Exhibit No.:	
Issue:	Revenue Requirement
Witness:	Michael P. Gorman
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Office of the Public Counsel
Case No.:	GR-2014-0007
Date Testimony Prepared:	January 29, 2014

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy, Inc.'s Filing of Revised Tariffs to Increase its Annual Revenues for Natural Gas	))))))	**CASE NO. GR-2014-0007**

Direct Testimony and Schedules of

Michael P. Gorman

On behalf of

The Office of the Public Counsel

January 29, 2014

BRUBAKER & ASSOCIATES, INC.

Project 9853

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy, Inc.'s Filing of Revised Tariffs to Increase its Annual Revenues for Natural Gas	)	**CASE NO. GR-2014-0007**

STATE OF MISSOURI)
) **SS**
COUNTY OF ST. LOUIS)

Affidavit of Michael P. Gorman

Michael P. Gorman, being first duly sworn, on his oath states:

1. My name is Michael P. Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Office of the Public Counsel in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules which were prepared in written form for introduction into evidence in the Missouri Public Service Commission Case No. GR-2014-0007.

3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.

Michael P. Gorman

Subscribed and sworn to before me this 29th day of January, 2014.

MARIA E. DECKER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis City
My Commission Expires: May 5 2017
Commission # 13706793

Notary Public

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

In the Matter of Missouri Gas Energy, Inc.'s Filing of Revised Tariffs to Increase its Annual Revenues for Natural Gas	))))))	**CASE NO. GR-2014-0007**

Direct Testimony of Michael P. Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q WHAT IS YOUR OCCUPATION?

A I am a consultant in the field of public utility regulation and a Managing Principal of Brubaker & Associates, Inc., energy, economic and regulatory consultants.

Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A This information is included in Appendix A to my testimony.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A This testimony is presented on behalf of the Office of the Public Counsel ("OPC").

Q WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A I will make recommendations concerning the overall cost of capital including return on equity, capital structure and embedded debt cost for Missouri Gas Energy, Inc. ("MGE" or "Company").

SUMMARY

Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.

A I recommend the Missouri Public Service Commission (the "Commission" or "MPSC") award MGE a return on common equity of 9.35%. My recommended return on equity of 9.35% would result in an overall cost of capital of 6.60% as developed on my Schedule MPG-1.

My recommended return on equity and proposed capital structure will provide MGE with an opportunity to realize cash flow financial coverages and balance sheet strength that conservatively support MGE's current bond rating. Consequently, my recommended return on equity represents fair compensation for MGE's investment risk, and it will preserve the Company's financial integrity and credit standing.

Q WILL YOU RESPOND TO MGE'S PROPOSED RETURN ON EQUITY OF 10.4%?

A Yes. I will respond to MGE witness Pauline Ahern's return on equity recommendation in my rebuttal testimony.

Q HOW DID YOU ESTIMATE MGE'S CURRENT MARKET COST OF EQUITY?

A I performed two versions of the Discounted Cash Flow ("DCF") model, Risk Premium study, and Capital Asset Pricing Model ("CAPM") to a proxy group of publicly traded companies that have investment risk similar to MGE. Based on these assessments, I estimate MGE's current market cost of equity to be 9.35%.

Utility Industry Market Outlook

Q PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.

A I begin my estimate of a fair return on equity for MGE by reviewing the market's assessment of gas utility industry investment risk, credit standing, and stock price performance. I used this information to get a sense of the market's perception of the risk characteristics of gas utility investments in general, which is then used to produce a refined estimate of the market's return requirement for assuming investment risk similar to MGE's utility operations.

Based on the assessments described below, I find the credit rating outlook of the industry to be strong and supportive of the industry's financial integrity, and gas utilities' stocks have exhibited strong price performance over the last several years.

Further, the gas utility industry is funding large capital expenditure programs, which is creating significant demands for external capital. Credit rating agencies and market participants have embraced the utilities' need for significant amounts of external capital by meeting the capital market demands of gas utilities at near historical low capital market costs. All of this supports my belief that MGE should have sufficient access to capital to support its capital program, and relatively moderate capital costs are currently available and expected to be available for the next several years.

Based on this review of credit outlooks and stock price performance, I conclude that the market continues to embrace the gas utility industry as a safe-haven investment, and views utility equity and debt investments as low-risk securities.

Q PLEASE DESCRIBE UTILITIES' CREDIT RATING OUTLOOK.

A Utilities' credit rating outlook has improved over the recent past and the credit outlook is Stable to Improving. Standard & Poor's ("S&P") recently published a report titled "Stable-To-Modestly Improved Industry Outlook Supports Ratings For U.S. Regulated Electric, Gas, And Water Utilities." In that report, S&P noted the following:

> **Effect on ratings**
>
> Notwithstanding the slow economic recovery, credit quality in the domestic utility industry has continued a long shift to greater stability, and even modest improvement in some cases, especially as many companies re-emphasize their core competencies.
>
> * * *
>
> **Industry Ratings Outlook**
>
> **Good access to funding expected to continue**
>
> Liquidity is adequate for most utilities and investor appetite for utility debt remains healthy, with deals continuing to be oversubscribed at very attractive rates. The amount of medium- to long-term debt and hybrid securities issued through the three months ended March 31, 2013 was about $8.7 billion. Credit fundamentals indicate that most, if not all, utilities should continue to have ample access to funding sources and credit. The relative certainty of financial performance provided by the regulatory framework under which utilities operate, their effective monopoly position, long-lived assets, and the financing necessary to fund these assets are all factors that make the utility sector attractive to investors. These elements have also helped utilities more effectively manage their rate-relief needs and mitigate the effect of sizable rate increases on customers.[1]

Similarly, Fitch states:

> **Rating Outlook**
>
> **Stable Ratings Outlook:** Fitch Ratings expects the ratings and ratings outlook for the overall U.S. Utilities, Power, and Gas (UPG) sector to remain stable in 2014.
>
> * * *

[1] *Standard & Poor's RatingsDirect*: "Industry Report Card: Stable-To-Modestly Improved Industry Outlook Supports Ratings For U.S. Regulated Electric, Gas, And Water Utilities," April 19, 2013 at 3-4 and 6-7, emphasis added.

Got Gas?

> Gas utilities are benefitting from stable and low natural gas prices, and growing volumes from system build-outs and growing usage in electricity generation and as transportation fuel. In the northeast and mid-Atlantic regions, conversions from heating oil are also propelling strong customer and volume growth. Fitch expects continued strong growth and improved credit metrics for the sector in 2014, although ratings are expected to be stable.

* * *

Sector Outlook

> The sector outlook for regulated gas distribution companies is positive. Relatively low and stable natural gas prices, customer growth, expanded use of natural gas for power generation and transportation fuel, and customer switching from heating oil or propane will drive substantially higher throughput volumes and drive improved profitability.[2]

Most recently, Moody's placed numerous electric and natural gas utilities under review for potential upgrade:

> Due to an improved opinion of credit supportiveness of the regulatory environment in the United States, Moody's on Nov. 8 placed ratings of numerous electric and natural gas utility holding companies and their regulated utility subsidiaries under review for upgrade. The action affects approximately $400 billion of debt.
>
> "Our placement of these issuers on review considers improving regulatory trends in the U.S., including better cost recovery provisions, reduced regulatory lag, and generally fair and open relationships between utilities and regulators," Moody's Managing Director Larry Hess said in a statement.[3]

[2] *FitchRatings*: "2014 Outlook: Utilities, Power, and Gas," December 12, 2013 at 1-2, emphasis added.

[3] SNL Financial: "Moody's puts numerous utility, holding company ratings under review for upgrade," November 11, 2013 at 1.

Q WHAT ARE THE IMPORTANT TAKEAWAY POINTS FROM THIS ASSESSMENT OF GAS UTILITY INDUSTRY CREDIT AND INVESTMENT RISK OUTLOOKS?

A Credit rating agencies consider the gas utility industry credit outlook to be Stable to Improving and believe investors will continue to provide needed capital to support utilities' large capital programs and at moderate capital costs. All of this supports the belief that gas utility investment continues to be regarded by market participants as a safe-haven or low-risk investment option.

RATE OF RETURN

MGE Investment Risk

Q PLEASE DESCRIBE THE MARKET'S ASSESSMENT OF THE INVESTMENT RISK OF MGE.

A Laclede Gas Company's ("Laclede Gas") acquisition of MGE was completed on September 3, 2013. MGE is now an operating division of Laclede Gas. Preceding the completion of this acquisition, Laclede Gas's bond rating from S&P was downgraded to "A-" from "A". Moody's bond rating for Laclede Gas remained at "Baa1." The outlook is "Stable" from both S&P and Moody's.

S&P's rating action related to the acquisition of MGE by Laclede Gas. S&P explained its rating action as follows:

> On July 19, 2013, Standard & Poor's Ratings Services lowered the long-term corporate credit ratings on St. Louis, Mo.-based The Laclede Group and its subsidiary Laclede Gas Co. to 'A-' from 'A'. We also lowered the rating on Laclede Gas' senior secured debt to 'A' from 'A+' and the short-term rating on Laclede Gas' CP to 'A-2' from A-1'. We are affirming the '1+' recovery rating. In addition, we removed all ratings from CreditWatch where we placed them with negative implications on April 4, 2013. The outlook is stable.
>
> The rating action reflects our expectation that LG's financial measures will weaken primarily due to the incremental debt needed to fund the

MGE acquisition. As a result, we have revised the company's financial risk profile to significant from intermediate. We are maintaining our designation of LG's business risk profile as excellent because the company will derive the bulk of its EBITDA from relatively low-risk regulated natural gas operations following the acquisition. However, if the riskier unregulated activities become a more meaningful percentage of the overall company, we would likely revise the business risk profile to strong.[4]

Q PLEASE DESCRIBE S&P'S RATING OUTLOOK FOR THE LACLEDE GROUP, INC. ("LACLEDE GROUP") AND LACLEDE GAS.

A S&P states as follows:

Rationale

The ratings on St. Louis. [sic] Mo.-based Laclede Gas Co. reflect the consolidated credit profile of the parent utility holding company The Laclede Group (LG). We consider LG to have an "excellent" business risk profile and a "significant" financial risk profile.

* * *

In addition, we view LG's business risk profile as being marginally excellent due to its acquisitive nature, investment in riskier nonutility activities, and plans to further invest in emerging technologies. While the acquisition will result in LG deriving slightly more than 90% of EBITDA from regulated operations, management is also focusing on growing its riskier unregulated activities. If there is additional growth in the unregulated businesses, we would revise the company's business risk profile to "strong" from excellent. This would necessitate stronger financial measures to preserve the company's current credit profile.

LG's business risk profile benefits from a diverse and stable service area. It has a largely residential and commercial customer base, which limits the utility's susceptibility to economic cyclicality, diverse gas supply sources, and ample natural gas storage capacity.[5]

[4] *Standard & Poor's RatingsDirect*: "Research Update: The Laclede Group Inc. And Laclede Gas Co. Corporate Credit Ratings Lowered To 'A-' On Acquisition Approval, July 19, 2013 at 2, provided by MGE in response to OPC DR 5007.

[5] *Standard & Poor's RatingsDirect*: "Summary: Laclede Gas Co.," July 24, 2013 at 4, provided by MGE in response to OPC DR 5007, emphasis added.

Q DOES THIS DISTINCTION IN THE BUSINESS RISK OF LACLEDE GROUP AND LACLEDE GAS JUSTIFY FOCUSING DIRECTLY ON LACLEDE GAS'S COST OF SERVICE IN SETTING REGULATED RATES?

A Yes. S&P clearly denotes a strong "Excellent" business position for the regulated operations of Laclede Group in general, and Laclede Gas in particular. However, S&P is concerned about the expanding risk of non-regulated businesses under Laclede Group, which may result in a reduction in the business outlook for Laclede Group if its non-regulated business activity expands.

S&P believes that Laclede Group is intending to expand its non-regulated businesses. If this happens, Laclede Group would need to strengthen its financial measures in order to offset this increased business risk. This means that Laclede Group would need to reduce its financial risk by increasing its common equity ratio of total capital. This will increase its cost of capital to regulated operations if rates are set at Laclede Gas using Laclede Group's capital structure.

This increase in common equity ratio for Laclede Group would not be necessary based on Laclede Gas's lower business risk regulated operations. Hence, the higher cost of capital at Laclede Group should be an avoided cost to Laclede Gas.

Q ARE THERE OTHER REASONS TO DIFFERENTIATE LACLEDE GAS FROM ITS PARENT COMPANY, LACLEDE GROUP, IN SETTING RATES FOR THE REGULATED UTILITY?

