of the firm (or 1 minus the payout ratio) and
2 letting "r" equal the firm's expected return on equity, the DCF growth rate "g" (also referred
3 to as the sustainable growth rate) is equal to their product, or

4 $g = br.$

5 As shown in the example, the growth rate for the hypothetical company is 6.00 percent
6 (12% ROE x 50% payout ratio).

7 Dr. Gordon has determined that this equation embodies the underlying
8 fundamentals of growth and, therefore, is a primary measure of growth to be used in the
9 DCF model (Gordon, The Cost of Capital to a Public Utility, 1974, p.81). It should be
10 noted, however, Dr. Gordon's research also indicates that analysts' growth rate projections
11 are useful in estimating investors' expectations. As a result, analysts' published growth rate
12 projections, along with other historical and projected growth rates, are considered in this
13 analysis for the purpose of reaching an accurate estimation of the expected sustainable
14 growth rate.

15 Q. CAN THE RETENTION GROWTH RATE MODEL BE FURTHER REFINED IN ORDER
16 TO BEST REPRESENT INVESTORS' EXPECTATIONS?

17 A. Yes. The above hypothetical example does not allow for the existence of external sources
18 of equity financing (i.e., sales of common stock). Stock financing will cause investors to
19 expect additional growth if the company is expected to issue additional shares at a market
20 price which exceeds book value.

21 The excess of market value over book value per share would benefit current
22 shareholders by increasing their per share equity value. Therefore, if the company is
23 expected to continue to issue stock at a price that exceeds book value per share, the
24 shareholders would continue to expect their book value to increase and would add that
25 growth expectation to that stemming from the retention of earnings, or internal growth.

1 On the other hand, if a company is expected to issue new common equity at a price
2 below book value, that would have a negative effect on shareholders' current growth rate
3 expectations. Finally, with little or no expected equity financing or a market-to-book ratio
4 at or near one, investors would expect the long-term sustainable growth rate for the
5 company to equal the growth from earnings retention.

6 Dr. Gordon identifies the growth rate which includes both expected internal and
7 external financing as,

$$8 \qquad g = br + sv$$

9 where, g = DCF expected growth rate,

10 r = return on equity,

11 b = retention ratio,

12 v = fraction of new common stock sold that accrues to the current shareholder,

13 s = funds raised from the sale of stock as a fraction of existing equity.

14 Additionally,

$$15 \qquad v = 1 - BV/MP$$

16 where,

17 MP = market price,

18 BV = book value.

19
20 The second term (sv), which represents the external portion of the expected growth rate,
21 does not normally represent a major source of growth when compared to the expected
22 growth attributed to the retention of earnings. For example, the FERC Generic Rate of
23 Return Model estimates the (sv) component in the range of 0.1% to 0.2%. However, I have
24 used this equation as the basis for determining sustainable growth for the comparable
25 group.

1 Q. IS HISTORICAL OR PROJECTED GROWTH IN EARNINGS OR DIVIDENDS
2 APPROPRIATE FOR DETERMINING THE DCF GROWTH RATE?

3 A. No, not always. As I have stated, growth derived from earnings or dividends alone can be
4 unreliable for ratemaking purposes due to external influences on these parameters such as
5 changes in the historical or expected rate of return on common equity or changes in the
6 payout ratio. An extended example will demonstrate this point.

7 If we take the example above and assume that, in year two, the expected return on
8 equity rises from 12 percent to 15 percent, the resulting growth rate in earnings and
9 dividends per share dramatically exceeds what the company could sustain indefinitely. The
10 error that can result from exclusive reliance on earnings or dividends growth is illustrated in
11 the following table:

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Gr.</u>
Book Value	\$20.00	\$21.20	\$22.79	6.75%
Equity Return	12%	15%	15%	
Earnings/Sh.	\$2.40	\$3.18	\$3.42	19.37%
Payout Ratio	50%	50%	50%	
Dividends/Sh.	\$1.20	\$1.59	\$1.71	19.37%

12
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20 Due to the change in return on equity in year two, the compound growth rate for dividends
21 and earnings is greater than 19 percent, which is the result only of a short-term increase in
22 the equity return rather than the intrinsic ability of the firm to grow continuously at a 19
23 percent annual rate.

24 For year one, the sustainable rate of growth ($g=br$) is 6.00 percent, just as it was in
25 the previous example. On the other hand, in years two and three, the sustainable growth
26 rate increases to 7.50 percent. ($15\% \text{ ROE} \times 50\% \text{ retention rate} = 7.50\%$). Consequently, if
27 the utility is expected to continually earn a 15 percent return on equity and retain 50 percent
28 of earnings for reinvestment, a growth rate of 7.50 percent would be a reasonable estimate

of the long-term sustainable growth rate. However, the compound growth rate in earnings and dividends, which is over 19 percent, dramatically exceeds the actual investor-expected growth rate.

As can be seen in the hypothetical, the 19 percent growth rate is simply the result of the change in return on equity from year one to year two, not the firm's ability to grow sustainably at that rate. Consequently, this type of growth rate cannot be relied upon to accurately measure investors' sustainable growth rate expectations. In this instance, to rely on either earnings or dividend growth would be to assume the return on equity could continue to increase indefinitely. This, of course, is a faulty assumption; the recognition of which emphasizes the need to analyze the fundamentals of actual growth.

