Exhibit No.:____
Issue: ROE
Witness: James M. Anderson
Exhibit Type: Direct
Sponsoring Party: Summit Natural Gas of Missouri, Inc.
Case No.: GR-2014-0086
Date: January 2, 2014

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. GR-2014-0086

DIRECT TESTIMONY

OF

JAMES M. ANDERSON

ON BEHALF OF

SUMMIT NATURAL GAS OF MISSOURI, INC.

Jefferson City, Missouri

January 2, 2014

TABLE OF CONTENTS

DIRECT TESTIMONY

OF

JAMES M. ANDERSON

SUMMIT NATURAL GAS OF MISSOURI, INC.

CASE NO. GR-2014-0086

DIRECT TESTIMONY

JAMES M. ANDERSON

SUMMIT NATURAL GAS OF MISSOURI, INC.

I. EDUCATIONAL BACKGROUND & PROFESSIONAL QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. James M. Anderson. My business address is 8400 E. Prentice Ave, Suite 500, Greenwood Village, CO 80111. I am a Senior Vice President of Municipal Capital Markets Group, Inc. (MCM), a Financial Industry Regulatory Authority (FINRA) regulated broker-dealer engaged in the origination and sales of securities. I am also a member of MCM's Board of Directors, a shareholder, and manager of the firm's Denver office. The firm also has offices in Dallas and Minneapolis. Additional information about MCM is available at www.municapital.com.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I received a Bachelor of Science in Business Administration and Accounting from the University of Denver in 1969.

Q. PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE.

A. I have been engaged in the securities industry since 1971. Prior to joining MCM in 1996, I was a Managing Director with John Hancock Freedom Securities, Inc., from 1992 to 1996, engaged in the firm's bond origination and investment banking department. From 1984 to 1992, I was a Managing Director of Prudential Bache Securities, engaged as an investment banker. In 1984,

Prudential Bache acquired Anderson DeMonbrun, Inc., an investment banking firm that my partner and I founded in 1979. I served as CEO and President of Anderson DeMonbrun, Inc., for the four years that it operated. From 1971 to 1979, I was with Hanifen Imhoff, Inc., an investment bank located in Denver. I started with Hanifen Imhoff as a trainee and became a Senior Vice President of the firm's public finance department and a member of the firm's Board of Directors. During my working career, I have been engaged in the origination and sales of securities, including determining the fair value of private securities.

Q. HAVE YOU PROVIDED EXPERT TESTIMONY IN UTILITY PROCEEDINGS IN THE PAST?

A. Yes. I have testified in person as an expert witness and provided written testimony in several state utility proceedings dealing with rate of return, capital structure, and financial viability. I testified before the North Carolina Utility Commission on granting a certificate of public convenience and necessity to Frontier Utilities, Inc. (later acquired by Sempra Energy) for the construction and operation of a new gas utility in western North Carolina. I also testified and provided written testimonies on rates of return on behalf of Colorado Natural Gas, Inc., (a subsidiary of Summit Utilities, Inc., ("Summit Utilities") the parent company of Summit Natural Gas of Missouri, Inc.) in its last three general rate cases before the Colorado Public Utility Commission. For Missouri Gas Utility, Inc. (the subsidiary of Summit Utilities, Inc., that was merged with Southern Missouri Gas Company, L.P., to form Summit Natural Gas of Missouri, Inc.), I testified and provided written testimony to this Commission concerning the

acquisition of a municipal system by Missouri Gas Utility, Inc. and, in a subsequent hearing before this Commission, I provided testimony on rates of return.

Q. WHAT EXPERIENCE DO YOU HAVE IN THE ORIGINATION, SALE OR PLACEMENT OF UTILITY EQUITY SECURITIES?

A. During my 42 years of experience in investment banking, I have originated debt and equity securities for a number of utilities, including Colorado Natural Gas, Inc. and Summit Utilities, Inc. During the past calendar quarter, my firm and I originated and sold taxable and tax-exempt debt securities for the Navajo Tribal Utility Authority. Beginning in 1996, my firm and I assisted the founders of Summit Utilities, Inc. with its initial capitalization by selling equity and debt to both individual and institutional investors. For the next ten years, until Summit Utilities was acquired by its current owners, my firm and I originated and sold all of the equity and debt securities offered by Summit Utilities. In 2010, I served as a member of a special subcommittee of Summit's Board of Directors in determining the fair market value of the minority shareholders' stock in a sale of that stock to Summit Utilities' current owners. I served on the Summit Utilities, Missouri Gas Utility and Colorado Natural Gas Boards of Directors from 1997 to 2011, and I am currently a non-voting alternative member of Summit Natural Gas of Missouri, Inc. and its parent's Boards of Directors.

Q. WHAT ARE YOUR PROFESSIONAL AFFILIATIONS?

A. I am currently a registered representative, a general securities principal, a municipal securities principal, and a financial operating principal registered with

FINRA and a former allied member of the New York Stock Exchange, Inc. I am also currently registered with the Colorado Commissioner of Securities and a former appointee by both Governors Romer and Owens to the Colorado Municipal Bond Advisory Board to the Colorado Commissioner of Securities.

II. TESTIMONY OVERVIEW

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been asked to provide expert testimony regarding the current cost of common equity capital for Summit Natural Gas of Missouri, Inc., ("SNG" or the "Company") a wholly-owned, gas distribution operating subsidiary of Summit Utilities, Inc.

Q. WHAT RATE OF RETURN SHOULD SNG BE AUTHORIZED TO EARN ON ITS EQUITY CAPITAL THAT IS EMPLOYED IN ITS DISTRIBUTION ASSETS?

A. From my analysis, for ratemaking purposes, I have determined that a fair cost of common equity capital that SNG should be allowed to earn on that portion of its capital structure financed by common equity is 15%.

Q. WHAT IS THE COMPANY'S CAPITAL STRUCTURE?

A. The capital structure is the permanent financing (common equity, long-term debt, or preferred stock) used to finance the firm's assets. The Company's current capital structure is 43% long-term debt and 57% common equity. SNG has no outstanding preferred stock.

Q. WHAT IS THE CAPITAL STRUCTURE OF SUMMIT UTILITIES, INC. THE PARENT COMPANY OF SNG?

A. At September 30, 2013, Summit Utilities' capital structure was 39% long-term debt and 61% common equity. Summit Utilities has no outstanding preferred stock.

Q. ARE THERE EXTENUATING FACTORS THAT AFFECT THE COMPANY'S COST OF CAPITAL?

A. Yes. The common equity holders of SNG bear a greater degree of risk than do the equity holders of other gas utilities in Missouri.

Q. HAVE YOU PREPARED SCHEDULES TO OFFER IN CONNECTION WITH YOUR TESTIMONY?

A. Yes, I have prepared Schedules JMA–1 through JMA-8. These Schedules are:

JMA-1 - Annual Return on Equity - Missouri gas utilities 2006 to 2012

JMA-2 – Gas Customers Served by Missouri gas utilities

JMA-3 – Net Utility Plant / Customer for Missouri gas utilities

JMA-4 – Percent of Revenue Recovered From Facility Charges

JMA-5 – Dividend Payout as Percent of Net Income 2006 to 2012

JMA-6 – Debt to Equity Ratio of Missouri gas utilities.

JMA-7 – Total Return of the eleven *Value Line* reference gas utilities

JMA-8 – 2010 Median Household Income Comparison

III. DETERMINATION OF THE MARKET COST OF COMMON EQUITY CAPITAL

Q. WHAT JUDICIAL PRINCIPLES DID YOU USE IN YOUR ANALYSIS OF THE RATE OF RETURN ON COMMON EQUITY?

A. The judicial principles taken into consideration in my analysis are found in decisions of the United States Supreme Court in *Bluefield* (262 U.S. 679, 693 [1923]) and *Hope* (320 U.S. 591, 603 [1944]). These decisions define a fair rate of return to be:

1) sufficient to ensure the financial soundness of the company's operation,

2) commensurate with returns on equity in other enterprises having corresponding risks,

3) adequate to support the company's credit and to attract capital at reasonable terms.