A Yes. As noted above, Laclede Group invests in non-regulated companies which can have a detrimental impact on the credit standing and cost of capital for Laclede Gas. This is in direct contradiction to the Commission's recent regulatory mechanisms

which have mitigated Laclede Gas's business risk, and should work to improve Laclede Gas's credit rating.

S&P states the following about recently approved regulatory mechanisms for Laclede Gas:

> LG's business risk profile benefits from a diverse and stable service area, with a largely residential and commercial customer base that limits the utility's susceptibility to economic cyclicality, diverse gas supply sources, and ample natural gas storage capacity. Generally, we view Missouri's regulatory climate as "less credit supportive". However, we believe it is more responsive to Laclede Gas' needs, as demonstrated by the approval of settlement agreements (albeit at much less than amounts sought) and timely cost recovery mechanisms such as a purchased gas adjustment clause, an infrastructure system replacement surcharge (ISRS), a pension cost tracker, largely decoupled rate design, and weather-mitigation rates. Laclede Gas is also permitted to retain a portion of profits generated by off-system sales. LG's investment in the riskier and more volatile unregulated businesses, its acquisitive strategy, and lackluster customer growth, detract from its business risk profile.
>
> On June 26, 2013, the MPSC approved a settlement agreement in Laclede Gas' pending rate case that makes permanent a $14.8 million ISRS that is already included in customer bills. Due to increasing costs and infrastructure investments, the company's ability to continue to effectively manage regulatory risk will be critical to credit quality.[6]

As noted by S&P, Laclede Group's strategy to expand its exposure to the higher risk non-regulated businesses is in direct opposition to the Commission's efforts to mitigate Laclede Gas's regulatory and business risk by implementing regulatory mechanisms which provide a higher assurance of full cost recovery, and stabilize the cash flows for Laclede Gas.

I recommend the Commission separate Laclede Gas's financial and business risk from Laclede Group's in establishing its cost of service in this proceeding.

[6] *Standard & Poor's RatingsDirect*: "Research Update: The Laclede Group Inc. And Laclede Gas Co. Corporate Credit Ratings Lowered To 'A-' On Acquisition Approval, July 19, 2013 at 4, provided by MGE in response to OPC DR 5007, emphasis added.

MGE's Proposed Capital Structure

Q WHAT IS MGE'S PROPOSED CAPITAL STRUCTURE?

A Laclede's proposed capital structure for MGE is shown below in Table 1. This capital structure is sponsored by MGE witness Glenn W. Buck. Mr. Buck explains that the capital structure reflects the capital used to finance the Company's provision of utility service. He states that his Schedule GWB-1 shows the capital structure of Laclede Group, the parent company of Laclede Gas, at July 31, 2013 on a pro forma basis. He also states that short-term debt was not included in the capital structure because the level of construction work in progress, underground inventories, margin calls on Laclede Gas's multi-year hedging program and deferred gas costs subject to PGA carrying cost exceed the average level of short-term debt outstanding for the test year.

Mr. Buck's proposed capital structure is shown as follows.

TABLE 1

MGE's Proposed Capital Structure
(July 31, 2013)

Description	Weight
Long-Term Debt	48.45%
Common Equity	51.55%
Total Regulatory Capital Structure	100.00%

Source: Schedule GWB-2.

Q DO YOU HAVE ANY ISSUES WITH MGE'S PROPOSED CAPITAL STRUCTURE?

A Yes. I take issue with the Company's proposed capital structure because it is based on Laclede Group's capital structure and not Laclede Gas. I recommend the Commission focus specifically on Laclede Gas's capital structure to set regulated rates for the reasons discussed above.

Q WHAT IS LACLEDE GAS'S CAPITAL STRUCTURE?

A Laclede Gas's capital structure, including the accounting related to the acquisition of MGE, is recorded as of September 30, 2013. That capital structure is shown on my Schedule MPG-1, page 2.

Q DO YOU RECOMMEND ANY ADJUSTMENTS TO LACLEDE GAS'S CAPITAL STRUCTURE?

A Yes. I recommend the use of Laclede Gas's capital structure adjusted to remove capital that is supporting assets that are not related to the provision of gas utility service. I recommend an adjustment to remove capital supporting a goodwill asset that was recorded on Laclede Gas's balance sheet by the acquisition of MGE. In its Fiscal Year 2013 Form 10-K, Laclede Group describes this acquisition adjustment as follows:

> Effective September 1, 2013, Laclede Group completed the purchase of substantially all of the assets and liabilities of Missouri Gas Energy (MGE), a utility engaged in the distribution of natural gas on a regulated basis in western Missouri, from Southern Union Company (SUG), an affiliate of Energy Transfer Equity, L.P. and Energy Transfer Partners, L.P. The purchase was completed pursuant to the purchase agreement dated December 14, 2012. Under the terms of the purchase agreement, Laclede Group acquired MGE for a purchase price of $975 million. The acquisition was supported through a combination of the issuance of 10.0 million shares of Laclede Group common stock, completed on May 29, 2013, the issuance by Laclede

> Gas of $450.0 million of first mortgage bonds, completed on August 13, 2013, short-term borrowings, and available cash.
>
> The acquisition was accounted for under the acquisition method of accounting in accordance with ASC 805 ("Topic 805"), "Business Combinations." Accordingly, goodwill was measured as the excess of the acquisition-date fair value of the consideration transferred over the amount of acquisition-date identifiable assets acquired net of assumed liabilities. Laclede Group recorded $247.1 million of goodwill as an asset in the consolidated balance sheet, which has been assigned to the Company's Gas Utility segment.[7]

As noted above, Laclede Group paid a premium above the prevailing fair value assets of MGE. By paying a premium above these fair value assets, Laclede Group recorded this goodwill asset which reflects the premium paid.

Q DID LACLEDE GAS MAKE REPRESENTATIONS TO THE COMMISSION CONCERNING COSTS ASSOCIATED WITH THIS ACQUISITION PREMIUM OR GOODWILL ASSET?

A Yes. In the Stipulation and Agreement approving the acquisition, Laclede Gas and Laclede Group represented to the Commission that costs associated with the MGE acquisition premium (i.e., goodwill) would not be included in Missouri rates. The Stipulation and Agreement states:

> The amount of any acquisition premium paid for MGE in connection with the Transaction shall not be recovered in retail distribution rates. Nothing herein shall preclude any party to this Agreement from taking a position in any future ratemaking proceedings involving the Laclede or MGE Divisions in Missouri regarding the ratemaking measures and adjustments necessary to ensure no impact from the acquisition premium on rates. Neither Laclede Gas nor its MGE division shall seek either direct or indirect rate recovery or recognition of any acquisition premium in any future general ratemaking proceeding in Missouri.[8]

[7]Laclede Group's Form 10-K Annual Report For the Fiscal Year Ended September 30, 2013 at 61, emphasis added.

[8]Stipulation and Agreement, Case No. GM-2013-0254, July 2, 2013 at 8, emphasis added.

As noted above, Laclede Gas agreed to not seek rate recovery, or recognition, of the acquisition premium. Including goodwill in the capital structure is an indirect way of recognizing and recovering the premium paid for MGE. If the Commission allows this recognition, customers will pay for this unregulated non-cash producing asset in perpetuity since this asset is not depreciated or amortized.

Q IF THE CAPITAL STRUCTURE IS NOT ADJUSTED TO REMOVE THE CAPITAL SUPPORTING THE ACQUISITION PREMIUM (OR GOODWILL ASSET), WILL RATES IN THIS PROCEEDING BE IMPACTED BY THE EXISTENCE OF THE ACQUISITION PREMIUM (OR GOODWILL ASSET)?

A Yes. The recording of an acquisition premium (or goodwill asset) had the effect of increasing Laclede Gas's asset side of its balance sheet. In order to keep the balance sheet in balance, the acquisition accounting allowed for the recording of the common equity capital used to fund the acquisition premium asset.

Annually, the acquisition premium asset undergoes an asset impairment test. If impaired, the acquisition premium asset and common equity supporting the acquisition premium are written down.

Q HOW DID YOU ADJUST LACLEDE GAS'S CAPITAL TO REMOVE THE CAPITAL SUPPORTING THIS GOODWILL (I.E., ACQUISITION PREMIUM) ASSET?

A Goodwill is an intangible asset that does not produce cash flows. As described by Laclede Group in its SEC 10-K filing, the goodwill asset was recorded as a result of acquisition accounting when Laclede Gas purchased MGE. It represents the difference between the acquisition price paid for MGE and the book value of the identifiable asset at the date of the acquisition.

The amount of identifiable assets largely represents the net book value of the utility plant and equipment owned and operated by MGE and which are used to provide service to its retail customers. The acquisition premium or goodwill asset is the amount paid above this book value of MGE's utility plant and equipment.

The goodwill asset is not included in utility plant and equipment and MGE's rate base. The capital supporting this goodwill asset should be removed from MGE's (or Laclede Gas's) capital structure for regulated operations. The acquisition premium (or goodwill asset) is funded by the equity capital used to fund the acquisition.

An acquisition premium (or goodwill asset) cannot be funded by Laclede Gas debt. Laclede Group did issue debt to fund part of the acquisition, however, that debt requires predictable and stable cash flows to service the debt, because it was issued by Laclede Gas under its corporate credit rating. That credit rating is tied to the predictable cash flows created by making investments in utility plant and equipment which are ultimately included in rate base and cost of service. Since the acquisition premium (i.e., goodwill asset) is not included in rate base, it will not be included in cost of service, and will not produce cash flows of any sort, much less the predictable cash flows necessary in order to maintain Laclede Gas's bond rating. As such, the premium above the book value of MGE's assets, or the acquisition premium, was funded entirely by common equity.

Q DO CREDIT RATING AGENCIES ALSO EVALUATE UTILITIES' FINANCIAL LEVERAGE BY ADJUSTING THEIR CAPITAL STRUCTURES AND DEBT COMPONENTS TO REMOVE GOODWILL ASSETS?

A Generally they do, particularly if the goodwill asset is significant. In its corporate rating criteria, S&P states as follows:

> Capitalization is equal to balance-sheet equity, plus debt and hybrids, after adjusting for goodwill and making all applicable adjustments. The capitalization calculation excludes any goodwill asset that exceeds 10% of total assets.[9]

The recorded goodwill asset on Laclede Gas's balance sheet is $247 million. This represents approximately 14% of Laclede Gas's net plant in-service of $1.78 billion recorded after the combination of MGE and Laclede Gas. This amount of goodwill asset is significant, and likely will be reflected as a capital structure adjustment by S&P, once it rates the new Laclede Gas's credit standing.[10]

Q HOW DID YOU DEVELOP YOUR PROPOSED CAPITAL STRUCTURE?

A This is developed on my Schedule MPG-1, page 2 and shown below in Table 2.

As shown in this table, I recommend a capital structure composed of 55.0% long-term debt and 45.0% common equity. This capital structure was developed as shown on Schedule MPG-1, page 2 which starts with Laclede Gas's actual recorded common equity balance at September 30, 2013 and removing the amount of common equity supporting Laclede Gas's goodwill asset. This results in an adjusted capital structure that represents the amount of investor capital available to support Laclede Gas's investments in utility plant and equipment.

[9] *Standard & Poor's RatingsDirect*: "Criteria/Corporates/General: Corporate Methodology: Ratios and Adjustments," November 19, 2013 at 16, emphasis added.

[10] The most recent credit report from S&P on Laclede Gas is dated July 19, 2013. This date precedes the combination of MGE and Laclede Gas.

TABLE 2

Proposed Capital Structure
(September 30, 2013

Description	Weight
Long-Term Debt	55.0%
Common Equity	45.0%
Total Regulatory Capital Structure	100.0%

Source: Schedule MPG-1, page 2.

Q DO YOU BELIEVE THAT YOUR PROPOSED CAPITAL STRUCTURE WILL SUPPORT LACLEDE GAS'S FINANCIAL INTEGRITY AND ACCESS TO CAPITAL?

A Yes. As shown later in my testimony, my recommended return on equity and proposed capital structure will produce credit metrics consistent with S&P's guidelines for an investment grade utility with business and financial risk comparable to that of Laclede Gas.

RETURN ON EQUITY

Q PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON EQUITY."

A A utility's cost of common equity is the return investors require on an investment in the utility. Investors expect to achieve their return requirement from receiving dividends and stock price appreciation.

Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED UTILITY'S COST OF COMMON EQUITY.

A In general, determining a fair cost of common equity for a regulated utility has been framed by two hallmark decisions of the U.S. Supreme Court: Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679 (1923) and Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

These decisions identify the general standards to be considered in establishing the cost of common equity for a public utility. Those general standards provide that the authorized return should: (1) be sufficient to maintain financial integrity; (2) attract capital under reasonable terms; and (3) be commensurate with returns investors could earn by investing in other enterprises of comparable risk.

Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE MGE'S COST OF COMMON EQUITY.

A I have used several models based on financial theory to estimate MGE's cost of common equity. These models are: (1) a constant growth Discounted Cash Flow ("DCF") model using consensus analysts' growth rate projections; (2) a multi-stage growth DCF model; (3) a Risk Premium model; and (4) a Capital Asset Pricing Model ("CAPM"). I have applied these models to a group of publicly traded utilities that have investment risk similar to MGE's.

Risk Proxy Group

Q HOW DID YOU SELECT A UTILITY PROXY GROUP SIMILAR IN INVESTMENT RISK TO MGE TO ESTIMATE ITS CURRENT MARKET COST OF EQUITY?

A I relied on a gas utility proxy group that I determined to be comparable in investment risk to MGE. My recommended proxy group is the same proxy group used by MGE's witness Ms. Ahern to estimate MGE's return on equity.

Q PLEASE DESCRIBE WHY YOU BELIEVE YOUR PROXY GROUP IS REASONABLY COMPARABLE IN INVESTMENT RISK TO MGE.

A The proxy group is shown on Schedule MPG-2. This proxy group has an average corporate credit rating from S&P of "A," which is one notch above S&P's corporate credit rating for Laclede Gas of "A-." The proxy group's corporate credit rating from Moody's of "A3" is two notches higher than Laclede Gas's rating from Moody's of "Baa2."

The proxy group has an average common equity ratio of 47.5% (including short-term debt) from SNL Financial ("SNL") and 55.3% (excluding short-term debt) from *The Value Line Investment Survey* ("*Value Line*") in 2012. The proxy group's common equity ratio is higher but comparable to the 51.6% common equity ratio proposed by Laclede Gas. This indicates that the proxy group has comparable financial risk to the Company.

I also compared MGE's business risk to the business risk of the proxy group based on S&P's ranking methodology. Laclede Gas has an S&P business risk profile of "Excellent," which is identical to the S&P business risk profile of the proxy group.[11] The S&P business risk profile score indicates that MGE's business risk is comparable to that of the proxy group.

I believe that my proxy group reasonably approximates the investment risk of MGE, and can be used to estimate a fair return on equity for MGE.

Discounted Cash Flow Model

Q PLEASE DESCRIBE THE DCF MODEL.

A The DCF model posits that a stock price is valued by summing the present value of expected future cash flows discounted at the investor's required rate of return or cost of capital. This model is expressed mathematically as follows:

$$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} + \dots + \frac{D_\infty}{(1+K)^\infty} \quad \text{where} \quad \text{(Equation 1)}$$

P_0 = Current stock price
D = Dividends in periods 1 - ∞
K = Investor's required return

This model can be rearranged in order to estimate the discount rate or investor-required return, "K." If it is reasonable to assume that earnings and dividends will grow at a constant rate, then Equation 1 can be rearranged as follows:

[11] S&P ranks the business risk of a utility company as part of its corporate credit rating review. S&P considers total investment risk in assigning bond ratings to issuers, including utility companies. In analyzing total investment risk, S&P considers both the business risk and the financial risk of a corporate entity, including a utility company. S&P's business risk profile score is based on a six-notch credit rating starting with "Vulnerable" (highest risk) to "Excellent" (lowest risk). The business risk of most utility companies falls within the lowest risk category, "Excellent," or the category one notch lower (more risk), "Strong." *Standard & Poor's RatingsDirect:* "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

$$K = D_1/P_0 + G \qquad \text{(Equation 2)}$$

K = Investor's required return
D_1 = Dividend in first year
P_0 = Current stock price
G = Expected constant dividend growth rate

Equation 2 is referred to as the annual "constant growth" DCF model.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.

A As shown in Equation 2 above, the DCF model requires a current stock price, expected dividend, and expected growth rate in dividends.

Q WHAT STOCK PRICE HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH DCF MODEL?

A I relied on the average of the weekly high and low stock prices of the utilities in the proxy group over a 13-week period ending on January 10, 2014. An average stock price is less susceptible to market price variations than a spot price. Therefore, an average stock price is less susceptible to aberrant market price movements, which may not be reflective of the stock's long-term value.

A 13-week average stock price reflects a period that is still short enough to contain data that reasonably reflect current market expectations, but the period is not so short as to be susceptible to market price variations that may not reflect the stock's long-term value. In my judgment, a 13-week average stock price is a reasonable balance between the need to reflect current market expectations and the need to capture sufficient data to smooth out aberrant market movements.

Q WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF MODEL?

A I used the most recently paid quarterly dividend, as reported in *Value Line*.[12] This dividend was annualized (multiplied by 4) and adjusted for next year's growth to produce the D_1 factor for use in Equation 2 above.

Q WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT GROWTH DCF MODEL?

A There are several methods that can be used to estimate the expected growth in dividends. However, regardless of the method, for purposes of determining the market-required return on common equity, one must attempt to estimate investors' consensus about what the dividend or earnings growth rate will be, and not what an individual investor or analyst may use to make individual investment decisions.

As predictors of future returns, security analysts' growth estimates have been shown to be more accurate than growth rates derived from historical data.[13] That is, assuming the market generally makes rational investment decisions, analysts' growth projections are more likely to influence investors' decisions which are captured in observable stock prices than growth rates derived only from historical data.

For my constant growth DCF analysis, I have relied on a consensus, or mean, of professional security analysts' earnings growth estimates as a proxy for investor consensus dividend growth rate expectations. I used the average of analysts' growth rate estimates from three sources: Zacks, SNL, and Reuters. All such projections were available on January 13, 2014, and all were reported online.

[12] *The Value Line Investment Survey*, December 6, 2013.

[13] *See, e.g.,* David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.

Each consensus growth rate projection is based on a survey of security analysts. There is no clear evidence whether a particular analyst is most influential on general market investors. Therefore, a single analyst's projection does not as reliably predict consensus investor outlooks as does a consensus of market analysts' projections. The consensus estimate is a simple arithmetic average, or mean, of surveyed analysts' earnings growth forecasts. A simple average of the growth forecasts gives equal weight to all surveyed analysts' projections. Therefore, a simple average, or arithmetic mean, of analyst forecasts is a good proxy for market consensus expectations.

Q WHAT ARE THE GROWTH RATES YOU USED IN YOUR CONSTANT GROWTH DCF MODEL?

A The growth rates I used in my DCF analysis are shown on Schedule MPG-3. The average growth rate for my proxy group is 4.82%.

Q WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?

A As shown on Schedule MPG-4, the average and median constant growth DCF returns for my proxy group are 9.04% and 8.80%, respectively. This model indicates a fair return on equity of 8.90% for MGE.

Q DO YOU HAVE ANY COMMENTS ON THE RESULTS OF YOUR CONSTANT GROWTH DCF ANALYSIS?

A Yes. The constant growth DCF analysis for my proxy group was based on a long-term sustainable growth rate of 4.82%. This growth rate is approximately the same as my estimate of a maximum long-term sustainable growth rate of 4.8% which I

discuss later in this testimony. I believe the constant growth DCF analysis produces fair return estimates.

Q WHAT IS YOUR ESTIMATE OF A MAXIMUM LONG-TERM SUSTAINABLE GROWTH RATE?

A A long-term sustainable growth rate for a utility stock cannot exceed the growth rate of the economy in which it sells its goods and services. Hence, a reasonable proxy for the long-term maximum sustainable growth rate for a utility investment is best proxied by the projected long-term Gross Domestic Product ("GDP"). *Blue Chip Financial Forecasts* projects that over the next 5 and 10 years, the U.S. nominal GDP will grow in the range of 4.9% to 4.6%. As such, the average growth rate over the next 10 years is around 4.8%, which I believe is a reasonable proxy of long-term sustainable growth.[14]

I discuss in my multi-stage growth DCF analysis academic and investment practitioner evidence that accepts the projected long-term GDP growth outlook as a maximum sustainable growth rate projection. Hence, recognizing the long-term GDP growth rate as a maximum sustainable growth is logical, and generally consistent with academic and economic practitioner accepted practices.

Multi-Stage Growth DCF Model

Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?

A Yes. My constant growth DCF is based on consensus analysts' growth rate projections, so it is a reasonable reflection of rational investment expectations over the next three to five years. The limitation on the constant growth DCF model is that

[14] *Blue Chip Financial Forecasts*, December 1, 2013 at 14.

it cannot reflect a rational expectation that a period of high/low short-term growth can be followed by a change in growth to a rate that is more reflective of long-term sustainable growth. Hence, I performed a multi-stage growth DCF analysis to reflect this outlook of changing growth expectations.

Q WHY DO YOU BELIEVE GROWTH RATES CAN CHANGE OVER TIME?

A Analyst projected growth rates over the next three to five years will change as utility earnings growth outlooks change. Utility companies go through cycles in making investments in their systems. When utility companies are making large investments, their rate base grows rapidly, which accelerates their earnings growth. Once a major construction cycle is completed or levels off, growth in the utility rate base slows, and its earnings growth slows from an abnormally high three- to five-year rate to a lower sustainable growth rate.

As major construction cycles extend over longer periods of time, even with an accelerated construction program, the growth rate of the utility will slow simply because rate base will slow, and the utility has limited human and capital resources available to expand its construction program. Hence, the three- to five-year growth rate projection should be used as a long-term sustainable growth rate but not without making a reasonable informed judgment to determine whether it considers the current market environment, the industry, and whether the three- to five-year growth outlook is sustainable.

Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.

A The multi-stage growth DCF model reflects the possibility of non-constant growth for a company over time. The multi-stage growth DCF model reflects three growth

periods: (1) a short-term growth period, which consists of the first five years; (2) a transition period, which consists of the next five years (6 through 10); and (3) a long-term growth period, starting in year 11 through perpetuity.

For the short-term growth period, I relied on the consensus analysts' growth projections described above in relationship to my constant growth DCF model. For the transition period, the growth rates were reduced or increased by an equal factor, which reflects the difference between the analysts' growth rates and the long-term sustainable growth rate. For the long-term growth period, I assumed each company's growth would converge to the maximum sustainable long-term growth rate.

Q WHY IS THE GDP GROWTH PROJECTION A REASONABLE PROXY FOR THE MAXIMUM SUSTAINABLE LONG-TERM GROWTH RATE?

A Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the economy in which they sell services. Utilities' earnings/dividend growth is created by increased utility investment or rate base. Such investment, in turn, is driven by service area economic growth and demand for utility service. In other words, utilities invest in plant to meet sales demand growth, and sales growth, in turn, is tied to economic growth in their service areas.

The Energy Information Administration ("EIA") has observed that utility sales growth tracks, albeit is lower than, the U.S. GDP growth, as shown on Schedule MPG-5. Utility sales growth has lagged behind GDP growth for more than a decade. As a result, nominal GDP growth is a very conservative proxy for gas utility sales growth, rate base growth, and earnings growth. Therefore, the U.S. GDP nominal growth rate is a conservative proxy for the highest sustainable long-term growth rate of a utility.

Q IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER THE LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?

A Yes. This concept is supported in both published analyst literature and academic work. Specifically, in a textbook entitled "Fundamentals of Financial Management," published by Eugene Brigham and Joel F. Houston, the authors state as follows:

> The constant growth model is most appropriate for mature companies with a stable history of growth and stable future expectations. Expected growth rates vary somewhat among companies, but dividends for mature firms are often expected to grow in the future at about the same rate as nominal gross domestic product (real GDP plus inflation).[15]

Q IS THERE ANY ACTUAL INVESTMENT HISTORY THAT SUPPORTS THE NOTION THAT THE CAPITAL APPRECIATION FOR STOCK INVESTMENTS WILL NOT EXCEED THE NOMINAL GROWTH OF THE U.S. GDP?

A Yes. This is evident by a comparison of the geometric annual growth of the U.S. GDP compared to the geometric growth of the U.S. stock market. Ibbotson & Associates measures the historical geometric growth of the U.S. stock market over the period 1929-2012 to be approximately 5.6%.[16] During this same time period, the U.S. geometric annual growth of the U.S. GDP was approximately 6.3%.[17]

As such, the geometric growth of the U.S. nominal GDP has been lower but comparable to the capital appreciation geometric growth of the U.S. stock market. This historical relationship indicates the U.S. GDP growth outlook is a conservative estimate of the long-term sustainable growth of U.S. stock investments.

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[15] *Fundamentals of Financial Management*, Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298.

[16] *Ibbotson & Associates 2013 Valuation Yearbook* inflation rate of 3.0%, page 23.

[17] U.S. Bureau of Economic Analysis, June 26, 2013.

Q HOW DID YOU DETERMINE A SUSTAINABLE LONG-TERM GROWTH RATE THAT REFLECTS THE CURRENT CONSENSUS OUTLOOK OF THE MARKET?