Q. IS HISTORICAL GROWTH IN DIVIDENDS AN ACCURATE INDICATOR OF INVESTORS' GROWTH EXPECTATIONS WHEN THE HISTORICAL PAYOUT RATIO HAS BEEN ERRATIC OR TRENDED DOWNWARD OVER TIME?

A. As stated, no. It can also be demonstrated that a change in our hypothetical utility's payout ratio makes the past rate of growth in dividends an unreliable basis for predicting investor-expected growth. If we assume the hypothetical utility consistently earns its expected equity return but in the second year changes its payout ratio from 50 percent to 75 percent, the resulting growth rate in dividends far exceeds a reasonable level of sustainable growth.

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Gr.</u>
Book Value	\$20.00	\$21.20	\$21.84	4.50%
Equity Return	12%	12%	12%	
Earnings/Sh.	\$2.40	\$2.54	\$2.62	4.50%
Payout Ratio	50%	75%	75%	
Dividends/Sh.	\$1.20	\$1.91	\$1.97	28.13%

Although the company has registered a high dividend growth rate (28.13%), it is not representative of the growth that could be sustained, as called for in the DCF model. In actuality, the sustainable growth rate (br) has declined due to the increased payout ratio. To

1 utilize a 28 percent growth rate in a DCF analysis for this hypothetical utility would be to
2 assume that the payout ratio could continue to increase indefinitely and lead to the unlikely
3 result that the firm could consistently pay out more in dividends than it earns. The
4 problems associated with sole reliance on historical dividend growth has been recognized in
5 the financial literature. According to Brigham and Gapenski,

6 If earnings and dividends are growing at the same rate, there is no problem,
7 but if these two growth rates are unequal, we do have a problem. First, the
8 DCF model calls for the expected dividend growth rate. However, if EPS
9 and DPS are growing at different rates, something is going to have to
10 change: these two series cannot grow at two different rates indefinitely
11 (Intermediate Financial Management, p.145).

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Historical Financial Information

ROE

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>Average</u>
Laclede Gas Company	10.70%	9.10%	9.50%	-	9.77%
<i>(Information from DR2012)</i>					

The Laclede Group	10.50%	9.10%	9.50%	10.80%	9.98%
<i>(Information from Value Line)</i>					

Financial Ratios - Laclede Gas Company

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>Average</u>
EPS	\$1.61	\$1.37	\$1.43	\$1.58	\$1.50
DPS	\$1.34	\$1.34	\$1.34	\$1.32	\$1.34
Payout	83.2%	97.8%	93.7%	83.5%	89.1%
BVPS	\$15.26	\$14.99	\$14.96	\$14.57	\$14.95

Capital Structure (The Laclede Group, taken from Value Line)

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>Average</u>
Common Equity	50.2%	54.5%	57.8%	58.6%	55.3%
Preferred Stock	0.2%	0.3%	0.4%	0.5%	0.4%
Long Term Debt	<u>49.6%</u>	<u>45.2%</u>	<u>41.8%</u>	<u>40.9%</u>	44.4%
	100.0%	100.0%	100.0%	100.0%	100.0%

These percentages are calculated differently than my recommended capital structure.

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Laclede Gas Company
Capital Structure as of 30 November 2001

Actual Capital Structure - Laclede Gas Company

	<u>Amount</u>	<u>Percent</u>
Common Stock Equity	\$262,441,927	38.71%
Preferred Stock	\$1,665,275	0.25%
Long Term Debt	\$281,851,964	41.57%
Short Term Debt	\$132,021,695	19.47%
	<u>\$677,980,861</u>	<u>100.00%</u>

Not including short-term debt; for comparison purposes only.

	<u>Amount</u>	<u>Percent</u>
Common Stock Equity	\$262,441,927	48.07%
Preferred Stock	\$1,665,275	0.31%
Long Term Debt	\$281,851,964	51.63%
	<u>\$545,959,165</u>	<u>100.00%</u>

Common Stock Equity

Common Stock	\$18,877,987
Paid-in capital	\$63,273,022
Gain on stock, net of expenses	\$422,416
Retained Earnings	\$179,868,502
less Treasury Stock	-
	<u>\$262,441,927</u>

Source: Company response to OPC DR2001, 2002, 2003, 2013; Schedules MB-4 and MB-5

BURDETTE - Direct
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Common Equity

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>Average</u>
The Laclede Group	50.2%	54.5%	57.8%	58.6%	55.3%
Value Line Composite Index	43.0%	43.1%	49.2%	50.1%	46.4%

Proxy Companies' Common Equity

	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>Average</u>
AGL Resources, Inc.	38.7%	48.3%	49.2%	47.1%	45.8%
NICOR, Inc.	61.7%	66.7%	64.0%	57.4%	62.5%
Northwest Nat. Gas Co.	51.0%	50.9%	49.9%	50.6%	50.6%
Piedmont Nat. Gas Co., Inc.	52.4%	53.9%	53.8%	55.3%	53.9%
WGL Holdings, Inc.	56.3%	54.8%	56.1%	57.1%	56.1%
Average	52.0%	54.9%	54.6%	53.5%	
			<i>Overall Average</i>		53.8%