This Commission has cited the *Hope* and *Bluefield* decisions at length and acknowledged its authority and responsibility to set just and reasonable rates for regulated utilities. This Commission has stated:

"A just and reasonable rate is one that is fair to both the utility and its customers; it is no more than is sufficient to keep public utility plants in proper repair for effective public service, [and] …to insure to the investors a reasonable return upon funds invested." [1]

Q. WHAT IS THE CONCEPT OF THE COST OF COMMON EQUITY CAPITAL AND HOW IS THAT COST DETERMINED?

A. The cost of common equity capital is the rate of return that investors require to invest their capital in common equity. This cost is determined in the marketplace and is based on expected returns and the investors' perception of the risks

[1] In the *Matter of Missouri Gas Energy and its Tariff Filing to Implement a General Rate Increase for Natural Gas Service*, Report and Order, Missouri Public Service Commission, Case No. GE-2009-0355, February 10, 2010 at line 7.

associated with the expected return. The bedrock principle in the financial markets is higher rates of return for higher degrees of risk. The marketplace determines the cost of capital by assessing the risks to which the capital is exposed. The principles set out above are consistent with the marketplace, stipulating that the common equity of a utility should receive the same rate of return earned by investments in enterprises with a comparable risk.

Evidence of the risk-return trade-off can be found by comparing the average annual rate of return for the S&P 500 index and the S&P Small Cap 600 index. Companies with smaller market capitalization (the market value of shares times the number of outstanding shares) are generally considered to involve a higher degree of risk than larger companies with a larger market capitalization and, therefore, should deliver a higher rate of return. From December 29, 1995 to September 30, 2013, the S&P 500 index of larger companies had an average annual rate of return of 9.79% over the 12-plus-year period. For the same period, the S&P Small Cap 600 index had an average annual rate of return of 22.6%[2]. The market produced a rate of return on the small cap companies with a perceived higher risk of more than twice as high as the average annual rate of return on the larger companies.

IV. RISK FACTORS EQUITY HOLDERS IN SNG MUST WEIGH AGAINST THE RATE OF RETURN ON EQUITY

[2] Closing price for the S&P 500 and S&P Small Cap 600 indexes at December 29, 1995 compared to the closing price of the indexes on September 30, 2013 as reported by *Marketsmith, Inc.*

Q. ARE THE RISKS UNDERTAKEN BY THE COMMON EQUITY HOLDERS IN SNG COMPARABLE TO THE RISKS ASSOCIATED WITH THE OWNERSHIP OF COMMON EQUITY OF OTHER MISSOURI GAS UTILITIES?

A. No. The common equity holders of SNG have all of the risks that holders of other Missouri gas utilities bear; however, there are substantially more risks borne by the common equity holders of SNG than the owners of the common equity of other Missouri gas utilities assume.

Q. WHAT ARE THESE ADDITIONAL RISKS OF OWNING THE COMMON EQUITY OF SNG?

A. There are several risks of holding common equity in SNG that are not common to other Missouri gas utilities. These risks are:

1. Over 95% of the Company's utility plant has been constructed by the Company, or its predecessor companies, to serve existing homes and businesses that, at the time of construction of the gas system, were using another fuel. As a result, the Company set rates through the use of projections and forecasts rather than by the more exact reimbursement process[3].
2. SNG and its predecessor companies have experienced lower rates of return on equity than those achieved by other Missouri gas utilities.
3. SNG has a small number of total gas customers.
4. SNG has a high ratio of residential to commercial customers.

[3] Reimbursement to landowners or developers who install natural gas distribution systems under the Company's Main Distribution Line Extension tariff sheets as identified in the proposed tariff.

5. There is a lack of geographical and economic diversity among SNG's customers.

6. The Company's investment in net utility plant per customer is very high.

7. SNG's revenues are heavily dependent on gas consumption rather than fixed charges.

8. The Company has not had frequent rate increases to maintain its return on equity.

9. SNG is not a public company.

10. SNG employs less debt leverage than other utilities.

11. The Company's debt has a variable interest rate, is very short term and, under the loan agreement, SNG has covenanted to raise additional equity capital if certain financial metrics are not reached within a specified period.

12. Neither SNG nor its predecessor companies have paid dividends in the past.

1. Construction of Utility Plant

Q. HOW DOES SETTING RATES THROUGH THE USE OF A FORECAST IN SERVICE AREAS TO BE CONSTRUCTED INCREASE THE RISKS TO THE COMMON EQUITY HOLDERS?

Inaccurate forecasts can result in the actual cost of service being higher than the forecast and/or the actual revenues being less than the forecast. If the Company's rates are not adjusted for these additional costs and/or loss of revenues, it will result in a reduction in the Company's return on equity. The preferred approach in setting utility rates is the reimbursement process that virtually assures a utility that it will earn its desired rate of return on equity.

In the reimbursement process, utilities use their existing rates when they expand to new service areas. These utilities normally secure new service areas by purchasing existing natural gas distribution systems, by reimbursing real estate developers or homebuilders for gas distribution systems installed by the developer or builder at the time a housing area or commercial development is built. Reimbursed payments to a developer are not paid until gas is flowing to a new utility customer, and the amount reimbursed is based on the number of actual customers connected. Regardless of the cost to construct the gas system incurred by the developer, the amount of the reimbursement is limited to an amount equal to the utility's net utility plant per customer, on which its existing rates have been set, and on which its rate of return on equity is based. This eliminates the risk that the utility's rates will not be sufficient for the utility to realize its fully authorized rate of return on equity.

Because SNG has acquired service areas by constructing gas systems in communities that existed at the time of construction and were using another fuel at that time, SNG has had to rely on forecasts rather than the safer method found in the reimbursement process. This is an added risk to the common equity that other Missouri gas utilities have not endured.

Q. WHAT ARE THE RISKS OF SETTING RATES BY FORECASTS RATHER THAN BY THE REIMBURSEMENT PROCESS?

A. While SNG's staff has a good deal of experience in the forecasting process and of estimating costs, gas usage, and rates for new service areas, inevitably certain projections will prove to be incorrect. A single incorrect assumption can

materially impact the entire forecast. These forecasts have many assumptions, from the cost of materials and construction to the number of customers actually connecting and their actual gas usage. The greater the number of assumptions, the higher the probability that some will be incorrect.

Gas usage can be particularly difficult to forecast. All of the areas where SNG has built new service areas were previously served primarily by propane. Because propane is an expensive fuel for space and water heating and is sold in large volumes, requiring the purchaser to buy a three-to-six-month supply at a time, propane users are accustomed to carefully managing their fuel usage. The cost of propane also limits the use of certain gas consuming appliances, such as gas clothes dryers, gas cook tops and gas fireplaces. As a result, the average new residential SNG customer will generally only have two types of natural gas appliances: furnace and water heater. Propane users are also accustomed to using wood burning and electric baseboard heat to augment heat from their gas furnaces.

In new service areas, not all propane users convert to the Company's new natural gas system. In the Company's service areas, up to 33% of the available customers have not converted. (See: Company witness Ms. Michelle A. Moorman's Schedule MAM-2.) This results in continuing deliveries of propane within SNG's service areas, resulting in alternative fuel competition. Competition from propane is rare in service areas purchased through the reimbursement process.

Under the reimbursement approach, the actual amount paid to the developer is dependent on the number of homes or businesses that become customers of the gas utility; therefore, the developer is only motivated to use natural gas as the fuel for space and water heating in the development. The developer will not go to the expense of installing a natural gas distribution system and allow new homeowners or business owners in the development to use another fuel such as propane, thereby causing the developer to forego a portion of the reimbursement payments. This restriction is often reinforced by covenants added to homeowner associations' charters by the developer.

Q. HOW MUCH OF THE COMPANY'S UTILITY PLANT WAS PURCHASED AS AN EXISTING OPERATING SYSTEM AND HOW MUCH OF THE UTILITY PLANT WAS CONSTRUCTED BY SNG?

A. Only the existing municipally-owned systems in Gallatin and Hamilton were purchased by SNG. At the time of purchase, there were 767 customers connected to the system in both Gallatin and Hamilton. The purchase price was $1,900,000, although the two towns had invested over $6,000,000 in their systems. This $1.9 million investment in utility plant is 0.8% of the Company's total net utility plant of $239,746,853 as identified on the Balance Sheet at September 30, 2013. The 767 customers acquired represent 5.0% of the Company's current 15,106 customers.