A I relied on the consensus analysts' projections of long-term GDP growth. *Blue Chip Financial Forecasts* publishes consensus economists' GDP growth projections twice a year. These consensus analysts' GDP growth outlooks are the best available measure of the market's assessment of long-term GDP growth. These analyst projections reflect all current outlooks for GDP, as reflected in analyst projections, and are likely the most influential on investors' expectations of future growth outlooks. The consensus economists' published GDP growth rate outlook is 4.9% to 4.6% over the next 10 years.[18]

Therefore, I propose to use the consensus economists' projected 5- and 10-year average GDP consensus growth rates of 4.9% and 4.6%, respectively, as published by *Blue Chip Financial Forecasts,* as an estimate of long-term sustainable growth. *Blue Chip Financial Forecasts'* projections provide real GDP growth projections of 2.7% and 2.4%, and GDP inflation of 2.1%[19] over the 5-year and 10-year projection periods, respectively. This consensus GDP growth forecast represents the most likely views of market participants because it is based on published consensus economist projections.

Q DO YOU CONSIDER OTHER SOURCES OF PROJECTED LONG-TERM GDP GROWTH?

A Yes, and these sources corroborate my consensus analysts' projections. The U.S. EIA in its *Annual Energy Outlook* projects real GDP out until 2040. In its *2013 Annual*

[18] *Blue Chip Financial Forecasts*, December 1, 2013 at 14.
[19] *Id*.

Report, the EIA projects real GDP through 2040 to be in the range of 2.0% to 2.9%, with a midpoint or reference case of 2.5%.[20]

Also, the Congressional Budget Office ("CBO") makes long-term economic projections. The CBO is projecting real GDP growth of 2.6% to 2.2% during the next 5 and 10 years, respectively, with GDP price inflation of 2.0%.[21] The CBO's real GDP projections are comparable to the consensus, but its GDP inflation is lower than the consensus economists.

The real GDP and nominal GDP growth projections made by the U.S. EIA and those made by the CBO support the use of the consensus analyst 5-year and 10-year projected GDP growth outlooks as a reasonable estimate of market participants' long-term GDP growth outlooks.

Q WHAT STOCK PRICE, DIVIDEND, AND GROWTH RATES DID YOU USE IN YOUR MULTI-STAGE GROWTH DCF ANALYSIS?

A I relied on the same 13-week stock price and the most recent quarterly dividend payment data discussed above. For stage one growth, I used the consensus analysts' growth rate projections discussed above in my constant growth DCF model. The transition period begins in year 6 and ends in year 10. For the long-term sustainable growth rate starting in year 11, I used 4.8%, the average of the consensus economists' 5-year and 10-year projected nominal GDP growth rates.

[20] *DOE/EIA Annual Energy Outlook 2013 With Projections to 2040*, April 2013 at 56.
[21] *CBO: The Budget and Economic Outlook: Fiscal Years 2013 to 2023*, February 2013 at 64.

Q WHAT ARE THE RESULTS OF YOUR MULTI-STAGE GROWTH DCF MODEL?

A As shown on Schedule MPG-6, the average and median DCF returns on equity for my proxy group are 9.06% and 8.93%, respectively. This model indicates a fair return on equity of 9.00% for MGE.

Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.

A The results from my DCF analyses are summarized in Table 3 below:

TABLE 3

Summary of DCF Results

Description	Proxy Group
Constant Growth DCF Model (Analysts' Growth)	8.90%
Multi-Stage Growth DCF Model	9.00%
Average	8.95%

I conclude that a reasonable DCF return for MGE in this case is 8.95%, rounded to 9.00%.

Risk Premium Model

Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.

A This model is based on the principle that investors require a higher return to assume greater risk. Common equity investments have greater risk than bonds because bonds have more security of payment in bankruptcy proceedings than common equity and the coupon payments on bonds represent contractual obligations. In contrast, companies are not required to pay dividends or guarantee returns on common equity

investments. Therefore, common equity securities are considered to be more risky than bond securities.

This risk premium model is based on two estimates of an equity risk premium. First, I estimated the difference between the required return on utility common equity investments and U.S. Treasury bonds. The difference between the required return on common equity and the Treasury bond yield is the risk premium. I estimated the risk premium on an annual basis for each year over the period 1986 through September 2013. The common equity required returns were based on regulatory commission-authorized returns for gas utility companies. Authorized returns are typically based on expert witnesses' estimates of the contemporary investor-required return.

The second equity risk premium estimate is based on the difference between regulatory commission-authorized returns on common equity and contemporary "A" rated utility bond yields by Moody's. I selected the period 1986 through September 2013 because public utility stocks consistently traded at a premium to book value during that period. This is illustrated on Schedule MPG-7, which shows that the market to book ratio since 1986 for the utility industry was consistently above a multiple of 1.0x. Over this period, regulatory authorized returns were sufficient to support market prices that at least exceeded book value. This is an indication that regulatory authorized returns on common equity supported a utility's ability to issue additional common stock without diluting existing shares. It further demonstrates that utilities were able to access equity markets without a detrimental impact on current shareholders.

Based on this analysis, as shown on Schedule MPG-8, the average indicated equity risk premium over U.S. Treasury bond yields has been 5.22%. Of the 28 observations, 22 indicated risk premiums fall in the range of 4.16% to 6.09%. Since

the risk premium can vary depending upon market conditions and changing investor risk perceptions, I believe using an estimated range of risk premiums provides the best method to measure the current return on common equity using this methodology.

As shown on Schedule MPG-9, the average indicated equity risk premium over contemporary Moody's utility bond yields was 3.81% over the period 1986 through September 2013. The indicated equity risk premium estimates based on this analysis primarily fall in the range of 3.04% to 4.81% over this time period.

Q DO YOU BELIEVE THAT THESE EQUITY RISK PREMIUM ESTIMATES ARE BASED ON A TIME PERIOD THAT IS TOO LONG OR TOO SHORT TO DRAW ACCURATE CONCLUSIONS CONCERNING CONTEMPORARY MARKET CONDITIONS?

A No. The time period I use in this risk premium study is a generally accepted period to develop a risk premium study using "expectational" data.

Contemporary market conditions can change dramatically during the period that rates determined in this proceeding will be in effect. A relatively long period of time where stock valuations reflect premiums to book value is an indication that the authorized returns on equity and the corresponding equity risk premiums were supportive of investors' return expectations and provided utilities access to the equity markets under reasonable terms and conditions. Further, this time period is long enough to smooth abnormal market movement that might distort equity risk premiums. While market conditions and risk premiums do vary over time, this historical time period is a reasonable period to estimate contemporary risk premiums.

Alternatively, studies have recommended that use of "actual achieved investment return data" in a risk premium study should be based on long historical time periods. The studies find that achieved returns over short time periods may not reflect investors' expected returns due to unexpected and abnormal stock price performance. Short-term abnormal actual returns would be smoothed over time and the achieved actual investment returns over long time periods would approximate investors' expected returns. Therefore, it is reasonable to assume that averages of annual achieved returns over long time periods will generally converge on the investors' expected returns.

My risk premium study is based on expectational data, not actual investment returns, and, thus, need not encompass a very long historical time period.

Q BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO ESTIMATE MGE'S COST OF COMMON EQUITY IN THIS PROCEEDING?

A The equity risk premium should reflect the relative market perception of risk in the utility industry today. I have gauged investor perceptions in utility risk today on Schedule MPG-10. On that schedule, I show the yield spread between utility bonds and Treasury bonds over the last 34 years. As shown on this schedule, the average utility bond yield spreads over Treasury bonds for "A" and "Baa" rated utility bonds for this historical period are 1.55% and 1.96%, respectively. The utility bond yield spreads over Treasury bonds for "A" and "Baa" rated utilities during September 2013 are 1.05% and 1.57%, respectively. The current average "A" and "Baa" rated utility bond yield spreads over Treasury bond yields are now lower than the 34-year average spreads.

A current 13-week average "A" rated utility bond yield of 4.75%, when compared to the current Treasury bond yield of 3.81% as shown on Schedule MPG-11, page 1 implies a yield spread of around 1 percentage point. This current utility bond yield spread is lower than the 34-year average spread for "A" utility bonds of 1.55%. Similarly, the current spread for the "Baa" utility yields of 1.40% is lower than the 34-year average spread of 1.96%.

These utility bond yield spreads are clear evidence that the market considers the utility industry to be a relatively low-risk investment and demonstrates that utilities continue to have strong access to capital.

Q HOW DID YOU ESTIMATE MGE'S COST OF COMMON EQUITY WITH THIS RISK PREMIUM MODEL?

A I added a projected long-term Treasury bond yield to my estimated equity risk premium over Treasury yields. The 13-week average 30-year Treasury bond yield, ending January 10, 2014 was 3.81%, as shown on Schedule MPG-11, page 1. *Blue Chip Financial Forecasts* projects the 30-year Treasury bond yield to be 4.40%, and a 10-year Treasury bond yield to be 3.40%.[22] Using the projected 30-year Treasury bond yield of 4.40%, and a Treasury bond risk premium of 4.16% to 6.09%, as developed above, produces an estimated common equity return in the range of 8.56% (4.40% + 4.16%) to 10.49% (4.40% + 6.09%). My risk premium estimates fall in the range of 8.56% to 10.49%.

I next added my equity risk premium over utility bond yields to a current 13-week average yield on "Baa" rated utility bonds for the period ending December 13, 2013 of 5.21%. Adding the utility equity risk premium of 3.04% to

[22] *Blue Chip Financial Forecasts*, January 1, 2014 at 2.

4.81%, as developed above, to a "Baa" rated bond yield of 5.21%, produces a cost of equity in the range of 8.25% (5.21% + 3.04%) to 10.02% (5.21% + 4.81%).

Q WHAT IS YOUR RECOMMENDED RETURN FOR MGE BASED ON YOUR RISK PREMIUM STUDY?

A My recommendation considers both utility security risk and market interest rate risk. Current interest rate spreads suggest the market is embracing utility investments as relatively low-risk investment alternatives. This is clearly evident from the low utility bond spreads relative to Treasury bonds currently compared to the historical time period studied. (See Schedules MPG-10 and MPG-11). Also, the market is pricing "Baa" utility bonds to produce lower yields compared to general corporate "Baa" bonds. On average over time, "Baa" utility bond yields are higher than "Baa" corporate bond yields, but not currently. (*Id*.) All of this supports my conclusion that the utility industry is perceived as a low-risk stable investment.

On the other hand, the Federal Reserve has been procuring long-term Treasury and collateralized bonds in an effort to stimulate the U.S. economy. This stimulus has reduced long-term interest rates. This government stimulus initiative has been reduced and is expected to be suspended in the near future. The suspension of the Federal Reserve's stimulus in long-term interest rate markets could cause long-term market interest rates to increase. I believe there is additional risk in long-term interest rate markets created by this Federal Reserve stimulus policy.

I recommend giving more weight to the high-end of my risk premium results to reflect the greater current market interest rate risk. I propose to provide 70% weight to the high-end of my risk premium estimates and 30% to the low-end of my risk premium estimates. Providing more weight to the high-end risk premium captures the

greater market interest rate risk. This results in a risk premium estimate over Treasury bond yields of 9.91%,[23] and a risk premium estimate over "Baa" utility bond yields of 9.49%.[24]

My risk premium analyses produce a return estimate in the range of 9.49% to 9.91%, with a midpoint of 9.70%.

Capital Asset Pricing Model ("CAPM")

Q PLEASE DESCRIBE THE CAPM.

A The CAPM method of analysis is based upon the theory that the market-required rate of return for a security is equal to the risk-free rate, plus a risk premium associated with the specific security. This relationship between risk and return can be expressed mathematically as follows:

$R_i = R_f + B_i \times (R_m - R_f)$ where:

R_i = Required return for stock i
R_f = Risk-free rate
R_m = Expected return for the market portfolio
B_i = Beta - Measure of the risk for stock

The stock-specific risk term in the above equation is beta. Beta represents the investment risk that cannot be diversified away when the security is held in a diversified portfolio. When stocks are held in a diversified portfolio, firm-specific risks can be eliminated by balancing the portfolio with securities that react in the opposite direction to firm-specific risk factors (e.g., business cycle, competition, product mix, and production limitations).

The risks that cannot be eliminated when held in a diversified portfolio are non-diversifiable risks. Non-diversifiable risks are related to the market in general

[23](.70 x 10.49%) + (.30 x 8.56%) = 9.91%.
[24](.70 x 10.02%) + (.30 x 8.25%) = 9.49%.

and are referred to as systematic risks. Risks that can be eliminated by diversification are regarded as non-systematic risks. In a broad sense, systematic risks are market risks, and non-systematic risks are business risks. The CAPM theory suggests that the market will not compensate investors for assuming risks that can be diversified away. Therefore, the only risk that investors will be compensated for are systematic or non-diversifiable risks. The beta is a measure of the systematic or non-diversifiable risks.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

A The CAPM requires an estimate of the market risk-free rate, the company's beta, and the market risk premium.