Note: Calculations do not include short term debt

Source: Value Line Investment Survey

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The Laclede Group	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>Average</u>
Common Equity	50.2%	54.5%	57.8%	58.6%	55.3%
LTD	49.6%	45.2%	41.8%	40.9%	44.4%
STD (or other, by calculation)	<u>0.2%</u>	<u>0.3%</u>	<u>0.4%</u>	<u>0.5%</u>	<u>0.4%</u>
	100.0%	100.0%	100.0%	100.0%	100.0%

AGL Resources, Inc.	<u>2001</u>	<u>2000</u>	<u>1999</u>	<u>1998</u>	<u>Average</u>
Common Equity	38.7%	48.3%	49.2%	47.1%	45.8%
LTD	61.3%	45.9%	45.3%	47.5%	50.0%
STD (or other, by calculation)	<u>0.00%</u>	<u>5.80%</u>	<u>5.50%</u>	<u>5.40%</u>	<u>4.2%</u>
	100.0%	100.0%	100.0%	100.0%	100.0%

NICOR, Inc.					
Common Equity	61.7%	66.7%	64.0%	57.4%	62.5%
LTD	37.8%	32.7%	35.5%	42.1%	37.0%
STD (or other, by calculation)	<u>0.50%</u>	<u>0.60%</u>	<u>0.50%</u>	<u>0.50%</u>	<u>0.5%</u>
	100.0%	100.0%	100.0%	100.0%	100.0%

Northwest Nat. Gas Co.					
Common Equity	51.0%	50.9%	49.9%	50.6%	50.6%
LTD	45.0%	45.1%	46.0%	45.0%	45.3%
STD (or other, by calculation)	<u>4.0%</u>	<u>4.0%</u>	<u>4.1%</u>	<u>4.4%</u>	<u>4.1%</u>
	100.0%	100.0%	100.0%	100.0%	100.0%

Piedmont Nat. Gas Co., Inc.					
Common Equity	52.4%	53.9%	53.8%	55.3%	53.9%
LTD	47.6%	46.1%	46.2%	44.7%	46.2%
STD (or other, by calculation)	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
	100.0%	100.0%	100.0%	100.0%	100.0%

WGL Holdings, Inc.					
Common Equity	56.3%	54.8%	56.1%	57.1%	56.1%
LTD	41.7%	43.1%	41.5%	40.3%	41.7%

STD (or other, by calculation)	<u>2.0%</u>	<u>2.1%</u>	<u>2.4%</u>	<u>2.6%</u>		<u>2.3%</u>
	100.0%	100.0%	100.0%	100.0%		100.0%

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Laclede Gas Company
Embedded Cost of Preferred Stock as of 30 November 2001

	Amount	Coupon	Annual
<u>Issue:</u>	<u>Outstanding</u>	<u>Rate</u>	<u>Requirement</u>
5.00% Series B	\$1,517,625	5.00%	\$75,881
4.56% Series C	<u>\$147,650</u>	4.56%	<u>\$6,733</u>
TOTAL:	\$1,665,275		\$82,614

Amount Outstanding \$1,665,275
Dividend Requirement: \$82,614

Embedded Cost Rate: **4.96%**

Source: Company response to OPC data request 2003

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Laclede Gas Company
Embedded Cost of Short Term Debt through 20 November 2001

	Wtd. Avg. Effective Interest Rate	Average Daily Balance	CWIP	Balance less CWIP	Weight	Weighted Cost
Dec-00	6.619%	\$ 178,875,335	\$ 7,738,155	\$ 171,137,180	10.80%	0.715%
Jan-01	6.506%	\$ 171,522,333	\$ 5,363,840	\$ 166,158,493	10.49%	0.682%
Feb-01	6.175%	\$ 140,190,154	\$ 4,184,639	\$ 136,005,515	8.58%	0.530%
Mar-01	5.462%	\$ 180,899,973	\$ 4,274,136	\$ 176,625,837	11.15%	0.609%
Apr-01	5.125%	\$ 164,484,179	\$ 4,932,373	\$ 159,551,806	10.07%	0.516%
May-01	4.585%	\$ 149,349,875	\$ 5,831,165	\$ 143,518,710	9.06%	0.415%
Jun-01	4.209%	\$ 131,346,190	\$ 6,304,611	\$ 125,041,579	7.89%	0.332%
Jul-01	4.100%	\$ 91,190,826	\$ 6,381,582	\$ 84,809,244	5.35%	0.219%
Aug-01	3.813%	\$ 95,711,442	\$ 8,406,381	\$ 87,305,061	5.51%	0.210%
Sep-01	3.503%	\$ 103,682,111	\$ 6,188,864	\$ 97,493,247	6.15%	0.216%
Oct-01	2.936%	\$ 123,391,283	\$ 6,394,014	\$ 116,997,269	7.38%	0.217%
Nov-01	2.472%	\$ 126,370,220	\$ 6,753,820	\$ 119,616,400	7.55%	0.187%
		\$ 1,657,013,921		\$ 1,584,260,341	100.00%	4.849%