Q. HOW ARE THE RATES SET IN NEW SERVICE AREAS TO BE CONSTRUCTED?

A. Before beginning construction in each proposed new service area, SNG (and its predecessor companies) forecasts: capital costs of construction, timing of construction, fixed and variable operating costs, commodity costs, interest expenses, deprecation, income and other taxes. The Company forecasts the number of customers it expects to connect to the new system and the anticipated gas usage per customer. The Company adds an amount for its return on equity and calculates the rates for the new service area. Prior to starting construction, SNG seeks approval of the MPSC to serve the new area. If approved, SNG's rates for the new service area are set by the MPSC, based on the Company's forecast and any input the Commission may have received from others.

Q. ISN'T THE DECISION TO CONSTRUCT GAS DISTRIBUTION SYSTEMS RATHER THAN PURCHASING EXISTING SYSTEMS WITHIN THE CONTROL OF MANAGEMENT AND, THEREFORE, NOT A RISK FOR WHICH RATEPAYERS SHOULD COMPENSATE THE COMPANY?

A. The Company's business plan is to construct natural gas distribution systems in existing rural communities that have not been served by other natural gas utilities. Management acknowledges the higher degree of risk of this business plan over purchasing existing gas distribution systems; however, management believes that SNG is entitled to rely on the tenets of the Bluefield and Hope decisions, which provide that a fair rate of return to the Company should be commensurate with the corresponding risks. SNG believes that it has provided value to its customers, as shown by 14,339 customers connecting to the

Company's systems; therefore, SNG should be compensated by its ratepayers for this risk that other Missouri gas utilities have not suffered.

Q. **IN THE COMPANY'S SERVICE AREAS WHERE CONSTRUCTION IS COMPLETE, ISN'T THE CONSTRUCTION RISK ELIMINATED AND, THEREFORE, NOT APPLICABLE IN SETTING THE COMPANY'S RATE OF RETURN ON EQUITY?**

A. No, because SNG undertook the risk associated with construction of a new gas distribution system to prospective customers that already had service from a competing fuel. SNG should be compensated by a higher rate of return on equity that is commensurate with that risk. As mentioned in the response above, fair compensation for a given degree of risk is consistent with the Bluefield and Hope decisions.

All of SNG's ratepayers exercised their freedom of choice in connecting to the Company's gas distribution systems, and they did so because the service offered by SNG was less expensive and offered more convenience, reliability and safety. All of the Company's customers have the option to switch back to a competing fuel. (Even for the two municipal systems acquired by SNG, the towns did not mandate that residents connect to the towns' gas systems.)

All of the other risk factors mentioned above were either directly caused by or heightened by the initial construction risk. For example, because SNG has not initiated frequent rate cases, any errors in the rates set by its forecasts have not been corrected. As each risk factor is discussed later in this testimony, the connection to the construction risk is explained.

2. Historic Low Rate of Return on Equity

Q. WHAT HAS BEEN THE COMPANY'S HISTORIC RATE OF RETURN ON EQUITY, AND HOW DO THE HISTORIC RETURNS CREATE A RISK FOR THE EQUITY HOLDERS?

A. The Company's return on equity and a comparison to other gas utilities in Missouri is shown in Schedule JMA-1.

While prior performance is no assurance of future performance, it is one of the few empirical tools that investors have to estimate the future rate of return of an enterprise. Investors tend to assign a lower probability that future rates of return will be in line with the corresponding risks of ownership if prior rates of return have not adequately compensated investors for the associated risks.

From an outside investor's point of view, low rates of return often indicate a poor or failing financial soundness of a utility. A reasonable amount of earnings on common equity is required to: replace equipment and plant, compensate a competent staff, attract additional capital (both debt and equity), finance expansion, improve products and services, comply with new or additional regulations, and pay dividends to common equity holders. Utilities that are unable to timely fund these obligations from operations increase the risk that the common equity holders will not receive a fair rate of return on their investment commensurate with the risk. Over time, the quality of the utility's assets and its operational efficiencies may decline; thereby deteriorating the utility's earning power.

Low rates of return that persist over an extended period are a signal to investors that there may be a hostile regulatory environment where the utility operates. Moody's Investors Service assigns a 25% weighting factor to a utility's regulatory framework in determining its bond credit ratings[4]. Moody's notes: "For a regulated utility, the predictability and supportiveness of the regulatory framework in which it operates is a key credit consideration". A poor history of return on equity causes equity investors to question whether or not a supportive regulatory framework exists and leads to the perception of added risk. A risk for equity investors is that the regulatory atmosphere may limit the utility's ability to earn a return on equity corresponding to all the risks of holding the common equity.

The ability of a utility to recover its costs from its existing rates is a second 25% weighting factor for Moody's in setting bond credit ratings[5]. Moody's and bond investors take into consideration, in their evaluations, a utility's ability to earn sufficient income, after all operating costs, to pay annual debt service by a reasonable coverage margin. With a low return on equity, there may not be enough funds from operations to produce a debt service coverage margin deemed adequate by debt investors. This is also a negative factor for existing or prospective equity investors and an indicator that the utility may not be able to comply with its debt covenants in the future, adding risks to the common equity holder. Low debt service coverage margins can result in higher interest rates on

[4] Moody's Investors Services, Inc. Rating Methodology – Regulated Electric and Gas Utilities, August 2009, page 6
[5] Ibid, page 7

future borrowings or worse, the inability to obtain additional credit. Higher interest costs can reduce the rate of return on a utility's common equity, posing an additional risk to the equity holders.

Q. HOW HAS THE CONSTRUCTION OF UTILITY PLANT, AS OPPOSED TO PURCHASING UTILITY PLANT, IMPACTED THE COMPANY'S RATE OF RETURN ON EQUITY?

A. As discussed above, the Company's rates have been set based on forecasts made prior to starting construction of new utility plant, and these rates have not been adequate to produce the Company's authorized rate of return on equity, see: Schedule JMA-1. The risks posed by constructing utility plant have reduced SNG's rate of return on equity. The Company's lower return on equity has been caused by fewer customers connecting, lower gas consumption, construction delays, delays in customers connecting, and higher construction costs incurred by Southern Missouri Gas Company, a predecessor of SNG. The net result is that prospective and existing equity investors view SNG has having a higher risk of obtaining adequate rates of return on equity in the future.

3. Small Number of Customers

Q. HOW MANY CUSTOMERS DOES SNG HAVE, AND HOW DOES THAT COMPARE TO OTHER MISSOURI UTILITIES?

A. SNG had 15,106 active meters on September 30, 2013, making SNG the smallest gas utility in Missouri - approximately one-fourth the size of the next smallest gas utility. See Schedule JMA-2, for the number of customers served by the other gas utilities in Missouri.

Q. HOW DOES THE SMALL NUMBER OF CUSTOMERS CREATE RISKS TO THE COMMON EQUITY HOLDERS?

A. SNG offers equity holders a much smaller pool of customers than other gas utilities. Adverse economic events can have a greater impact on a small pool of customers than on a large pool. For example, a downturn in the tourism industry will have a much greater economic impact on SNG from its Branson service area (5.3% of SNG's active customers) than Missouri Gas Energy would suffer from slower economic activity in the tourism industry in its Kansas City service area or for Laclede in its St. Louis service area. Equity investors recognize this lack of customer diversification, caused by a smaller pool of customers. Diversification is a common tool that equity investors use to reduce risk within their investment portfolios, and equity investors are well aware of the additional risks caused by the lack of diversification, whether in a stock portfolio or a utility's customer base.

Due to the Company's small customer count, certain costs have a greater impact on SNG and its customers. Some utility costs are approximately the same, regardless the number of utility customers. These costs place a disproportionate burden on a small utility's customers than that borne by the customers of a large utility. For example, SNG has budgeted $300,000 for the cost of this rate case. On a per-customer basis, this cost is $21.91[6] per active customer. Comparing this per-customer cost to Empire District Gas, the next smallest Missouri Gas utility, $300,000 of rate case expenses would cost each of

[6] Based on 13,692 customers, which excludes the Lake of the Ozarks service area, that is not part of this rate case.