Q WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE RATE?

A As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield is 4.40%.[25] The current 30-year Treasury bond yield is 3.81%, as shown on Schedule MPG-11, page 1. I used *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield of 4.40% for my CAPM analysis.

Q WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE OF THE RISK-FREE RATE?

A Treasury securities are backed by the full faith and credit of the United States government, so long-term Treasury bonds are considered to have negligible credit risk. Also, long-term Treasury bonds have an investment horizon similar to that of common stock. As a result, investor-anticipated long-run inflation expectations are

[25] *Blue Chip Financial Forecasts*, January 1, 2014 at 2.

reflected in both common-stock required returns and long-term bond yields. Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate) included in a long-term bond yield is a reasonable estimate of the nominal risk-free rate included in common stock returns.

Treasury bond yields, however, do include risk premiums related to unanticipated future inflation and interest rates. A Treasury bond yield is not a risk-free rate. Risk premiums related to unanticipated inflation and interest rates are systematic or market risks. Consequently, for companies with betas less than 1.0, using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis can produce an overstated estimate of the CAPM return.

Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?

A As shown on Schedule MPG-12, the proxy group average *Value Line* beta estimate is 0.73.

Q HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?

A I derived two market risk premium estimates, a forward-looking estimate and one based on a long-term historical average.

The forward-looking estimate was derived by estimating the expected return on the market (as represented by the S&P 500) and subtracting the risk-free rate from this estimate. I estimated the expected return on the S&P 500 by adding an expected inflation rate to the long-term historical arithmetic average real return on the market. The real return on the market represents the achieved return above the rate of inflation.

Morningstar's *Stocks, Bonds, Bills and Inflation 2013 Classic Yearbook* estimates the historical arithmetic average real market return over the period 1926 to 2012 as 8.7%.[26] A current consensus analysts' inflation projection, as measured by the Consumer Price Index, is 2.1%.[27] Using these estimates, the expected market return is 10.98%.[28] The market risk premium then is the difference between the 10.98% expected market return, and my 4.40% risk-free rate estimate, or approximately 6.60%.

The historical estimate of the market risk premium was also estimated by Morningstar in *Stocks, Bonds, Bills and Inflation 2013 Classic Yearbook*. Over the period 1926 through 2012, Morningstar's study estimated that the arithmetic average of the achieved total return on the S&P 500 was 11.8%,[29] and the total return on long-term Treasury bonds was 6.1%.[30] The indicated market risk premium is 5.7% (11.8% - 6.1% = 5.7%). The average of my market risk premium estimates is 6.2% (6.6% to 5.7%).

Q HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARE TO THAT ESTIMATED BY MORNINGSTAR?

A Morningstar's analysis indicates that a market risk premium falls somewhere in the range of 6.0% to 6.7%. My market risk premium falls in the range of 5.7% to 6.6%. My average market risk premium of 6.2% is within Morningstar's range.

Morningstar estimates a forward-looking market risk premium based on actual achieved data from the historical period of 1926 through 2012. Using this data,

[26] *Morningstar, Inc., Ibbotson SBBI 2013 Classic Yearbook*; Market Results for Stocks, Bonds, Bills, and Inflation 1926-2012 at 88.
[27] *Blue Chip Financial Forecasts*, January 1, 2014 at 2.
[28] { [(1 + 0.087) ∗ (1 + 0.021)] – 1 } ∗ 100.
[29] *Morningstar, Inc. Ibbotson SBBI 2013 Classic Yearbook* at 87.
[30] *Id*.

Morningstar estimates a market risk premium derived from the total return on large company stocks (S&P 500), less the income return on Treasury bonds. The total return includes capital appreciation, dividend or coupon reinvestment returns, and annual yields received from coupons and/or dividend payments. The income return, in contrast, only reflects the income return received from dividend payments or coupon yields. Morningstar argues that the income return is the only true risk-free rate associated with Treasury bonds and is the best approximation of a truly risk-free rate.[31] I disagree with this assessment from Morningstar, because it does not reflect a true investment option available to the marketplace and therefore does not produce a legitimate estimate of the expected premium of investing in the stock market versus that of Treasury bonds. Nevertheless, I will use Morningstar's conclusion to show the reasonableness of my market risk premium estimates.

Morningstar's range is based on several methodologies. First, Morningstar estimates a market risk premium of 6.7% based on the difference between the total market return on common stocks (S&P 500) less the income return on Treasury bond investments. Second, Morningstar found that if the New York Stock Exchange (the "NYSE") was used as the market index rather than the S&P 500, that the market risk premium would be 6.5%, not 6.7%. Third, if only the two deciles of the largest companies included in the NYSE were considered, the market risk premium would be 6.0%.[32]

Finally, Morningstar found that the 6.7% market risk premium based on the S&P 500 was influenced by an abnormal expansion of price-to-earnings ("P/E") ratios relative to earnings and dividend growth during the period 1980 through 2001.

[31] *Morningstar, Inc., Ibbotson SBBI 2013 Valuation Yearbook: Market Results for Stocks, Bonds, Bills, and Inflation 1926-2012* at 55.

[32] Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. *Id.* at 54.

Morningstar believes this abnormal P/E expansion is not sustainable.[33] Therefore, Morningstar adjusted this market risk premium estimate to normalize the growth in the P/E ratio to be more in line with the growth in dividends and earnings. Based on this alternative methodology, Morningstar published a long-horizon supply-side market risk premium of 6.0%.[34]

Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

A As shown on Schedule MPG-13, based on Morningstar's market risk premium of 6.7%, a risk-free rate of 4.40%, and a beta of 0.73, my CAPM analysis produces a return of 9.26%.

This CAPM estimate reflects a projected risk-free rate that is approximately 50 basis points higher than the current long-term risk-free rate as proxied by the U.S. Treasury security. Using this projected Treasury bond yield largely captures the additional risk in the marketplace related to the uncertainty of long-term interest rates after the Federal Reserve discontinues its economic stimulus intervention.

Return on Equity Summary

Q BASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO YOU RECOMMEND FOR MGE?

A Based on my analyses, I estimate MGE's current market cost of equity to be 9.35%.

[33] *Morningstar, Inc., Ibbotson SBBI 2013 Valuation Yearbook: Market Results for Stocks, Bonds, Bills, and Inflation 1926-2012* at 54.
[34] *Id*.

TABLE 4

Return on Common Equity Summary

Description	Results
DCF	9.00%
Risk Premium	9.70%
CAPM	9.26%

My recommended return on common equity of 9.35% is the midpoint of my recommended range of 9.00% to 9.70%. My recommended return on equity estimates reflect the current market interest rate risk and equity investment risk as described in this testimony.

Financial Integrity

Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN INVESTMENT GRADE BOND RATING FOR MGE?

A Yes. I have reached this conclusion by comparing the key credit rating financial ratios for MGE, at my proposed return on equity and proposed capital structure, to S&P's benchmark financial ratios using S&P's new credit metric ranges.

Q PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT METRIC METHODOLOGY.

A S&P publishes a matrix of financial ratios that correspond to its assessment of the business risk of the utility company and related bond rating. On May 27, 2009, S&P

expanded its matrix criteria[35] by including additional business and financial risk categories. Based on S&P's most recent credit matrix, the business risk profile categories are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and "Vulnerable." Most utilities have a business risk profile of "Excellent" or "Strong." The financial risk profile categories are "Minimal," "Modest," "Intermediate," "Significant," "Aggressive," and "Highly Leveraged." Most of the utilities have a financial risk profile of "Aggressive." Laclede Gas has an "Excellent" business risk profile and a "Significant" financial risk profile.

Q PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN ITS CREDIT RATING REVIEW.

A S&P evaluates a utility's credit rating based on an assessment of its financial and business risks. A combination of financial and business risks equates to the overall assessment of MGE's total credit risk exposure. S&P publishes a matrix of financial ratios that defines the level of financial risk as a function of the level of business risk.

S&P publishes ranges for three primary financial ratios that it uses as guidance in its credit review for utility companies. The three primary financial ratio benchmarks it relies on in its credit rating process include: (1) Total Debt to Total Capital; (2) Debt to Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA"); and (3) Funds From Operations ("FFO") to Total Debt.[36]

[35] S&P updated its 2008 credit metric guidelines in 2009, and incorporated utility metric benchmarks with the general corporate rating metrics. *Standard & Poor's RatingsDirect*: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

[36] *Standard & Poor's RatingsDirect*: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

Q HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?

A I calculated each of S&P's financial ratios based on MGE's cost of service for its retail jurisdictional operations. While S&P would normally look at total consolidated MGE financial ratios in its credit review process, my investigation in this proceeding is not the same as S&P's. I am attempting to judge the reasonableness of my proposed cost of capital for rate-setting in MGE's retail regulated utility operations. Hence, I am attempting to determine whether my proposed rate of return will in turn support cash flow metrics, balance sheet strength, and earnings that will support an investment grade bond rating and MGE's financial integrity.

Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR MGE.

A The S&P financial metric calculations for MGE at a 9.35% return are developed on Schedule MPG-14, page 1.

MGE's adjusted total debt ratio is approximately 55%. This is within the "Aggressive" utility guideline range of 50% to 60%. This total debt ratio will support an investment grade bond rating.

As shown on Schedule MPG-14, page 1, column 1, based on an equity return of 9.35%, MGE will be provided an opportunity to produce a debt to EBITDA ratio of 3.6x. This is within S&P's "Significant" guideline range of 3.0x to 4.0x.[37] This ratio also supports an investment grade credit rating.

[37] *Standard & Poor's RatingsDirect*: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009 at 4.

Finally, MGE's retail operations FFO to total debt coverage at a 9.35% equity return is 18%, which is within S&P's "Aggressive" metric guideline range of 12% to 20%. The FFO/total debt ratio will support an investment grade bond rating.

At my recommended return on equity of 9.35% and proposed capital structure, MGE's financial credit metrics are supportive of its current investment grade utility bond rating.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes, it does.

Qualifications of Michael P. Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a Managing Principal with Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from Southern Illinois University, and in 1986, I received a Masters Degree in Business Administration with a concentration in Finance from the University of Illinois at Springfield. I have also completed several graduate level economics courses.

In August of 1983, I accepted an analyst position with the Illinois Commerce Commission ("ICC"). In this position, I performed a variety of analyses for both formal and informal investigations before the ICC, including: marginal cost of energy, central dispatch, avoided cost of energy, annual system production costs, and working capital. In October of 1986, I was promoted to the position of Senior Analyst. In this position, I assumed the additional responsibilities of technical leader on projects, and my areas of responsibility were expanded to include utility financial modeling and financial analyses.

In 1987, I was promoted to Director of the Financial Analysis Department. In this position, I was responsible for all financial analyses conducted by the Staff. Among other things, I conducted analyses and sponsored testimony before the ICC on rate of return, financial integrity, financial modeling and related issues. I also supervised the development of all Staff analyses and testimony on these same issues. In addition, I supervised the Staff's review and recommendations to the Commission concerning utility plans to issue debt and equity securities.

In August of 1989, I accepted a position with Merrill-Lynch as a financial consultant. After receiving all required securities licenses, I worked with individual investors and small businesses in evaluating and selecting investments suitable to their requirements.

In September of 1990, I accepted a position with Drazen-Brubaker & Associates, Inc. ("DBA"). In April 1995, the firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA principals and Staff. Since 1990, I have performed various analyses and sponsored testimony on cost of capital, cost/benefits of utility mergers and acquisitions, utility reorganizations, level of operating expenses and rate base, cost of service studies, and analyses relating to industrial jobs and economic development. I also participated in a study used to revise the financial policy for the municipal utility in Kansas City, Kansas.

At BAI, I also have extensive experience working with large energy users to distribute and critically evaluate responses to requests for proposals ("RFPs") for electric, steam, and gas energy supply from competitive energy suppliers. These analyses include the evaluation of gas supply and delivery charges, cogeneration and/or combined cycle unit feasibility studies, and the evaluation of third-party asset/supply management agreements. I have participated in rate cases on rate

design and class cost of service for electric, natural gas, water and wastewater utilities. I have also analyzed commodity pricing indices and forward pricing methods for third party supply agreements, and have also conducted regional electric market price forecasts.