Average Monthly Level: \$ 138,084,493

Average Monthly Level less CWIP: **\$ 132,021,695**

Weighted average interest rate: **4.85%**

Source: Company response to OPC data request 2004

Burdette - Direct

GR-2002-356 Laclede Gas Company

Risk Measures

	<u>Public</u>	(millions) <u>Revenue</u>	% Rev <u>Nat. Gas</u>	<u>S&P</u>	<u>Missouri Regulation?</u>			
AGL Resources, Inc.	Yes	\$1,080.20	76.0%	A-	No			
NICOR, Inc.	Yes	\$2,544.10	83.0%	AA	No			
Northwest Nat. Gas Co.	Yes	\$646.80	98.0%	A	No			
Piedmont Nat. Gas Co., Inc.	Yes	\$929.00	86.0%	A	No			
WGL Holdings, Inc.	Yes	\$1,172.80	100.0%	AA-	No			
Average		\$1,274.58	88.6%	A				
The Laclede Group	Yes	\$851.70	92.0%	AA-	Yes			
	<u>Beta</u>	<u>Payout Ratio</u>	<u>Common Equity</u>	<u>Safety</u>	<u>MTB</u>	<u>Interest Earned</u>	<u>Fixed Charge Coverage</u>	<u>Financial Strength</u>
AGL Resources, Inc.	0.60	65.0%	32.0%	2.0	1.92	2.3	245%	B++
NICOR, Inc.	0.60	58.0%	50.0%	1.0	2.93	4.8	510%	A+
Northwest Nat. Gas Co.	0.60	65.0%	46.0%	2.0	1.60	3.0	250%	B++
Piedmont Nat. Gas Co., Inc.	0.60	85.0%	52.0%	2.0	2.03	3.9	290%	B++
WGL Holdings, Inc.	0.60	88.0%	48.0%	1.0	1.67	4.0	375%	A
Average	0.60	72.2%	45.6%	1.6	2.03	3.60	334%	B++/A
The Laclede Group	0.55	83.2%	41.0%	2.0	1.55	2.6	255%	B++

Note: Common equity ratio includes current maturities of long term debt and all short term debt, as reported by C.A. Turner.

Source: C.A. Turner Utility Reports; Value Line Investment Survey

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Summary - Discounted Cash Flow Growth - Laclede Group and Proxy Group

Historical Growth		Compound Growth			Value Line		
COMPANY	br + sv	EPS	DPS	BVPS	EPS	DPS	BVPS
AGL Resources, Inc.	1.72%	-2.75%	0.47%	2.74%	0.50%	0.75%	2.50%
NICOR, Inc.	5.81%	5.39%	5.40%	2.60%	4.50%	4.50%	4.00%
Northwest Nat. Gas Co.	3.79%	0.22%	0.89%	3.96%	-2.00%	1.25%	4.00%
Piedmont Nat. Gas Co., Inc.	4.43%	4.46%	5.78%	5.96%	5.75%	5.75%	6.00%
WGL Holdings, Inc.	4.37%	-0.02%	2.05%	4.91%	2.75%	2.25%	4.50%
Average	4.02%	1.46%	2.92%	4.03%	2.30%	2.90%	4.20%
The Laclede Group	2.19%	-2.35%	1.42%	2.47%	0.75%	1.50%	3.00%

Projected Growth		Value Line/First Call		
COMPANY	br + sv	EPS	DPS	BVPS
AGL Resources, Inc.	5.92%	8.75%	1.00%	6.00%
NICOR, Inc.	-	6.50%	5.50%	3.50%
Northwest Nat. Gas Co.	5.51%	6.05%	1.50%	4.00%
Piedmont Nat. Gas Co., Inc.	4.94%	5.75%	4.00%	5.50%
WGL Holdings, Inc.	6.25%	6.00%	1.50%	5.00%
Average	5.65%	6.61%	2.70%	4.80%
The Laclede Group	4.77%	5.00%	1.50%	3.00%

Averages/Ranges		Overall		Hi/Low		Average	Average
COMPANY	Average	Low	High	Average	Median	Historical	Projected
AGL Resources, Inc.	2.51%	-2.75%	8.75%	3.00%	1.72%	0.85%	5.42%
NICOR, Inc.	4.77%	2.60%	6.50%	4.55%	4.94%	4.60%	5.17%
Northwest Nat. Gas Co.	2.65%	-2.00%	6.05%	2.03%	3.79%	1.73%	4.27%
Piedmont Nat. Gas Co., Inc.	5.30%	4.00%	6.00%	5.00%	5.75%	5.45%	5.05%
WGL Holdings, Inc.	3.60%	-0.02%	6.25%	3.11%	4.37%	2.97%	4.69%
Average	3.77%	0.36%	6.71%	3.54%	4.11%	3.12%	4.94%
The Laclede Group	2.11%	-2.35%	5.00%	1.33%	2.19%	1.28%	3.57%

Burdette - Direct
GR-2002-356 Laclede Gas Company

Discounted Cash Flow Growth Parameters
The Laclede Group

Historical Growth

Compound Growth

<u>Historical Data</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>
1995	1.27	1.24	13.05
1996	1.87	1.26	13.72
1997	1.84	1.30	14.26
1998	1.58	1.32	14.57
1999	1.47	1.34	14.96
2000	1.37	1.34	14.99
2001	1.61	1.34	15.26

Compound Growth Rates

1995-99	3.72%	1.96%	3.47%
1996-00	-7.48%	1.55%	2.24%
1997-01	-3.28%	0.76%	1.71%

Ave. Compound Gr. **-2.35%** **1.42%** **2.47%** #

Value Line	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>
Historical Gr.	<u>0.75%</u>	<u>1.50%</u>	<u>3.00%</u>