Empire's customers $6.82[7]. Other costs, such as occupancy expenses or the expense of a safety staff, are less dramatic on a per-customer basis, but contribute to higher rates to customers of a small utility than these costs would for a larger utility. Higher costs per customer result in higher overall rates for a small utility and create additional risks to the common equity investors. These additional risks are: greater revenue loss from customer conservation, a reduction in the competitiveness of the utility's total gas cost compared to all other alternative fuels, and resistance by customers and regulators to higher rates.

Q. HOW HAS THE COMPANY'S BUSINESS PLAN TO CONSTRUCT UTILITY PLANT IMPACTED THE NUMBER OF CUSTOMERS?

A. When the predecessor to Southern Missouri Gas Company began business in Missouri, and when Summit Utilities began operating in the state, the only communities available for these companies to offer natural gas service were small rural communities that did not have an existing natural gas utility. Although Summit Utilities acquired two small municipal gas distribution systems, both Summit Utilities' and Southern Missouri Gas Company's business plans were to provide service to rural Missouri by constructing new gas distribution systems. Because the state's rural areas have relatively few homes and businesses, SNG has a small number of customers, and probably always will, when compared to the large metropolitan areas in the state.

[7] Based on Empire's customer count of 43,991

4. High Ratio of Residential to Commercial Customers

Q. WHAT IS THE COMPANY'S RATIO OF RESIDENTIAL TO COMMERCIAL CUSTOMERS, AND HOW DOES THAT CREATE AN ADDITIONAL RISK TO THE COMMON EQUITY?

A. SNG has a small commercial customer base. Based on the number of meters from the Ms. Moorman's Schedule MAM-2, the Company's ratio of residential to commercial customers is 6 to 1 (2,526 commercial meters of 15,106 at September 30, 2013)[8]. Very few transportation customers use heat in their production processes[9]. All of the other commercial customers use gas only for space and water heating and, consequently, have a gas load profile similar to residential customers. This ratio and the commercial customer load profile significantly limit SNG's ability to offset lower residential rates with higher commercial rates. Because SNG is unable to pass more costs on to a large base of commercial customers, its common equity has a risk that other utility equity holders do not.

Utilities with higher residential rates and a concentration of residential customers present other risks to their common equity holders. Residential customers are more likely to disconnect in the summer and reconnect in the fall and to not timely pay their utility bills or to default on the payment. A much higher percentage of the Company's bad debt is from residential customers. Residential customers are more likely to conserve and/or use other sources of

[8] Includes the Lake of the Ozarks service area, which is not part of this rate case.
[9] Reference Schedule TDP-4, Exhibit 21.

fuel, such as wood, than commercial customers. For these reasons, equity investors view utility service areas with large, well established businesses, institutions, and government offices as less risky than a high concentration of residential areas.

Q. HOW HAS THE COMPANY'S BUSINESS PLAN OF CONSTRUCTING UTILITY PLANT TO RURAL COMMUNITIES RESULTED IN THE HIGH RATIO OF RESIDENTIAL CUSTOMERS?

A. Rural communities have fewer commercial buildings than urban areas. State and federal government, large medical institutions, shopping malls, big box retailers, and institutions of higher learning generally do not have a presence in rural communities. Rural businesses tend to be smaller than urban businesses and have fewer employees. In order to have an adequate workforce, manufacturers and other large businesses must locate in urban or suburban areas. For these reasons, there is naturally a higher ratio of residential customers in rural areas than urban and suburban areas.

5. Lack of Geographical and Economic Diversity in SNG's Customer Base

Q. WHY DOES THE LACK OF GEOGRAPHICAL AND ECONOMIC DIVERSITY OF THE COMPANY'S CUSTOMER BASE CREATE A RISK TO THE COMMON EQUITY, AND WHAT ARE THOSE RISKS?

A. Moody's assigns a 10% weighting factor to the geographical/economic diversification of a utility's customer base in its bond credit rating methodology.[10] For Moody's, an important part of a utility's diversification is an array of geographic regions and economic diversity within the utility's service areas. SNG's service areas are entirely composed of rural areas far from the state's commercial centers. All of SNG's customers are located in small towns. Most customers are socio-economically similar, and the principal industries in the communities are agricultural or tourism/recreation. Most employers are small businesses with less than 50 employees, and there is an absence of industrial customers and institutional customers, such as large government facilities, retailers, medical service providers, and colleges.

Just as a lack of customer diversification has a negative impact for Moody's bond credit rating, it also negatively impacts the risks assumed by the common equity. Moody's describes this risk as follows: "Diversification of (the utility's) overall business operations helps to mitigate the risk that any one part of the company will have a severe negative impact on cash flow and credit quality. Moody's goes on to say: "(diversification) reduce(s) the risk that a company will experience a sudden or rapid deterioration in its overall creditworthiness because of an adverse development specific to any one part of its operations". Any deterioration in the Company's creditworthiness is a risk to the equity holders, as it could impact the Company's ability to pay debt service, produce adequate debt

[10] Moody's Investors Services, Inc. Rating Methodology – Regulated Electric and Gas Utilities, August 2009, page 9

service coverage margins, obtain additional credit, pay operating costs and pay dividends.

There is also a material difference between customers' household incomes in SNG's service areas and the household incomes in the service areas of the gas utilities that serve the urban portions of the state. The average median household income reported in the 2010 census for the counties where SNG has distribution systems (weighted by the number of SNG meters in each county) was $35,726. This was 81% of the state-wide 2010 median household income of $44,306 and 71% of the U.S. 2010 median household income of $50,046. For urban counties in the state, the 2010 median household income was $55,049 in the Kansas City metropolitan area and $52,289 in the St Louis metropolitan area (weighted by the number of households in each county within each metropolitan area). The 2010 median household income for SNG's service area is 65% of Kansas City's and 68% of St. Louis's 2010 median household income. See Schedule JMA-8.

Serving lower income customers increases the risk of earning an appropriate return on SNG's common equity because SNG's customers have less ability to pay for utility services than the customers of other gas utilities in the state. There is a higher probability that lower income customers will become financially overextended and less likely to afford their utility services. Lower income customers are less likely to use more natural gas by adding additional gas consuming appliances, such as gas fireplaces, clothes dryers and cook tops. Lower income customers are also more resistant to fixed rate pricing than higher

income customers because customers believe that demand pricing allows them to better control their utility costs.

Q. HOW HAS THE COMPANY'S CONSTRUCTION OF UTILITY PLANT AFFECTED THE RISK FROM THE LACK OF GEOGRAPHICAL AND ECONOMIC DIVERSITY?

A. The only areas within the state available for SNG to construct utility plant have been in rural areas that, by their nature, lack geographical and economic diversification.

6. High Capital Investment in Utility Plant per Customer

Q. WHAT IS THE COMPANY'S CAPITAL INVESTMENT PER CUSTOMER, AND HOW DOES THIS POSE A RISK TO THE COMMON EQUITY?

A. The Company's current capital investment per customer is $10,697 (pro forma rate base divided by total active meters at September 30, 2013, or $146,468,436 / 13,692)[11]. See Mr. Taylor's Schedule KDT-2. Other Missouri gas utilities have a much lower capital investment per customer than SNG (see Schedule JMA-3). This high capital investment per customer is caused by the distance of the Company's distribution system from interstate pipelines and the rural nature of the Company's service area.

Not only is the amount of common equity invested in each customer higher for SNG than other Missouri gas utilities, but SNG must also incur more debt per customer than the other utilities. As a result of the high equity

[11] Excludes the Lake of the Ozarks service area, which is not part of this rate case.

investment in each customer, SNG needs a larger profit margin on each customer. The higher debt per customer increases the interest cost associated with financing the investment in each customer. The higher investment per customer also increases the depreciation expense and property taxes per customer. (See Mr. Taylor's Schedule KDT-1) These four items dramatically boost the cost to serve customers and result in much higher rates than other Missouri gas utilities.

High rates increase customers' motivation to conserve, to intermittently interrupt service, to use other fuels, and allow customers to recover conservation expenses more quickly. While all gas utilities are subject to these risks, the risks are disproportionately higher for SNG due to its higher investment in each customer. A reduction of actual gas consumption from the historic consumption amounts used in this rate case may materially reduce SNG's revenues. This poses an additional risk that a fair cost of common equity will not be recovered by the rates resulting from this case.