In addition to our main office in St. Louis, the firm also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

A Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of service and other issues before the Federal Energy Regulatory Commission and numerous state regulatory commissions including: Arkansas, Arizona, California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Missouri, Montana, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and before the provincial regulatory boards in Alberta and Nova Scotia, Canada. I have also sponsored testimony before the Board of Public Utilities in Kansas City, Kansas; presented rate setting position reports to the regulatory board of the municipal utility in Austin, Texas, and Salt River Project, Arizona, on behalf of industrial customers; and negotiated rate disputes for industrial customers of the Municipal Electric Authority of Georgia in the LaGrange, Georgia district.

Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR ORGANIZATIONS TO WHICH YOU BELONG.

A I earned the designation of Chartered Financial Analyst ("CFA") from the CFA Institute. The CFA charter was awarded after successfully completing three examinations which covered the subject areas of financial accounting, economics, fixed income and equity valuation and professional and ethical conduct. I am a member of the CFA Institute's Financial Analyst Society.

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Missouri Gas Energy

Rate of Return

(September 30, 2013)

Line	Description	Weight[1] (1)	Cost (2)	Weighted Cost (3)
1	Long-Term Debt	54.98%	4.35%	2.39%
2	Common Equity	45.02%	**9.35%**	4.21%
3	**Total**	**100.00%**		**6.60%**

Source:

[1] Schedule MPG-1, page 2.

Missouri Gas Energy

Capital Structure - Regulatory
($000)

Laclede Group[1]

	Description	Financial (9/30/2013) (1)	Remove Goodwill Equity (2)	Regulatory Balance (3)	Weight (4)
1	Common Equity	$ 1,046,282	$ (247,078)	$ 799,204	46.68%
2	Long-Term Debt (including current portion)	912,712		912,712	53.32%
3	Capitalization	$ 1,958,994		$ 1,711,916	100.00%

Laclede Gas Company[2]

	Description	Financial (9/30/2013)	Remove Goodwill Equity	Regulatory Balance	Weight
4	Common Equity	$ 973,930	$ (247,078)	$ 726,852	45.02%
5	Long-Term Debt (including current portion)	887,712		887,712	54.98%
6	Capitalization	$ 1,861,642		$ 1,614,564	100.00%

Sources:

[1] Laclede Group, Inc., SEC 10-K, downloaded on January 17, 2014.

[2] Laclede Gas Co., SEC 10-K, downloaded on January 17, 2014.

Missouri Gas Energy

Proxy Group

Line	Company	Credit Ratings[1] S&P (1)	Credit Ratings[1] Moody's (2)	Common Equity Ratios SNL[1] (3)	Common Equity Ratios Value Line[2] (4)	S&P Business Risk Score[3] (5)
1	AGL Resources Inc.	BBB+	Baa1	40.8%	50.5%	Strong
2	Atmos Energy Corporation	A-	Baa1	48.3%	54.7%	Excellent
3	New Jersey Resources Corporation	A	Aa3	50.0%	60.8%	Excellent
4	Northwest Natural Gas Company	A+	A3	45.2%	51.5%	Excellent
5	Piedmont Natural Gas Company, Inc.	A	A3	43.4%	51.3%	Excellent
6	South Jersey Industries, Inc.	BBB+	N/A	43.3%	55.0%	Strong
7	Southwest Gas Corporation	A-	Baa1	49.9%	50.8%	Excellent
8	WGL Holdings, Inc.	A+	N/A	59.5%	67.5%	Excellent
9	**Average**	**A**	**A3**	**47.5%**	**55.3%**	**Excellent**
10	Laclede Gas (Missouri Gas Energy)	**A-**	**Baa2**		**51.6%/45.0%[4,5]**	Excellent

Sources:

[1] SNL Financial, Downloaded on January 13, 2014.

[2] *The Value Line Investment Survey,* December 6, 2013.

[3] *S&P RatingsDirect:* "U.S. Regulated Utilities, Strongest To Weakest," July 30, 2013.

[4] Schedule GWB-2.

[5] Schedule MPG-1, page 2.

Missouri Gas Energy

Consensus Analysts' Growth Rates

Line	Company	Zacks Estimated Growth %[1] (1)	Zacks Number of Estimates (2)	SNL Estimated Growth %[2] (3)	SNL Number of Estimates (4)	Reuters Estimated Growth %[3] (5)	Reuters Number of Estimates (6)	Average of Growth Rates (7)
1	AGL Resources Inc.	5.00%	N/A	5.40%	3	4.00%	1	4.80%
2	Atmos Energy Corporation	6.50%	N/A	7.50%	2	7.75%	2	7.25%
3	New Jersey Resources Corporation	4.00%	N/A	2.90%	3	2.50%	2	3.13%
4	Northwest Natural Gas Company	4.00%	N/A	5.00%	2	4.00%	1	4.33%
5	Piedmont Natural Gas Company, Inc.	5.00%	N/A	4.70%	3	4.00%	1	4.57%
6	South Jersey Industries, Inc.	6.00%	N/A	8.00%	1	N/A	N/A	7.00%
7	Southwest Gas Corporation	3.40%	N/A	3.00%	3	2.55%	2	2.98%
8	WGL Holdings, Inc.	4.60%	N/A	4.30%	3	4.60%	3	4.50%
9	**Average**	**4.81%**	**N/A**	**5.10%**	**3**	**4.20%**	**2**	**4.82%**

Sources:

[1] Zacks Elite, http://www.zackselite.com/, downloaded on January 13, 2014.

[2] SNL Interactive, http://www.snl.com/, downloaded on January 13, 2014.

[3] Reuters, http://www.reuters.com/, downloaded on January 13, 2014.

Missouri Gas Energy

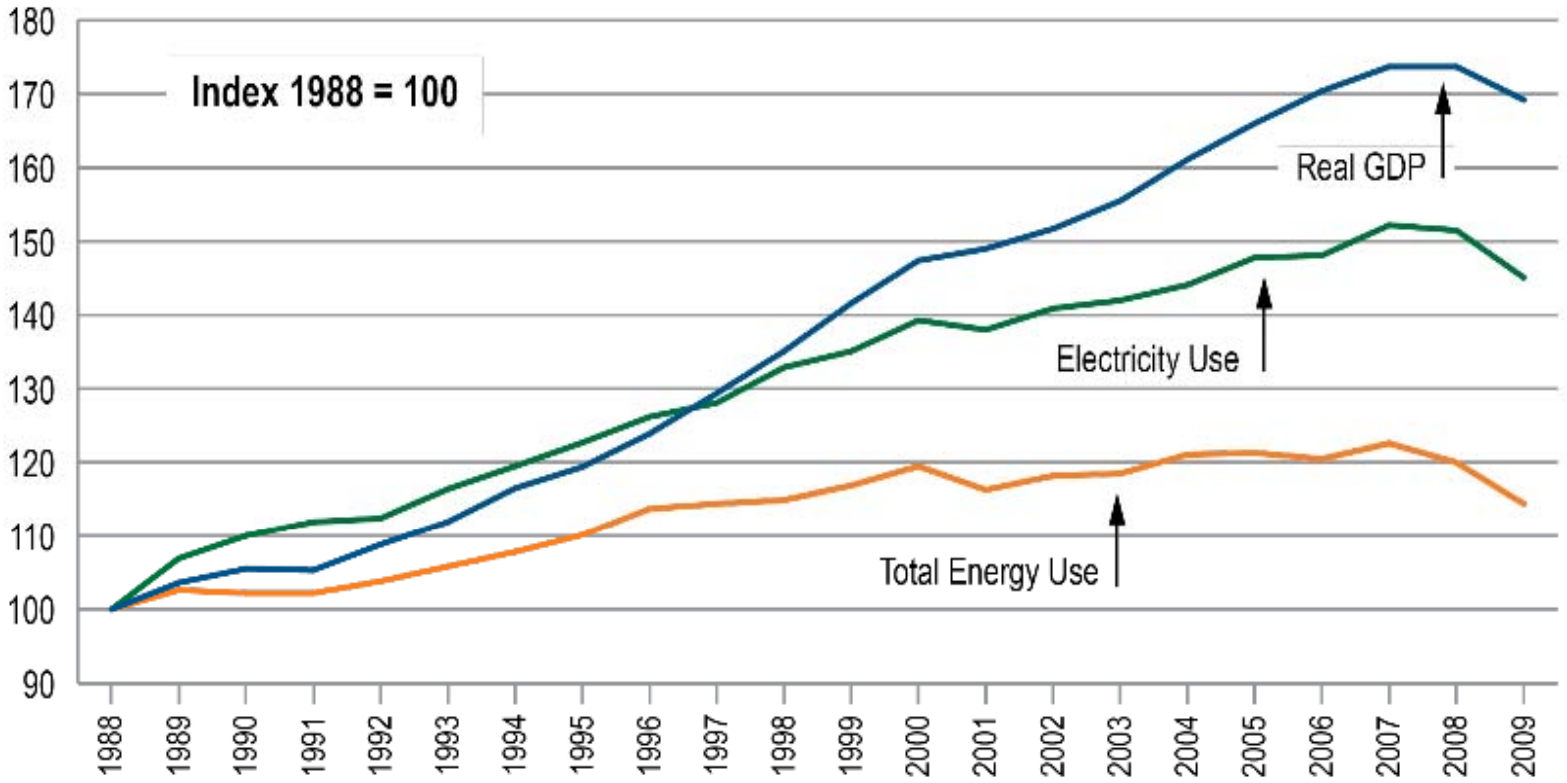
Constant Growth DCF Model
(Consensus Analysts' Growth Rates)

Line	Company	13-Week AVG Stock Price[1] (1)	Analysts' Growth[2] (2)	Annualized Dividend[3] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	AGL Resources Inc.	$46.73	4.80%	$1.88	4.22%	9.02%
2	Atmos Energy Corporation	$44.66	7.25%	$1.48	3.55%	10.80%
3	New Jersey Resources Corporation	$45.35	3.13%	$1.68	3.82%	6.95%
4	Northwest Natural Gas Company	$42.66	4.33%	$1.84	4.50%	8.83%
5	Piedmont Natural Gas Company, Inc.	$33.07	4.57%	$1.24	3.92%	8.49%
6	South Jersey Industries, Inc.	$56.77	7.00%	$3.66	6.90%	13.90%
7	Southwest Gas Corporation	$53.52	2.98%	$1.32	2.54%	5.52%
8	WGL Holdings, Inc.	$41.09	4.50%	$1.68	4.27%	8.77%
9	**Average**	**$45.48**	**4.82%**	**$1.85**	**4.22%**	**9.04%**
10	**Median**					**8.80%**

Sources:
[1] SNL Financial, Downloaded on January 13, 2013.
[2] Schedule MPG-3.
[3] *The Value Line Investment Survey,* December 6, 2013.

Missouri Gas Energy

Electricity Sales Are Linked to U.S. Economic Growth



Note:
1988 represents the base year. Graph depicts increases or decreases from the base year.

Sources:
U.S. Department of Energy, Energy Information Administration.
Edison Electric Institute, http://www.eei.org.