(Avg of 5 and 10 yr. if both are available)

Retention Growth

<u>Retention Ratio (b)</u>	<u>Equity Return (r)</u>	<u>Growth (b*r)</u>
0.024		
0.326		
0.293	12.90%	3.79%
0.165	10.80%	1.78%
0.088	9.50%	0.84%
0.022	9.10%	0.20%
0.168	10.50%	1.76%

Ave. Internal
Growth (br): 1.67%

ADD: External
Growth (sv): 0.52%

Historical
"br + sv" Gr. **2.19%**

Projected Growth

Retention Growth Calculation

<u>Value Line</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>	<u>Retention Ratio (b)</u>	<u>Equity Return (r)</u>	<u>Growth (b*r)</u>
2002	\$1.25	\$1.36	\$15.25	-0.088	8.50%	-0.75%
2003	1.80	1.38	15.55	0.233	11.50%	2.68%
2005-07	2.25	1.45	18.05	0.356	12.00%	4.27%

Analyst's Estimates

Value Line 7.00% 1.50% 3.00% Projected Growth (br): 2.07%

First Call 3.00% ADD: External Growth (sv): 0.51%

Average
Proj'd Growth **5.00%** **1.50%** **3.00%** Projected "br + sv" Gr. **4.77%**

SOURCE: The Value Line Investment Survey; C.A. Turner Utility Reports;
 First Call Corporation

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Burdette - Direct
GR-2002-356 Laclede Gas Company

Discounted Cash Flow Growth Parameters
AGL Resources

Historical Growth

Compound Growth

<u>Historical Data</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>
1995	1.33	1.04	10.12
1996	1.37	1.06	10.56
1997	1.37	1.08	10.99
1998	1.41	1.08	11.42
1999	0.91	1.08	11.59
2000	1.29	1.08	11.50
2001	1.50	1.08	12.19

Compound Growth Rates

1995-99	-9.05%	0.95%	3.45%
1996-00	-1.49%	0.47%	2.15%
1997-01	2.29%	0.00%	2.62%
<u>Ave. Compound Gr.</u>	<u>-2.75%</u>	<u>0.47%</u>	<u>2.74%</u>

<u>Value Line</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>
Historical Gr.	0.50%	0.75%	2.50%

(Avg of 5 and 10 yr. if both are available)

Retention Growth

<u>Retention Ratio (b)</u>	<u>Equity Return (r)</u>	<u>Growth (b*r)</u>
0.218		
0.226		
0.212	11.30%	2.39%
0.234	12.30%	2.88%
-0.187	7.90%	-1.48%
0.163	11.50%	1.87%
0.280	12.30%	3.44%

Ave. Internal
Growth (br): 1.82%

ADD: External
Growth (sv): -0.10%

Historical
"br + sv" Gr. **1.72%**

Projected Growth

Retention Growth Calculation

<u>Value Line</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>
2002	\$1.65	\$1.08	\$12.65
2003	1.80	1.08	13.70
2005-07	2.10	1.16	16.60

<u>Retention Ratio (b)</u>	<u>Equity Return (r)</u>	<u>Growth (b*r)</u>
0.345	13.00%	4.49%
0.400	13.00%	5.20%
0.448	12.50%	5.60%

Analyst's Estimates

<u>Value Line</u>	9.50%	1.00%	6.00%
First Call	8.00%		
Average			
<u>Proj'd Growth</u>	8.75%	1.00%	6.00%

Projected
Growth (br): 5.10%

ADD: External
Growth (sv): 0.32%

Projected
"br + sv" Gr. **5.92%**

SOURCE: The Value Line Investment Survey; C.A. Turner Utility Reports;
First Call Corporation

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Burdette - Direct
GR-2002-356 Laclede Gas Company

Discounted Cash Flow Growth Parameters
Northwest Natural Gas Co.