Q. HOW HAS SNG'S CONSTRUCTION OF UTILITY PLANT CONTRIBUTED TO THE RISKS CAUSED BY THE LARGE INVESTMENT PER CUSTOMER?

A. Under the reimbursement system, the amount paid for new distribution systems acquired from real estate developers is equal to the average per customer cost of a utility's plant assets, regardless of the actual cost incurred by the developers to install the distribution systems. Normally, the cost paid to acquire each new customer by the other utilities in the state is no more than its average capital

investment in existing customers. Purchasing systems in this manner involves a materially smaller risk to their equity holders than the risk incurred by SNG.

7. Revenues Are Heavily Dependent on Gas Consumption

Q. HOW ARE SNG'S OPERATING REVENUES DEPENDENT ON GAS CONSUMPTION?

A. The table in Schedule JMA-4 shows the percent of revenue recovered from facility charges by other Missouri gas utilities and SNG, at its current rates, and the rates proposed in this rate case. Even at the proposed rate structure, SNG's rates produce substantially more revenue from the consumption of gas than the monthly fixed Customer Charge. In the Rogersville and Branson Divisions, SNG has an optional rate that has no Customer Charge. Currently 32% of all customers are under this optional rate, as set out in Ms. Moorman's direct testimony. This is not the case for the other Missouri utilities. In order for SNG to earn its full revenue requirement, its customers must consume gas in the volumes used in this rate case, based on thirty year normal temperatures. This makes SNG's revenues heavily dependent on gas consumption.

Q. HOW DOES OPERATING REVENUE DEPENDENCE ON GAS CONSUMPTION IMPACT THE RISKS ASSUMED BY THE EQUITY HOLDERS?

A. Certain events that directly impact gas consumption and that are outside of management control are: weather, conservation by customers, government programs to encourage energy savings, and the loss or inactivity of customers. While all gas utilities face these risks, the risk to SNG is greater because a larger

portion of its revenue is earned through gas consumption than other gas utilities (even at the proposed rates).

Other Missouri gas utilities' fixed charges produce sufficient revenue to cover most of their fixed expenses. SNG is not able to cover its fixed expenses from its fixed charges. With the exception of the gas commodity costs (billed separately to customers), virtually all of SNG's other expenses are fixed, but most of its revenue is variable. This mismatch of expenses to revenues poses a substantial risk to the common equity. SNG's inability to recover its fixed expenses with fixed revenues misaligns customers' objectives to save energy with the Company's objective to sell more gas.

Even though SNG has added customers over the past several years, the national trend shows customers have reduced their individual natural gas consumption. Because of SNG's rate structure, a reduction in gas consumed erodes SNG's revenues faster than those of other utilities, thereby creating an additional risk to SNG's common equity holders. Rightly or wrongly, the conventional wisdom among some equity investors is that the earth's temperatures are warming, which heightens the perception of this risk among those investors.

Q. HOW HAS THE CONSTRUCTION OF UTILITY PLANT CONTRIBUTED TO THE RISKS POSED BY THE HEAVY RELIANCE ON GAS CONSUMPTION FOR REVENUES?

A. Because most of SNG's customers connecting to its utility plant had previously used propane, they have become accustomed to paying only for the fuel that

they actually use, and not paying a fixed monthly charge. SNG experiences a higher number of customers disconnecting in the summertime than Summit Utilities' other natural gas distribution utility. On September 30 2013, 9.83% of SNG's meters were inactive; see Ms. Moorman's Schedule MAM – 2. SNG attributes this to the customers' desire to avoid the monthly fixed charge during the summer, when their gas usage is very low. For these reasons, SNG's existing and proposed rate design provides for a low monthly fixed Customer Charge.

8. Infrequent Rate Cases

Q. HOW DO INFREQUENT RATE CASES POSE A RISK TO THE HOLDERS OF THE COMMON EQUITY?

A. Missouri Gas Utility's (a predecessor to SNG) only rate case used a test period that ended March 31, 2007, six and a half years ago. Southern Missouri Gas Company (a predecessor to SNG) requested a small utility rate case proceeding in 2010. The last formal general rate case proceeding for Southern Missouri Gas Company was filed in 2000. As discussed above, SNG's and its predecessors' return on equity has historically been below other Missouri utilities. If the Company had participated in more frequent rate cases, the consistent low return on equity might not have occurred. Most economic observers believe that smaller, more frequent price increases are better tolerated by customers than a sizable price increase made every three to seven years. This approach to pricing would indicate that more frequent rate cases would be preferable.

Over the last seven years, changes in the Company's cost structure and capital construction in service areas that did not exist at the time of the last rate case have not been reflected in SNG's rates in a timely manner. The Company has not recovered a significant increase in property taxes imposed in 2011, and SNG's rates have not included an adjustment for income taxes in Southern Missouri Gas Company's former service areas. In its credit rating methodology, Moody's says: "The ability to recover prudently incurred costs in a timely manner is perhaps the single most important credit consideration for regulated utilities"[12]. An important concept in this statement is "in a timely manner". Less frequent rate cases severely limit the opportunity for the timely recovery of the added costs and a fair return on new capital expenditures.

Rate case expenses are a material deterrent to conducting frequent rate cases for a utility the size of SNG. As mentioned above, SNG is budgeting $300,000 for this rate case, or $21.91[13] per customer. As mentioned above, the next smallest Missouri gas utility, Empire District Gas, would spend $6.82 per customer for a $300,000 rate case. The costs SNG is expecting to incur in this rate case are projected to be 8.9% of SNG's 2014 budgeted net income after taxes. These costs make frequent rate cases prohibitive for SNG.

SNG must pay the rate case expenses, whether or not the case moves forward. There are no assurances that SNG will be allowed to recover these costs in its future rates. A recent study of rate case expenses incurred by utilities

[12] Moody's Investors Services, Inc. Rating Methodology – Regulated Electric and Gas Utilities, August 2009, page 7

[13] Excludes customers in the Lake of the Ozarks service area, which is not part of this rate case.

in Missouri may be the catalyst for this Commission to reduce or eliminate the recovery of these expenses[14]. If SNG is allowed to recover the rate case expenses, it will probably be over an extended period of years. SNG will probably not be allowed to earn a return on its investment in these costs. Of course, these risks are the same as those undertaken by all Missouri gas utilities; however, the magnitude of the rate case expenses to a utility the size of SNG places a much greater burden on the Company than other utilities and a higher risk to the common equity. The recommendations contained in the recent study on rate case expenses would, if adopted, prevent SNG from recovering its reasonable and prudent rate case expenses, thus exacerbating the problem by creating an earnings shortfall.

Q. WHY IS THE FREQUENCY OF RATE CASES NOT WITHIN MANAGEMENT'S CONTROL AND, THEREFORE, NOT A RISK THAT RATEPAYERS SHOULD COMPENSATE SNG?

A. Annual or biennial rate cases would be the preference of equity owners; however, the accumulated rate case costs to be recovered from the ratepayers would become a significant portion of SNG's rate. If rate case expenses must be partially or totally paid by the equity investors, frequent rate case expenses would have a material impact on the rate of return on common equity for a company the size of SNG.

[14] Missouri Public Service Commission File Nos. AW-2011-0330, In the Matter of a Working File to Consider Changes to Commission Rules and Practices Regarding Rate Case Expense.

Q. HOW HAS CONSTRUCTION OF UTILITY PLANT CONTRIBUTED TO THE RISK OF INFREQUENT RATE CASES?

A. Because SNG has not initiated frequent rate cases, any errors in the rates set by its forecasts have not been corrected. SNG has constructed utility plant in Warsaw, and Branson since Missouri Gas Utility's and Southern Missouri Gas Company's last rate cases and since the majority of the Lebanon expansion has been constructed. Currently, the Company is constructing utility plant in Lake of the Ozarks (not part of this rate case). The rates in these areas were set by a forecast and will need to be corrected in this rate case or a future rate cases. Since Warsaw, Lebanon and Branson construction was completed in 2010, 2011, and 2011, respectively, SNG has under earned its allowed rate of return on equity in those service areas. The inability to timely set rates that produce a fair rate of return on equity is an additional risk that equity holders of the other utilities do not endure when they purchase utility plant by the reimbursement process.