Missouri Gas Energy

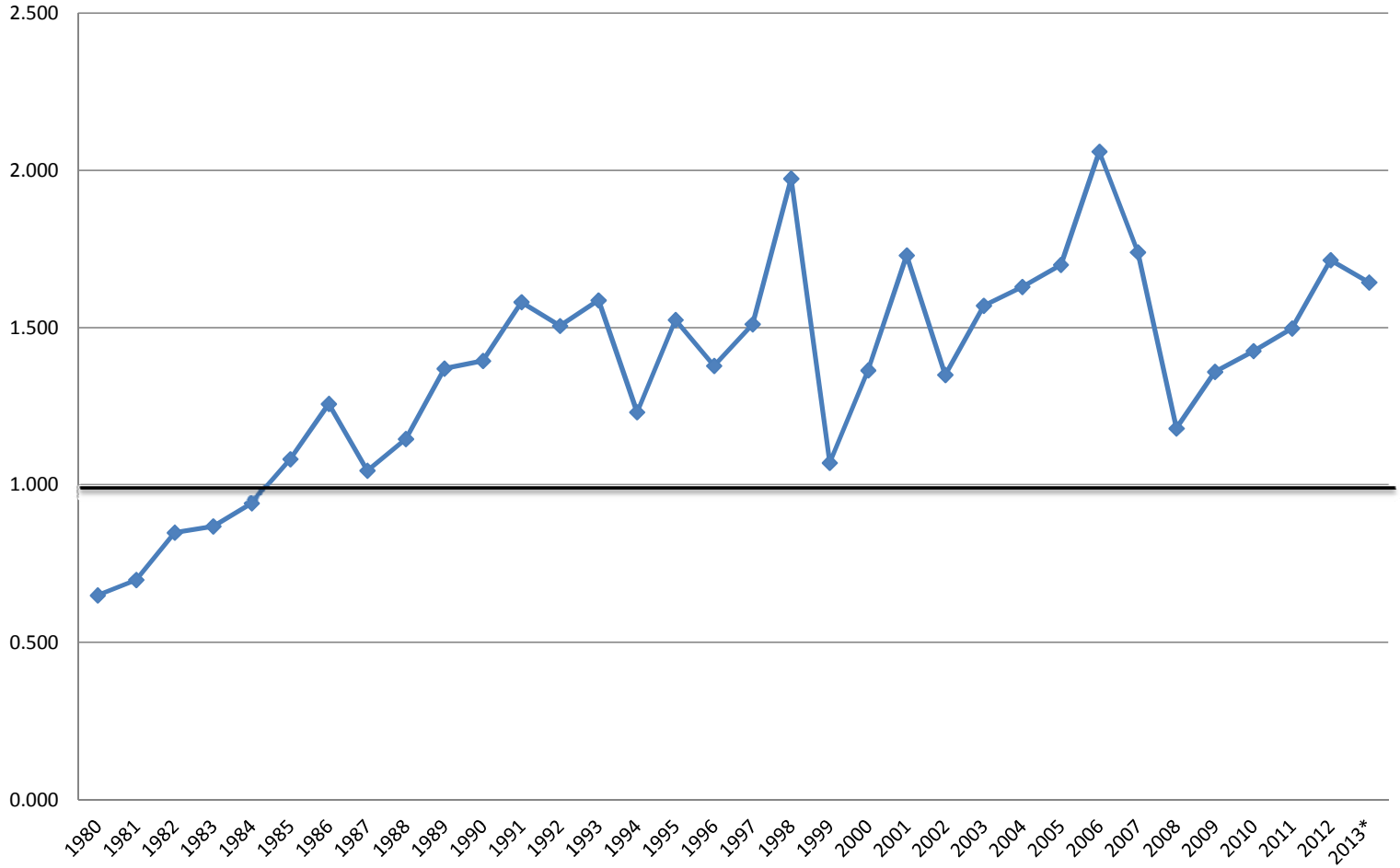
Multi-Stage Growth DCF Model

Line	Company	13-Week AVG Stock Price[1] (1)	Annualized Dividend[2] (2)	First Stage Growth[3] (3)	Second Stage Growth Year 6 (4)	Year 7 (5)	Year 8 (6)	Year 9 (7)	Year 10 (8)	Third Stage Growth[4] (9)	Multi-Stage Growth DCF (10)
1	AGL Resources Inc.	$46.73	$1.88	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	4.80%	9.01%
2	Atmos Energy Corporation	$44.66	$1.48	7.25%	6.84%	6.43%	6.03%	5.62%	5.21%	4.80%	8.85%
3	New Jersey Resources Corporation	$45.35	$1.68	3.13%	3.41%	3.69%	3.97%	4.24%	4.52%	4.80%	8.28%
4	Northwest Natural Gas Company	$42.66	$1.84	4.33%	4.41%	4.49%	4.57%	4.64%	4.72%	4.80%	9.19%
5	Piedmont Natural Gas Company, Inc.	$33.07	$1.24	4.57%	4.61%	4.64%	4.68%	4.72%	4.76%	4.80%	8.67%
6	South Jersey Industries, Inc.	$56.77	$3.66	7.00%	6.63%	6.27%	5.90%	5.53%	5.17%	4.80%	12.46%
7	Southwest Gas Corporation	$53.52	$1.32	2.98%	3.29%	3.59%	3.89%	4.19%	4.50%	4.80%	7.06%
8	WGL Holdings, Inc.	$41.09	$1.68	4.50%	4.55%	4.60%	4.65%	4.70%	4.75%	4.80%	9.00%
9	**Average**	**$45.48**	**$1.85**	**4.82%**	**4.82%**	**4.81%**	**4.81%**	**4.81%**	**4.80%**	**4.80%**	**9.06%**
10	**Median**										**8.93%**

Sources:
[1] Schedule MPG-4.
[2] *The Value Line Investment Survey,* December 6, 2013.
[3] Schedule MPG-3.
[4] *Blue Chip Financial Forecasts,* December 1, 2013 at 14.

Missouri Gas Energy

Common Stock Market/Book Ratio



Source:
AUS Utility Reports, various dates.

* Includes data through September 30, 2013.

Missouri Gas Energy

Equity Risk Premium - Treasury Bond

Line	Year	Authorized Gas Returns[1] (1)	Treasury Bond Yield[2] (2)	Indicated Risk Premium (3)
1	1986	13.46%	7.80%	5.66%
2	1987	12.74%	8.58%	4.16%
3	1988	12.85%	8.96%	3.89%
4	1989	12.88%	8.45%	4.43%
5	1990	12.67%	8.61%	4.06%
6	1991	12.46%	8.14%	4.32%
7	1992	12.01%	7.67%	4.34%
8	1993	11.35%	6.60%	4.75%
9	1994	11.35%	7.37%	3.98%
10	1995	11.43%	6.88%	4.55%
11	1996	11.19%	6.70%	4.49%
12	1997	11.29%	6.61%	4.68%
13	1998	11.51%	5.58%	5.93%
14	1999	10.66%	5.87%	4.79%
15	2000	11.39%	5.94%	5.45%
16	2001	10.95%	5.49%	5.46%
17	2002	11.03%	5.43%	5.60%
18	2003	10.99%	4.96%	6.03%
19	2004	10.59%	5.05%	5.54%
20	2005	10.46%	4.65%	5.81%
21	2006	10.43%	4.99%	5.44%
22	2007	10.24%	4.83%	5.41%
23	2008	10.37%	4.28%	6.09%
24	2009	10.19%	4.07%	6.12%
25	2010	10.08%	4.25%	5.83%
26	2011	9.92%	3.91%	6.01%
27	2012	9.94%	2.92%	7.02%
28	2013 [3]	9.51%	3.33%	6.18%
29	**Average**	**11.21%**	**6.00%**	**5.22%**

Sources:

[1] Regulatory Research Associates, Inc., *Regulatory Focus,* Jan. 85 - Dec. 06, and July 9, 2013, which are subject to a 200 basis point adjustment for certain generation assets.

[2] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

[3] The data includes the period Jan - Sep 2013.

Missouri Gas Energy

Equity Risk Premium - Utility Bond

Line	Year	Authorized Gas Returns[1] (1)	Average "A" Rated Utility Bond Yield[2] (2)	Indicated Risk Premium (3)
1	1986	13.46%	9.58%	3.88%
2	1987	12.74%	10.10%	2.64%
3	1988	12.85%	10.49%	2.36%
4	1989	12.88%	9.77%	3.11%
5	1990	12.67%	9.86%	2.81%
6	1991	12.46%	9.36%	3.10%
7	1992	12.01%	8.69%	3.32%
8	1993	11.35%	7.59%	3.76%
9	1994	11.35%	8.31%	3.04%
10	1995	11.43%	7.89%	3.54%
11	1996	11.19%	7.75%	3.44%
12	1997	11.29%	7.60%	3.69%
13	1998	11.51%	7.04%	4.47%
14	1999	10.66%	7.62%	3.04%
15	2000	11.39%	8.24%	3.15%
16	2001	10.95%	7.76%	3.19%
17	2002	11.03%	7.37%	3.66%
18	2003	10.99%	6.58%	4.41%
19	2004	10.59%	6.16%	4.43%
20	2005	10.46%	5.65%	4.81%
21	2006	10.43%	6.07%	4.36%
22	2007	10.24%	6.07%	4.17%
23	2008	10.37%	6.53%	3.84%
24	2009	10.19%	6.04%	4.15%
25	2010	10.08%	5.46%	4.62%
26	2011	9.92%	5.04%	4.88%
27	2012	9.94%	4.13%	5.81%
28	2013 [3]	9.51%	4.38%	5.13%
29	**Average**	**11.21%**	**7.40%**	**3.81%**

Sources:

[1] Regulatory Research Associates, Inc., *Regulatory Focus,* Jan. 85 - Dec. 06, and July 9, 2013, which are subject to a 200 basis point adjustment for certain generation assets.

[2] Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields from 2010-2013 were obtained from http://credittrends.moodys.com/.

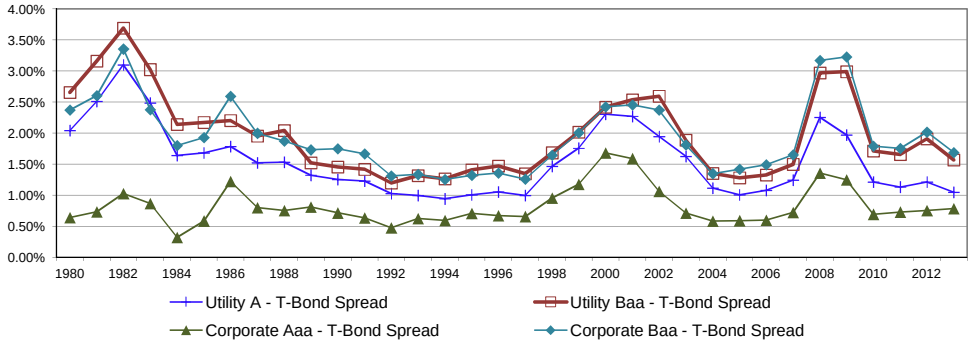
[3] The data includes the period Jan - Sep 2013.

Missouri Gas Energy

Bond Yield Spreads

Line	Year	T-Bond Yield[1] (1)	Public Utility Bond A[2] (2)	Public Utility Bond Baa[2] (3)	Public Utility Bond A-T-Bond Spread (4)	Public Utility Bond Baa-T-Bond Spread (5)	Corporate Bond Aaa[1] (6)	Corporate Bond Baa[1] (7)	Corporate Bond Aaa-T-Bond Spread (8)	Corporate Bond Baa-T-Bond Spread (9)	Utility to Corporate Baa Spread (10)	Utility to Corporate A-Aaa Spread (11)
1	1980	11.30%	13.34%	13.95%	2.04%	2.65%	11.94%	13.67%	0.64%	2.37%	0.28%	1.40%
2	1981	13.44%	15.95%	16.60%	2.51%	3.16%	14.17%	16.04%	0.73%	2.60%	0.56%	1.78%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	0.34%	2.07%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.38%	0.65%	1.62%
5	1984	12.39%	14.03%	14.53%	1.64%	2.14%	12.71%	14.19%	0.32%	1.80%	0.34%	1.32%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	0.24%	1.10%
7	1986	7.80%	9.58%	10.00%	1.78%	2.20%	9.02%	10.39%	1.22%	2.59%	-0.39%	0.56%
8	1987	8.58%	10.10%	10.53%	1.52%	1.95%	9.38%	10.58%	0.80%	2.00%	-0.05%	0.72%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.17%	0.78%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	-0.21%	0.51%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	-0.29%	0.54%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.67%	-0.25%	0.59%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	-0.12%	0.55%
14	1993	6.60%	7.59%	7.91%	0.99%	1.31%	7.22%	7.93%	0.62%	1.33%	-0.02%	0.37%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.01%	0.35%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%	0.30%
17	1996	6.70%	7.75%	8.17%	1.05%	1.47%	7.37%	8.05%	0.67%	1.35%	0.12%	0.38%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.66%	1.26%	0.09%	0.34%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.04%	0.51%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.18%	2.01%	0.01%	0.58%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	-0.01%	0.62%
22	2001	5.49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.45%	0.08%	0.68%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.22%	0.88%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.08%	0.91%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.35%	0.00%	0.53%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.42%	-0.14%	0.41%
27	2006	4.99%	6.07%	6.32%	1.08%	1.32%	5.59%	6.48%	0.60%	1.49%	-0.16%	0.48%
28	2007	4.83%	6.07%	6.33%	1.24%	1.50%	5.56%	6.48%	0.72%	1.65%	-0.15%	0.52%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	-0.20%	0.90%
30	2009	4.07%	6.04%	7.06%	1.97%	2.99%	5.31%	7.30%	1.24%	3.23%	-0.24%	0.72%
31	2010	4.25%	5.46%	5.96%	1.21%	1.71%	4.94%	6.04%	0.69%	1.79%	-0.08%	0.52%
32	2011	3.91%	5.04%	5.56%	1.13%	1.65%	4.64%	5.66%	0.73%	1.75%	-0.10%	0.40%
33	2012	2.92%	4.13%	4.83%	1.21%	1.91%	3.67%	4.94%	0.75%	2.01%	-0.11%	0.46%
34	2013 [3]	3.33%	4.38%	4.90%	1.05%	1.57%	4.12%	5.02%	0.78%	1.68%	-0.11%	0.27%
35	**Average**	**7.05%**	**8.60%**	**9.02%**	**1.55%**	**1.96%**	**7.88%**	**9.00%**	**0.82%**	**1.94%**	**0.02%**	**0.73%**

Yield Spreads
Treasury Vs. Corporate & Treasury Vs. Utility



Sources:

[1] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.