<u>Historical Growth</u>					<u>Retention Growth</u>		
<u>Compound Growth</u>					<u>Retention</u>	<u>Equity</u>	<u>Growth</u>
	<u>Historical Data</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>	<u>Ratio (b)</u>	<u>Return (r)</u>	<u>(b*r)</u>
1	1995	1.61	1.18	14.55	0.267		
2	1996	1.97	1.20	15.37	0.391		
3	1997	1.76	1.21	16.02	0.313	11.00%	3.44%
4	1998	1.02	1.22	16.59	-0.196	6.00%	-1.18%
5	1999	1.70	1.23	17.12	0.276	9.90%	2.74%
6	2000	1.79	1.24	17.93	0.307	10.00%	3.07%
7	2001	1.88	1.25	18.60	0.335	10.00%	3.35%
8							
9	<u>Compound Growth Rates</u>					<u>Ave. Internal</u>	
10	1995-99	1.37%	1.04%	4.15%		<u>Growth (br):</u>	2.28%
11							
12	1996-00	-2.37%	0.82%	3.93%		<u>ADD: External</u>	
13						<u>Growth (sv):</u>	1.50%
14	1997-01	1.66%	0.82%	3.80%			
15						<u>Historical</u>	
16	<u>Ave. Compound Gr.</u>	<u>0.22%</u>	<u>0.89%</u>	<u>3.96%</u>		<u>"br + sv" Gr.</u>	<u>3.79%</u>
17							
18	<u>Value Line</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>			
19	<u>Historical Gr.</u>	<u>-2.00%</u>	<u>1.25%</u>	<u>4.00%</u>			
20	(Avg of 5 and 10 yr. if both are available)						
21							
22	<u>Projected Growth</u>						
23	<u>Retention Growth Calculation</u>				<u>Retention</u>	<u>Equity</u>	<u>Growth</u>
24	<u>Value Line</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>	<u>Ratio (b)</u>	<u>Return (r)</u>	<u>(b*r)</u>
25	2002	\$2.00	\$1.26	\$33.00	0.370	10.50%	3.89%
26	2003	2.15	1.28	33.50	0.405	10.50%	4.25%
27	2005-07	2.50	1.35	35.50	0.460	11.00%	5.06%
28							
29	<u>Analyst's Estimates</u>					<u>Projected</u>	
30	<u>Value Line</u>	7.50%	1.50%	4.00%		<u>Growth (br):</u>	4.40%
31							
32	<u>First Call</u>	4.60%				<u>ADD: External</u>	
33						<u>Growth (sv):</u>	0.45%
34							
35	<u>Average</u>					<u>Projected</u>	
36	<u>Proj'd Growth</u>	<u>6.05%</u>	<u>1.50%</u>	<u>4.00%</u>		<u>"br + sv" Gr.</u>	<u>5.51%</u>

SOURCE: The Value Line Investment Survey; C.A. Turner Utility Reports;
First Call Corporation

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Burdette - Direct
GR-2002-356 Laclede Gas Company

Discounted Cash Flow Growth Parameters
Piedmont Natural Gas Co.

Historical Growth

<u>Compound Growth</u>					<u>Retention Growth</u>		
	<u>Historical Data</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>	<u>Retention Ratio (b)</u>	<u>Equity Return (r)</u>	<u>Growth (b*r)</u>
1	1995	1.45	1.09	12.31	0.248		
2	1996	1.67	1.15	13.07	0.311		
3	1997	1.85	1.21	13.90	0.346	13.10%	4.53%
4	1998	1.96	1.28	14.91	0.347	13.20%	4.58%
5	1999	1.86	1.36	15.71	0.269	11.80%	3.17%
6	2000	2.01	1.44	16.52	0.284	12.10%	3.43%
7	2001	2.02	1.52	17.26	0.248	11.70%	2.90%
8							
9	<u>Compound Growth Rates</u>					<u>Ave. Internal Growth (br):</u>	
10	1995-99	6.42%	5.69%	6.29%			3.72%
11							
12	1996-00	4.74%	5.78%	6.03%		<u>ADD: External Growth (sv):</u>	
13							0.71%
14	1997-01	2.22%	5.87%	5.56%			
15						<u>Historical "br + sv" Gr.</u>	<u>4.43%</u>
16	<u>Ave. Compound Gr.</u>	<u>4.46%</u>	<u>5.78%</u>	<u>5.96%</u>	#		
17							
18	<u>Value Line</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>			
19	<u>Historical Gr.</u>	<u>5.75%</u>	<u>5.75%</u>	<u>6.00%</u>			
20	(Avg of 5 and 10 yr. if both are available)						

Projected Growth

<u>Retention Growth Calculation</u>							
	<u>Value Line</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>	<u>Retention Ratio (b)</u>	<u>Equity Return (r)</u>	<u>Growth (b*r)</u>
24	2002	\$1.95	\$1.60	\$18.15	0.179	11.00%	1.97%
25	2003	2.25	1.68	19.10	0.253	12.00%	3.04%
26	2005-07	2.90	1.82	22.70	0.372	12.50%	4.66%
27							
28							
29	<u>Analyst's Estimates</u>					<u>Projected Growth (br):</u>	
30	<u>Value Line</u>	6.50%	4.00%	5.50%			3.22%
31							
32	<u>First Call</u>	5.00%				<u>ADD: External Growth (sv):</u>	
33							0.29%
34						<u>Projected "br + sv" Gr.</u>	<u>4.94%</u>
35	<u>Average Proj'd Growth</u>	<u>5.75%</u>	<u>4.00%</u>	<u>5.50%</u>			
36							

SOURCE: The Value Line Investment Survey; C.A. Turner Utility Reports;
First Call Corporation

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Burdette - Direct
GR-2002-356 Laclede Gas Company

Discounted Cash Flow Growth Parameters
WGL Holdings, Inc.