9. SNG Is Not a Public Company

Q. WHAT ARE THE ADDITIONAL RISKS OF OWNING COMMON EQUITY IN A NON-PUBLICLY TRADED COMPANY OVER THE EQUITY OWNERSHIP IN A PUBLICLY TRADED COMPANY?

A. SNG's shares and debt are not regulated by the U.S. Securities and Exchange Commission ("SEC"). The sale of SNG's common equity shares was not registered with the SEC. The Company is not subject to the SEC shareholder reporting requirements that publicly traded companies are. The debt issued by SNG is also not registered with the SEC.

SNG's common equity holders cannot quickly liquidate their shares as the shareholders of publicly traded companies can. There is no secondary market for the shares. If the Company's shareholders elect to sell their shares, they may offer them only through a private sale. Because prospective buyers of the shares cannot quickly obtain independent information on the Company, a private sale of common equity is often difficult and time consuming.

Generally, equity holders of non-publicly traded companies must be comfortable with holding their shares for an extended period until, and if, a liquidity event occurs. Normally, these liquidity events are the purchase of the Company by another utility or by a private investor or group of investors, or if SNG or its parent company makes a public offering of its shares of common equity and agrees to register the shares of the existing shareholders with the SEC. The sale of the Company to a third party requires the approval of a majority of the Company's existing shareholders; therefore, a single shareholder, holding less than a majority of the outstanding shares, is limited in its ability to sell shares until, and if, most of the other shareholders wish to sell their shares.

Investment advisory firms, such as *Value Line, Yahoo Finance*, and *Standard & Poor's*, and brokerage firms provide a large amount of statistical information on publicly traded companies, including publicly traded utilities. This statistical information generally covers a number of years and, in many cases, forecasts of future statistical data are also available. Statistics, such as beta, (an indicator of risk that is discussed in detail below) are compiled on publicly traded companies. This information is not available for private companies, such as

SNG. In some cases, such as the calculation of beta, the statistic cannot be calculated because a daily or weekly market value of a company's stock is required. The lack of this information puts investors in private companies at risk because there may be no way to obtain this information, even directly from the private companies themselves because, like beta, it cannot be calculated.

When added together, these risks of owning shares in a private company demand that the rate of return on equity earned on the private company be higher than from a publicly traded company. Often, private companies are in a business or an industry segment in which investors cannot make an investment through the purchase of publicly traded shares. The anticipated return from investing in a particular business segment may be worth the added risks of holding non-public shares. For SNG, its business is exactly the same as the publicly traded gas utilities. The only reason for an investor to forego the lower risks of a publicly traded utility is for a higher rate of return on its investment.

Q. DOES THE CONSTRUCTION OF UTILITY PLANT IMPACT SNG'S POSITION AS A PRIVATE OR PUBLIC COMPANY?

A. The capital for construction of utility plant must be obtained by SNG in the private equity market. For the reasons discussed above, private equity demands a higher rate of return. SNG or its parent company's ability to become a public company may be impacted by construction of utility plant and the associated risks. Because of construction, SNG's and its parent company's return on equity has been small and inconsistent, which are not characteristics that are well accepted in the public market. Without a higher return on equity than authorized

for the other Missouri utilities, it is unlikely that either SNG or its parent company can become a public company. Utility investors are very unlikely to make an investment in SNG that involves more risk than the publicly traded utilities for the same rate of return.

10. SNG Employs Less Debt Leverage

Q. WHAT IS THE COMPANY'S DEBT TO EQUITY RATIO, AND HOW DOES THAT RATIO COMPARE TO OTHER GAS UTILITIES?

A. SNG's debt to equity ratio is 43% debt to 57% equity. The gas utilities in the *Value Line* report have an average ratio of 48% to 52% debt to equity (see table 2 below). The other Missouri utilities in Schedule JMA-6 have a debt to equity ratio closer to 50%.

Q. WHAT ARE THE RISKS OF A LOWER DEBT TO EQUITY RATIO TO THE COMMON EQUITY HOLDERS?

A. The use of leverage allows equity holders to obtain a higher rate of return on equity with lower utility rates on ratepayers. Because debt capital is significantly less expensive than equity capital, a utility can lower its return on rate base when it employs an appropriate amount of equity. The adjustment for income taxes on the return on equity further increases the differential between the cost of debt and equity. High utility rates pose a risk to the common equity holders' returns due to customers switching to alternative fuels or otherwise reducing their consumption of natural gas. SNG's ability to secure new customers will be more difficult because the savings available by switching to natural gas may be

reduced or eliminated. All of these risks have the potential of reducing the actual rate of return earned by the equity holders.

Q. HOW DOES THE CONSTRUCTION OF UTILITY PLANT AFFECT THE COMPANY'S DEBT TO EQUITY RATIO?

A. Lenders lend less to utilities that undertake major capital construction projects built to make an alternative fuel available to prospective customers. SNG recently completed an expansion in Branson and is currently constructing a major expansion to the Lake of the Ozarks. SNG's lenders have been reluctant to lend debt up to the customary 50 - 50 debt to equity ratio because of the higher risk that the lenders perceive in the construction of utility plant rather purchasing existing utility plant. The Company's lenders' actions confirm that SNG's business plan of constructing utility plant is more risky than the traditional procurement system used by other Missouri gas utilities.

11. Onerous Debt Terms

Q. WHAT ARE THE TERMS OF SNG'S CURRENT LONG-TERM DEBT?

A. SNG has $100 million of long-term debt outstanding. All of this debt is due on December 31, 2015. The interest rate is adjustable monthly with changes in the 30-day LIBOR. The loan agreement contains a number of restrictive covenants, including a requirement that SNG increase its common equity if certain financial metrics are not met during the period of the loan.

Q. HOW DO THE TERMS OF SNG'S EXISTING DEBT POSE A RISK TO THE COMMON EQUITY HOLDERS?

A. SNG will be required to refinance all of its long-term debt within two years. If SNG is not able to connect the desired number of new customers in its Lake of the Ozarks project, it may have difficulty arranging refunding financing. The interest rates on the new refunding debt will be set at the time of issuance and may be considerably higher than the current rates. Thirty-day adjustable interest rates, like those on the existing loan, can increase quickly and dramatically, as the 30-day U.S. Treasury Bills did in the second week of October, 2013 during the recent federal government shutdown. If SNG does not meet the financial metrics required in the existing loan agreement, it will be required to increase its common equity. The additional equity will result in a reduction of the rate of return on the existing common equity. All of these factors pose a substantial additional risk to SNG's existing and prospective equity investors. For other Missouri gas utilities, investors' risks are reduced by very long-term (thirty years or more) fixed rate debt that normally does not require the utility to increase its equity capital if financial metrics are not met.

Q. HOW DOES THE CONSTRUCTION OF UTILITY PLANT IMPACT THE TERMS OF SNG'S LONG-TERM DEBT?

A. SNG's lenders have required these more onerous terms because SNG is constructing utility plant to prospective customers that are using another fuel. The Company's lenders' perception of the risk of construction of utility plant, as evidenced by these terms, is consistent with my view of the additional risk to the common equity posed by construction.

12. Lack of a Dividend

Q. WHAT IS THE AMOUNT OF DIVIDENDS THAT SNG HAS PAID OVER THE PAST SEVEN YEARS?

A. Neither SNG nor its predecessor companies have paid dividends. See Schedule JMA-5 for SNG's and its parent company's dividend payout ratio to net income compared to other Missouri utilities.

Q. HOW DOES THE PAYMENT OF DIVIDENDS INFLUENCE EQUITY INVESTORS DECISIONS TO INVEST IN UTILITIES?

A. A primary objective of equity investors in utility companies is to earn relatively constant annual income. Most utilities accommodate investors' desire for income by a dividend payment that is a relatively constant portion of the utility's annual net income. For utility equity investors, a significant portion of investors' total return is from dividends. See Section VI of this testimony for an explanation of total return and Schedule JMA-7 for a table showing how dividends have contributed to the total return of the eleven gas utilities used as a reference group in determining the cost of common equity capital in Section V, below. SNG has not paid a dividend, and its parent company's dividend history has been erratic and, at times, exceeded its net income. No dividends, or irregular dividends, are a risk to the average utility investor, as the dividend is an important part of the investor's anticipated income, particularly investors looking to reinvest the dividends to increase their total return.