[2] Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields from 2010-2013 were obtained from http://credittrends.moodys.com/.

[3] The data includes the period Jan - Sep 2013.

Missouri Gas Energy

Treasury and Utility Bond Yields

Line	Date	Treasury Bond Yield[1] (1)	"A" Rated Utility Bond Yield[2] (2)	"Baa" Rated Utility Bond Yield[2] (3)
1	01/10/14	3.80%	4.65%	5.11%
2	01/03/14	3.93%	4.81%	5.23%
3	12/27/13	3.94%	4.82%	5.24%
4	12/20/13	3.82%	4.73%	5.14%
5	12/13/13	3.88%	4.80%	5.25%
6	12/06/13	3.90%	4.86%	5.33%
7	11/29/13	3.82%	4.76%	5.22%
8	11/22/13	3.84%	4.79%	5.25%
9	11/15/13	3.80%	4.79%	5.27%
10	11/08/13	3.84%	4.83%	5.32%
11	11/01/13	3.69%	4.70%	5.15%
12	10/25/13	3.60%	4.59%	5.06%
13	10/18/13	3.65%	4.66%	5.13%
14	**Average**	**3.81%**	**4.75%**	**5.21%**
15	**Spread To Treasury**		**0.94%**	**1.40%**

Sources:

[1] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.

[2] http://credittrends.moodys.com/.

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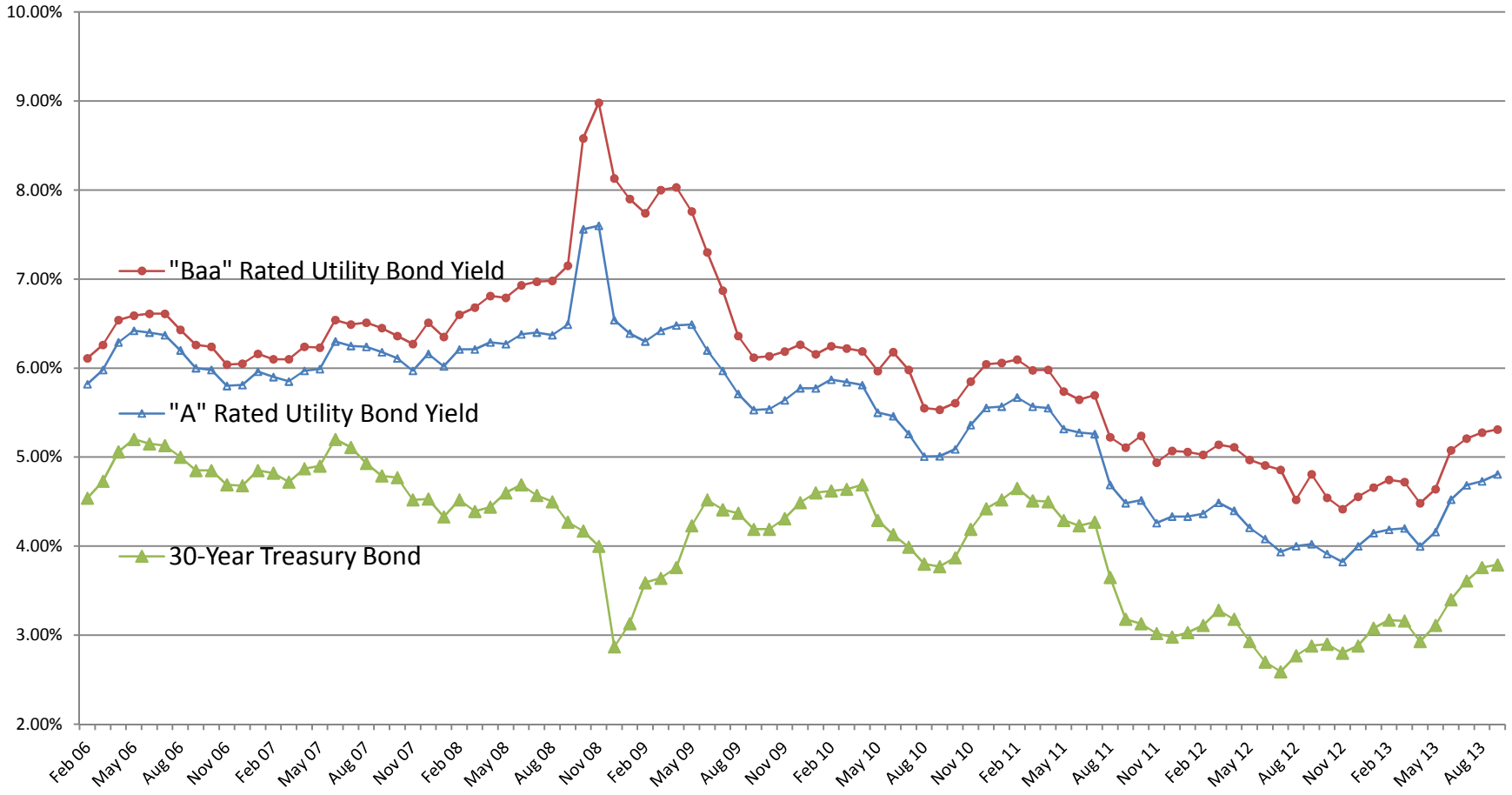
Trends in Bond Yields



Sources:
Merchant Bond Record.
www.moodys.com, Bond Yields and Key Indicators.
St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

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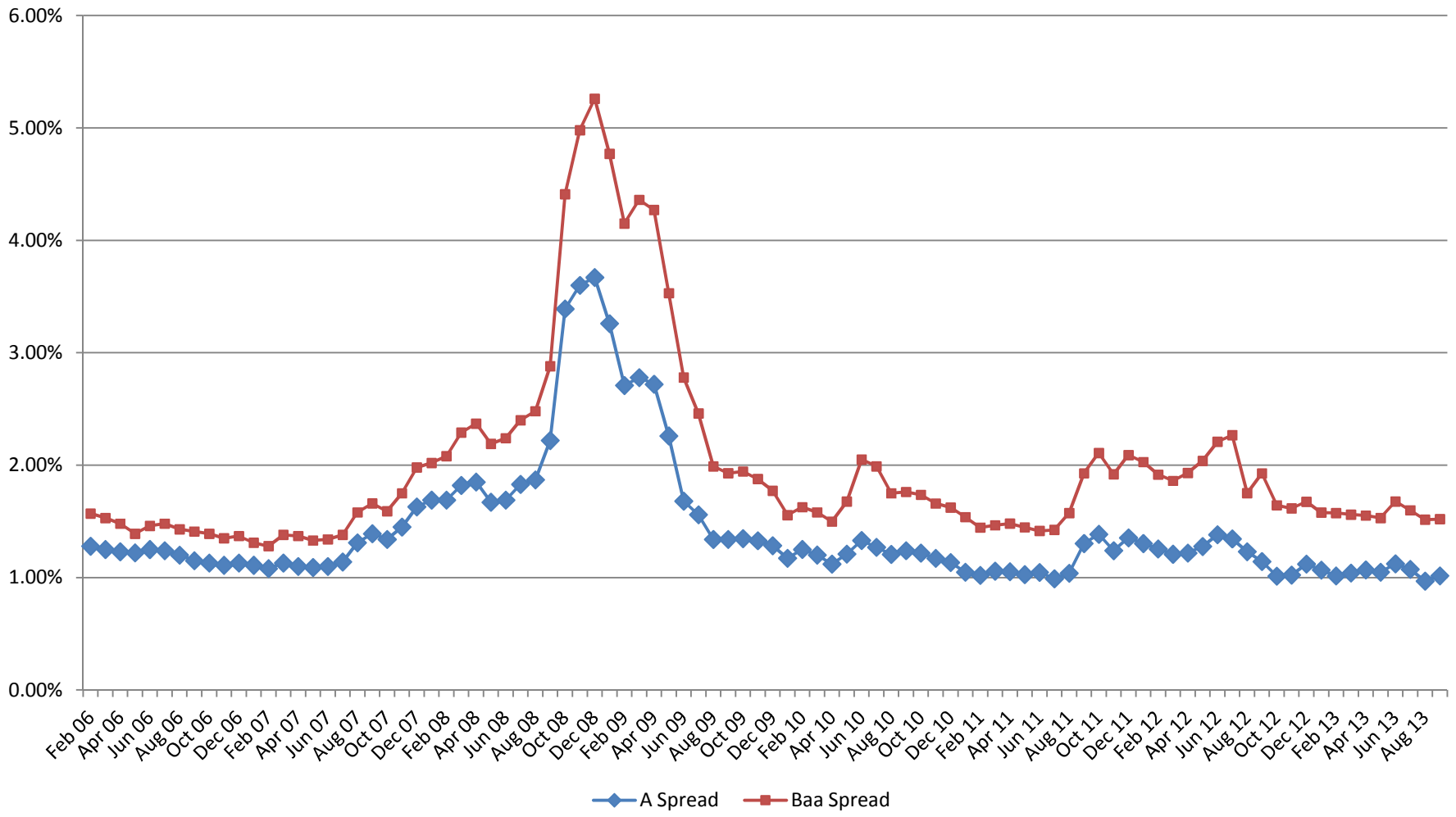
Yield Spread Between Utility Bonds and 30-Year Treasury Bonds



Sources:
Merchant Bond Record.
www.moodys.com, Bond Yields and Key Indicators.
St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

Missouri Gas Energy

Value Line Beta

Line	Company	Beta
1	AGL Resources Inc.	0.75
2	Atmos Energy Corporation	0.80
3	New Jersey Resources Corporation	0.70
4	Northwest Natural Gas Company	0.65
5	Piedmont Natural Gas Company, Inc.	0.75
6	South Jersey Industries, Inc.	0.70
7	Southwest Gas Corporation	0.80
8	WGL Holdings, Inc.	0.65
9	**Average**	**0.73**

Source:
The Value Line Investment Survey,
December 6, 2013.

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CAPM Return

Line	Description	Market Risk Premium
1	Risk-Free Rate[1]	4.40%
2	Risk Premium[2]	6.70%
3	Beta[3]	0.73
4	**CAPM**	**9.26%**

Sources:

[1] *Blue Chip Financial Forecasts*; January 1, 2014, at 2.

[2] Morningstar, Inc. *Ibbotson SBBI 2013 Classic Yearbook* at 88, and Morningstar, Inc. *Ibbotson SBBI 2013 Valuation Yearbook* at 54 and 66.

[3] Schedule MPG-12.

Missouri Gas Energy

Standard & Poor's Credit Metrics

Line	Description	Retail Cost of Service Amount (1)	S&P Benchmark[1/2] Significant (2)	S&P Benchmark[1/2] Aggressive (3)	Reference (4)
1	Rate Base (Gas)	$ 565,169,190			Noack Direct, Schedule A-1
2	Weighted Common Return	4.21%			Page 2, Line 2, Col. 3.
3	Pre-Tax Rate of Return	9.22%			Page 2, Line 3, Col. 4.
4	Income to Common	$ 23,789,254			Line 1 x Line 2.
5	EBIT	$ 52,128,994			Line 1 x Line 3.
6	Depreciation & Amortization	$ 33,322,721			Noack Direct, Schedule A-1
7	Imputed Amortization	$ -			Not Applicable.
8	Deferred Income Taxes & ITC	$ -			Not Applicable.
9	Funds from Operations (FFO)	$ 57,111,975			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	$ -			Not Applicable.
11	EBITDA	$ 85,451,715			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio	55%	45% - 50%	50% - 60%	Page 2, Line 1, Col. 1.
13	Debt to EBITDA	3.6x	3.0x - 4.0x	4.0x - 5.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt	18%	20% - 30%	12% - 20%	Line 9 / (Line 1 x Line 12).

Sources:

[1] Standard & Poor's: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

[2] S&P RatingsDirect: "U.S. Regulated Electric Utilities, Strongest to Weakest," July 30, 2013.

Note:

Based on the July 2013 S&P report, Laclede Gas has an "Excellent" business risk profile and a "Significant" financial risk profile.

Missouri Gas Energy

Standard & Poor's Credit Metrics
(Pre-Tax Rate of Return)

Line	Description	Weight (1)	Cost (2)	Weighted Cost (3)	Pre-Tax Weighted Cost (4)
1	Long-Term Debt	55.0%	4.35%	2.39%	2.39%
2	Common Equity	45.0%	**9.35%**	4.21%	6.83%
3	**Total**	**100.0%**		**6.60%**	**9.22%**
4	Tax Conversion Factor*				1.62308

Sources:
Schedule MPG-1.
* Noack Direct, Schedule A.