Historical Growth

<u>Compound Growth</u>					<u>Retention Growth</u>		
	<u>Historical Data</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>	<u>Retention Ratio (b)</u>	<u>Equity Return (r)</u>	<u>Growth (b*r)</u>
1	1995	1.45	1.12	11.95	0.228		
2	1996	1.85	1.14	12.79	0.384		
3	1997	1.85	1.17	13.48	0.368	13.70%	5.04%
4	1998	1.54	1.20	13.86	0.221	11.10%	2.45%
5	1999	1.47	1.22	14.72	0.170	9.90%	1.68%
6	2000	1.79	1.24	15.31	0.307	11.70%	3.59%
7	2001	1.88	1.26	16.24	0.330	11.20%	3.69%
8							
9	<u>Compound Growth Rates</u>					Ave. Internal	
10	1995-99	0.34%	2.16%	5.35%		<u>Growth (br):</u>	3.29%
11							
12	1996-00	-0.82%	2.12%	4.60%		ADD: External	
13						<u>Growth (sv):</u>	1.08%
14	1997-01	0.40%	1.87%	4.77%			
15						Historical	
16	<u>Ave. Compound Gr.</u>	<u>-0.02%</u>	<u>2.05%</u>	<u>4.91%</u>	#	<u>"br + sv" Gr.</u>	<u>4.37%</u>
17							
18	Value Line	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>			
19	Historical Gr.	<u>2.75%</u>	<u>2.25%</u>	<u>4.50%</u>			
20	(Avg of 5 and 10 yr. if both are available)						

Projected Growth

<u>Retention Growth Calculation</u>							
	<u>Value Line</u>	<u>EPS</u>	<u>DPS</u>	<u>BVPS</u>	<u>Retention Ratio (b)</u>	<u>Equity Return (r)</u>	<u>Growth (b*r)</u>
24	2002	\$1.45	\$1.28	\$16.60	0.117	8.50%	1.00%
25	2003	1.90	1.30	17.15	0.316	10.50%	3.32%
26	2005-07	2.65	1.35	20.60	0.491	12.50%	6.13%
27							
28							
29	<u>Analyst's Estimates</u>					Projected	
30	Value Line	7.50%	1.50%	5.00%		<u>Growth (br):</u>	3.48%
31							
32	First Call	4.50%				ADD: External	
33						<u>Growth (sv):</u>	0.12%
34							
35	Average					Projected	
36	<u>Proj'd Growth</u>	<u>6.00%</u>	<u>1.50%</u>	<u>5.00%</u>		<u>"br + sv" Gr.</u>	<u>6.25%</u>

SOURCE: The Value Line Investment Survey; C.A. Turner Utility Reports;
First Call Corporation

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Burdette - Direct
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Stock Prices and Dividend Yields

Stock Price

	<u>Fri</u> <u>05/03/2002</u>	<u>Fri</u> <u>05/10/2002</u>	<u>Mon</u> <u>05/17/2002</u>	<u>Fri</u> <u>05/24/2002</u>	<u>Fri</u> <u>05/31/2002</u>	<u>Fri</u> <u>06/07/2002</u>	<u>Average</u>
The Laclede Group	\$24.75	\$23.13	\$23.34	\$23.45	\$24.58	\$23.60	\$23.81
AGL Resources, Inc.	\$23.98	\$23.02	\$23.15	\$23.17	\$22.90	\$22.23	\$23.08
NICOR, Inc.	\$46.91	\$46.29	\$46.92	\$48.90	\$48.06	\$46.49	\$47.26
Northwest Nat. Gas Co.	\$29.52	\$29.68	\$28.80	\$29.20	\$29.25	\$28.09	\$29.09
Piedmont Nat. Gas Co., Inc.	\$37.52	\$36.25	\$35.48	\$35.96	\$35.90	\$34.88	\$36.00
WGL Holdings, Inc.	\$26.42	\$26.05	\$26.28	\$26.68	\$26.63	\$25.34	\$26.23

Expected Dividend and Dividend Yield

	<u>Average</u> <u>Stk. Price</u>	<u>Expected</u> <u>2003</u> <u>Dividend</u>	<u>Expected</u> <u>Dividend</u> <u>Yield</u>	<u>3-month</u> <u>Stock Price</u> <u>Average</u>	<u>Expected</u> <u>2003</u> <u>Dividend</u>	<u>Expected</u> <u>Dividend</u> <u>Yield</u>
The Laclede Group	\$23.81	\$1.38	5.80%	\$26.67	\$1.38	5.17%
AGL Resources, Inc.	\$23.08	\$1.08	4.68%			
NICOR, Inc.	\$47.26	\$1.94	4.10%			
Northwest Nat. Gas Co.	\$29.09	\$1.28	4.40%			
Piedmont Nat. Gas Co., Inc.	\$36.00	\$1.68	4.67%			
WGL Holdings, Inc.	\$26.23	\$1.30	4.96%			
Proxy company average:			4.56%			