Q. MANY GROWTH COMPANIES DO NOT PAY DIVIDENDS. WHY DOES THE LACK OF A DIVIDEND BY SNG POSE AN ADDITIONAL RISK TO ITS EQUITY HOLDERS?

A. Many growing companies do not pay dividends. The Dictionary of Finance and Investment Terms defines growth stocks as:

> "Stock of a corporation that has exhibited faster-than-average gains in earnings over the last few years and is expected to continue to show high levels of profit growth. Over the long run, growth stocks tend to outperform slower-growth or stagnant stocks. Growth stocks are riskier investments than average stocks, however, since they usually sport higher price/earnings ratios and make little or no dividend payments to shareholders"[15].

Regulated utilities rarely experience the level of growth necessary to be classified as a growth company; however, investors in the utility sector do not expect utilities to be growth companies. Investors in the utility sector do expect consistent dividends, but will accept a lower dividend yield if the dividend payout has consistently increased year over year. Utility investors are willing to forego the super charge earnings increases of growth companies in exchange for dividends. SNG's no dividends, combined with its slow earnings growth, are risks that few utility investors are willing to accept. In order to attract investors, SNG must be able to show a rate of return on common equity substantially higher than other utilities that pay a dividend.

Q. HOW HAS SNG'S CONSTRUCTION OF UTILITY PLANT IMPACTED ITS ABILITY TO PAY DIVIDENDS?

A. SNG has used its cash flow to construct new utility plant rather than pay dividends. It is likely that SNG will continue to invest its cash flow to construct additional utility plant. SNG anticipates that the initial construction will be completed in the Lake of the Ozarks at the end of this calendar year; however,

[15] Dictionary of Finance and Investment Terms, third edition, 1985, page181

SNG plans to continue to construct utility plant in order to make "in-fill" improvements to connect additional customers in the Lake of the Ozarks Division, the Branson Division, as well as all of its other service districts.

V. DETERMINING THE COST OF COMMON EQUITY

Q. HOW DID YOU DETERMINE THE COST OF EQUITY CAPITAL FOR SNG?

A. The cost of common equity is the rate of return required to attract investors' capital at reasonable terms. The actual cost of common equity is determined in a competitive marketplace by the market's evaluation of the anticipated returns versus the expected risks. Computing the market's actions by mathematical calculations is difficult because the market takes into consideration factors that are not always mathematical; however, using several alternative approaches can produce an unbiased estimate of a utility's required return on common equity.

The first approach is the capital asset pricing model (CAPM). This model uses the beta (a risk weighting factor described below) from a group of natural gas distribution companies. For this calculation, a reference group of the eleven natural gas utilities that is followed in *Value Line* was used. The CAPM is widely used to estimate the cost of equity capital among large utilities, but does not take into consideration the difference in the risk profile of SNG, as compared to the referenced utilities from *Value Line*.

The second approach is the discounted cash flow (DCF) model. This model was applied to the same utilities as the CAPM.

The third approach is the Total Return of the referenced utilities used in the other two models. The Total Return is the rate of return representing the

actual price appreciation of a stock, with cash dividends reinvested on their payment date, over a given period. For the Total Return model, the period from December 31, 2007, to October 15, 2013, was used in the calculation.

A risk premium was added to the average of these three approaches in order to take into consideration the additional risks that the holders of the common equity in SNG bear over the normal risks that the referenced group of utilities bears.

A summary of the four analyses and the SNG risk adjustment is below:

Table 1

Model & Risk Adjustment	**% Cost of Common Equity**
CAPM – Long-term	9.1%
DCF model (with consensus growth forecasts)	10.2%
Total Return (Dividends Reinvested 2007 -2013)	12.5%
Average of Models	10.6%
SNG Risk Premium Adjustment	4.4%
Rate of Return to be Applied to SNG	15.0%

VI. COST OF COMMON EQUITY PRICING MODEL ANALYSIS

Q. WHAT WAS THE INPUT DATA USED IN YOUR CALCULATIONS?

A. Below is a table of data on the eleven gas utilities covered in Value Line's natural gas utility industry report 16 that was used to calculate the models presented above.

[16] *Value Line* Investment Survey, December 7, 2012, pages 538 to 549.

Value Line Data Table 2

Company	Ticker Symbol	Market Cap (Billion)	Mkt. Size	Mkt. Value / Book Val.	Beta	Dividend Yield	Earnings Growth Rate	2014 ROE	% Debt	% Equity
AGL Resources	GAS	$5.3	Mid.	1.34	.75	4.2%	9.0%	8.5%	52.5%	47.5%
Atmos Energy	ATO	$3.8	Mid.	1.39	.70	3.4%	5.5%	8.5%	49%	51%
Laclede Group	LG	$1.4	Mid	1.68	.60	3.8%	6.0%	12.5%	54%	46%
New Jersey Res.	NJR	$1.8	Mid.	2.33	.70	3.7%	4.0%	14.0%	40%	60%
Nisource, Inc.	NI	$9.2	Large	1.62	.85	3.4%	10.5%	9.5%	56.5%	43.5%
N.W. Natural Gas	NWN	$1.1	Mid.	1.49	.60	4.4%	4.5%	8.0%	48.5%	51.5%
Piedmont Nat. Gas	PNY	$2.5	Mid.	2.07	.70	3.8%	4.0%	11.0%	47.5%	52.5%
So. Jersey Ind.	SJI	$1.9	Mid.	2.28	.65	3.2%	7.5%	12.5%	43%	57%
Southwest Gas	SWX	$2.2	Mid.	1.54	.75	2.8%	8.0%	10.5%	47.5%	52.5%
UGI Corp.	UGI	$4.5	Mid.	1.86	.75	2.9%	8.0%	11.5%	58%	42%
WGL Holdings	WGL	$2.2	Mid.	1.67	.65	3.9%	3.5%	10.0%	30.5%	69.5%
Average		**$3.3**	**Mid.**	**1.75**	**.70**	**3.6%**	**6.4%**	**10.6%**	**48%**	**52%**

For the CAPM, the average market rate of return used in the calculation was the inflation adjusted geometric mean rate of return for the entire equity market from 1926 to 2009, for both large and small companies, as reported by Ibbotson Associates[17]. According to the statistics tracked by Ibbotson, the mean rate of return for large companies is 6.6%, and for small companies, the rate is 8.6%. For the risk-free rate of return used in the CAPM calculation, the yield on the 30-year U.S. Treasury bond at the close of business on October 15, 2013, quoted by *The Wall Street Journal*[18], was used. This yield was 3.78%. For the Total Return model, the market price for the *Value Line* stocks of gas utilities and the dividends paid were provided by *Yahoo.com* and compiled in Schedule JMA-7.

Q. HOW WAS THE CAPITAL ASSET PRICING MODEL CALCULATED?

[17] Ibbotson SBBI 2010 Classic Yearbook, Table 6-8, page 121.
[18] The Wall Street Journal, October 15, 2013, web site edition, market data, yield on the bonds due Aug. 15, 2043.

A. In this model, the percent cost of common equity equals the risk free rate of return, added to the average annual market rate of return, times the average beta. The risk-free rate of return is 3.78%, which is the yield on long-term (30 years) U.S. Treasury bonds. The beta used is the average beta of the gas utility stocks followed by *Value Line* – 0.7. The average market rate of return is Ibbotson's long-term inflation adjusted market rate of 6.6% for large companies and 8.6% for small companies. These two rates were averaged together because the gas utilities followed by *Value Line* are mid-sized companies, rather than small or large companies. As a result, the average market rate is 7.6%. The cost of common equity found by the CAPM model is 9.1% ((0.7 X 7.6%) + 3.78%).