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The Laclede Group

Average Stock Price - 3 month period

<u>Date</u>		
03/11/2002	\$ 27.49	04/25/2002 \$ 27.33
03/12/2002	\$ 27.18	04/26/2002 \$ 26.80
03/13/2002	\$ 27.00	04/29/2002 \$ 27.19
03/14/2002	\$ 27.04	04/30/2002 \$ 27.10
03/15/2002	\$ 26.97	05/01/2002 \$ 27.15
03/18/2002	\$ 26.60	05/02/2002 \$ 26.72
03/19/2002	\$ 26.92	05/03/2002 \$ 26.42
03/20/2002	\$ 26.63	05/06/2002 \$ 26.25
03/21/2002	\$ 27.11	05/07/2002 \$ 25.99
03/22/2002	\$ 26.70	05/08/2002 \$ 26.50
03/25/2002	\$ 26.86	05/09/2002 \$ 26.26
03/26/2002	\$ 26.72	05/10/2002 \$ 26.05
03/27/2002	\$ 27.00	05/13/2002 \$ 26.32
03/28/2002	\$ 26.86	05/14/2002 \$ 26.57
04/01/2002	\$ 26.52	05/15/2002 \$ 26.51
04/02/2002	\$ 26.82	05/16/2002 \$ 26.16
04/03/2002	\$ 26.45	05/17/2002 \$ 26.28
04/04/2002	\$ 26.59	05/20/2002 \$ 26.36
04/05/2002	\$ 26.64	05/21/2002 \$ 26.26
04/08/2002	\$ 26.74	05/22/2002 \$ 26.62
04/09/2002	\$ 26.50	05/23/2002 \$ 26.95
04/10/2002	\$ 27.09	05/24/2002 \$ 26.68
04/11/2002	\$ 26.34	05/28/2002 \$ 26.58
04/12/2002	\$ 26.95	05/29/2002 \$ 26.60
04/15/2002	\$ 26.51	05/30/2002 \$ 26.53
04/16/2002	\$ 27.21	05/31/2002 \$ 26.63
04/17/2002	\$ 27.49	06/03/2002 \$ 25.72
04/18/2002	\$ 27.72	06/04/2002 \$ 26.35
04/19/2002	\$ 27.68	06/05/2002 \$ 25.96
04/22/2002	\$ 27.63	06/06/2002 \$ 24.99
04/23/2002	\$ 27.60	06/07/2002 \$ 25.34
04/24/2002	\$ 27.02	06/10/2002 \$ 25.40

Average \$ 26.67

Burdette - Direct
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DCF Cost of Common Equity Calculations

DCF Cost of Equity Using All Growth Rates

	Dividend		Growth		Cost of Equity		
	<u>Yield</u>	<u>Low</u>	<u>Average</u>	<u>High</u>	<u>Low</u>	<u>Average</u>	<u>High</u>
The Laclede Group	5.80%	-2.35%	2.11%	5.00%	3.45%	7.91%	10.80%
AGL Resources, Inc.	4.68%	-2.75%	2.51%	8.75%	1.93%	7.19%	13.43%
NICOR, Inc.	4.10%	2.60%	4.77%	6.50%	6.70%	8.87%	10.60%
Northwest Nat. Gas Co.	4.40%	-2.00%	2.65%	6.05%	2.40%	7.05%	10.45%
dmont Nat. Gas Co., Inc.	4.67%	4.00%	5.30%	6.00%	8.67%	9.97%	10.67%
WGL Holdings, Inc.	4.96%	-0.02%	3.60%	6.25%	4.93%	8.55%	11.20%
Average	4.56%	0.36%	3.77%	6.71%	4.93%	8.33%	11.27%

DCF Cost of Equity Using Projected Growth Rates

	Dividend		Projected growth		Cost of Equity		
	<u>Yield</u>	<u>Low</u>	<u>Average</u>	<u>High</u>	<u>Low</u>	<u>Average</u>	<u>High</u>
The Laclede Group	5.80%	1.50%	3.57%	5.00%	7.30%	9.36%	10.80%
Proxy Group Average	4.56%	2.70%	4.94%	6.71%	7.26%	9.50%	11.27%

Burdette - Direct
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Capital Asset Pricing Model (CAPM) Cost of Common Equity (Ke)

$$\text{Formula: } K_e = R_f + \text{beta}(R_m - R_f)$$

Risk Free Rate (Rf) = 5.30%
Market Premium (Rm - Rf) = 7.30%

	<u>Beta</u>	<u>CAPM</u> <u>Ke</u>
The Laclede Group	0.55	9.31%
AGL Resources, Inc.	0.60	9.68%
NICOR, Inc.	0.60	9.68%
Northwest Nat. Gas Co.	0.60	9.68%
Piedmont Nat. Gas Co., Inc.	0.60	9.68%
WGL Holdings, Inc.	0.60	9.68%
Average CAPM cost of equity:		9.68%

Source: Value Line Investment Survey; Ibbotson Associates;

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Laclede Gas Company

Weighted Average Cost of Capital - 30 November 2001

	<u>Percent</u>	<u>Cost Rate</u>	<u>Weighted Cost</u>	<u>Cost Rate</u>	<u>Weighted Cost</u>
Common Stock	38.71%	9.75%	3.77%	10.20%	3.95%
Preferred Stock	0.25%	4.96%	0.01%	4.96%	0.01%
Long term debt	41.57%	7.58%	3.15%	7.58%	3.15%
Short term debt	19.47%	4.85%	0.94%	4.85%	0.94%
	<u>100.00%</u>		7.88%		8.06%

Pre-Tax Interest Coverage

Tax factor = 1.63

	<u>Weighted Cost</u>	<u>Pre-tax Weighted Cost</u>	<u>Weighted Cost</u>	<u>Pre-tax Weighted Cost</u>
Common Stock	3.77%	6.15%	3.95%	6.44%
Preferred Stock	0.01%	0.02%	0.01%	0.02%
Long term debt	3.15%	3.15%	3.15%	3.15%
Short term debt	0.94%	0.94%	0.94%	0.94%
Total	7.88%	10.27%	8.06%	10.55%

Pre-tax wtd. cost: 10.27%
 Cost of Debt 4.10%
Pre-tax Interest Coverage 2.51

Pre-tax weighted cost: 10.55%
 Cost of Debt: 4.10%
2.58

Source: Schedules MB-2, 4, 5.