Q. HOW WAS THE DISCOUNTED CASH FLOW MODEL CALCULATED?

A. This model is based on the referenced group of companies' dividend yield (the annual dividend divided by the shares' market value) and the companies' projected growth in earnings per share. Because the annual dividends are paid quarterly for the entire referenced group of companies, their dividend yield has been adjusted for the annual compounding effect of the quarterly payments. The dividend income received each quarter can be reinvested to earn additional dividends on that amount in subsequent quarters. The projected growth in earnings used in the calculation is the earnings forecast by *Value Line.* The table below shows the calculation:

Discounted Cash Flow Model Table 3

Company	Ticker Symbol	Dividend Yield*	Growth Rate	DCF Cost Of Equity
AGL Resources	GAS	4.4%	9.0%	10.9%
Atmos Energy	ATO	3.6%	5.5%	8.2%
Laclede Group	LG	4.0%	6.0%	7.4%
New Jersey Res.	NJR	3.9%	4.0%	9.6%
Nisource, Inc.	NI	3.6%	10.5%	14.7%
N.W. Natural Gas	NWN	4.7%	4.5%	7.3%
Piedmont Nat. Gas	PNY	4.0%	4.0%	6.6%
So. Jersey Ind.	SJI	3.4%	7.5%	12.7%
Southwest Gas	SWX	2.9%	8.0%	12.2%
UGI Corp.	UGI	3.1%	8.0%	7.9%
WGL Holdings	WGL	4.1%	3.5%	6.8%
Average		**3.8%**	**6.4%**	**10.2%**
*Adjusted for quarterly payments				

Q. HOW IS THE TOTAL RETURN CALCULATED?

A. The Total Return is the rate of return representing the actual price appreciation of a stock with cash dividends reinvested on their payment date over a given period. Like the DCF model, the Total Return model uses dividends, but replaces the growth rate with the actual historic market price appreciation or decline for the common shares of the referenced companies for a given period. The period is the 69 ½ months from December 31, 2007 to October 15, 2013. This five-plus-year period was chosen because it includes the 2008-09 financial panic, the stock market crash, the greatest recession in the past 65 years and the slow recovery that followed. During this period, the Dow Jones Utility Index hit a high of 557.69 on January 31, 2008, and then fell by almost one-half to 287.29. As of October 15, 2013, it stood at 491.68, having never regained its January 31, 2008 high, and 40.85 points lower than on December 31, 2007. In

spite of the price decline among utility stocks in the index, the referenced utilities produced a 12.5% Total Return over the five-plus-years. Table 5 below shows the Total Return for each utility in the group. See Schedule JMA-7 for more detail.

Total Return[19] December, 2007 to October, 2013 Table 5

Symbol	Initial Price	Last Price	Initial Annual Dividend	Current Annual Dividend	Cost Basis	Current Value	Total Return
GAS	$37.64	$45.26	$1.68	$1.88	$10,000	$15,744	57.44%
ATO	28.04	42.22	1.32	1.40	10,000	19,505	95.05%
LG	34.24	45.91	1.52	1.72	10,000	17,048	70.48%
NJR	33.35	43.78	1.12	1.68	10,000	16,019	60.19%
NI	18.89	30.82	0.92	1.00	10,000	21,955	119.55%
NWN	48.66	41.92	1.52	1.82	10,000	10,613	6.13%
PNY	26.16	32.84	1.04	1.24	10,000	15,569	55.69%
SJI	36.09	57.82	1.08	1.77	10,000	19,081	90.81%
SWX	29.77	50,89	.92	1.32	10,000	20,351	103.51%
UGI	27.25	39.06	.76	1.13	10,000	17,266	72.66%
WGL	32.76	42.45	1.36	1.68	10,000	16,391	63.91%
Portfolio Totals					**$110.000**	**$189,542**	**72.31%**

Average Annual Return for 69 & ½ months 12.5%

VII. SNG RISK PREMIUM ADJUSTMENT

Q. WHAT IS THE RISK PREMIUM ADJUSTMENT?

A. The risk premium is the additional return on equity needed to induce investors to invest in a utility, like SNG, that poses more risks than other utilities. This is consistent with the marketplace that places a higher rate of return on added risk and the *Bluefield* and *Hope* decisions, which allow that the rate of return should

[19] Quarter by quarter calculation are shown in JMA-7

be commensurate with returns on equity in other enterprises having corresponding risks.

Q. HOW IS THE RISK PREMIUM ADJUSTMENT CALCULATED?

A. The CAPM can be adjusted by modifying the beta to reflect SNG's greater risks than the risks borne by the referenced gas utilities. In the CAPM, beta is a factor that reflects a risk premium the market places on stocks representing more risk. Because SNG would need a daily market valuation for its stock in order to calculate its appropriate beta, the beta for SNG may be found by averaging the beta for groups of publicly traded stocks that have additional risks similar to SNG's.

For the DCF and Total Return models, the risk premium was subjectively calculated as described below. The DCF model assumes that investors in a gas utility will accept a return on equity equal to the average dividend yield (adjusted for quarterly compounding) plus the expected growth in the earnings per share. The Total Return model assumes that investors will accept a return on equity found by reinvesting the historic dividends at companies' per-share market value, plus the shares' market price appreciation or decline. Using the models in this manner is appropriate if the risks undertaken by an investor in one gas utility are about the same as the risks associated with the *Value Line* gas utilities but, as described above, the risks are clearly greater for an investment in SNG.

Q. WHAT WOULD BE THE APPROPRIATE BETA FOR SNG?

A. Beta is a number calculated to represent the changes in the market price of an individual stock, as compared to changes in the market price for all stocks. The

market, as a whole, has a theoretical beta of 1.0. The natural gas utilities in the *Value Line* report have an average beta of 0.7. (See table 2 above.) If all stocks increased in market value by an average of 3%, a portfolio of natural gas utilities should increase by an average of 2.1%, or 70% of the 3% average change in the broader market. The same is true of a decrease in the market value. In order to calculate the beta of an individual stock, the stock's market value must be tracked for an extended period. Because SNG is not a public company, it has no record of market values to compare to the entire market. As a result, SNG's beta must be estimated by other means.

The first place to look is at small public companies, most of which are industrial companies. Industrial companies normally have a beta higher than utilities because of the higher degree of risk that the market perceives industrial companies to bear. Many of the risks that SNG's common equity holders bear are more similar to industrial companies than other utilities. The risks that are similar to small industrial companies are: 1) a small universe of customers, 2) lack of customer diversity, 3) lack of pricing control (for SNG, this is due to competition from other fuels and the high cost of rate cases), 4) dependence on high volume sales, 5) expansion into new markets, 6) onerous debt terms and 7) the lack of a dividend.

In addition, SNG's equity holders also have the risks associated with the Company being a very small business. The smallest of the eleven companies in *Value Line's* report is Northwest Natural Gas, with a market capitalization of $1.1 billion. Northwest's market capitalization is 1.5 times its book value (see table 2

above). SNG's adjusted book value is $132,563,149[20]. Applying Northwest's market multiplier to SNG, its market capitalization would be $198,844,724. Even if the larger multiplier of the average for all eleven companies in the *Value Line* report of 1.75 is applied, SNG would only rise to a market cap of $231,985,511. By any standard, SNG is a micro-cap company.

The beta for micro-cap industrial companies with risks similar to SNG can best be determined by finding the beta for the Russell Microcap Index. This index is made up of the 1,000 smallest publicly traded companies in the Russell 2000 Index, plus all of the qualified next smallest public companies, by market capitalization. The number of companies in the index varies from year to year as the index attempts to cover the smallest 3% of the U.S. security markets. The beta for this index is approximately the same as the beta for the exchange traded fund (ETF) that is made up of the shares of the companies in the Russell Microcap Index. This ETF ticker symbol is IWC, and its beta is 1.10. This beta is consistent with the beta for the ETF of the Russell 2000 (slightly larger companies), ticker symbol IWN, which is 1.13. The S&P Small-Cap 600 ETF, ticker symbol IJR, beta is 1.09[21]. The companies in the S&P Small-Cap 600 are much larger (by market cap) than either of the Russell indexes. From these examples, the average beta for a large portfolio of small companies (600 to 2,000 individual small companies) is 1.11. This beta can be applied to SNG for the risk

[20] Reference Mr. Porter's Schedule TDP-3, Exhibit 18.
[21] *MarketSmith*, Incorporated, October 11, 2013, symbol IWC, IWN & IJR.

to the common equity of being a small company, even though it does not reflect that SNG is a private company.

To compensate for the other risks of holding SNG's common equity, the average beta for companies in industries similar to natural gas distribution can be used. These would include: the Oil and Gas Distribution Industry, the Pipeline Master Limited Partnership (MLP) Industry, and the Electric Utility - Central Industry. The average beta for companies in the Oil and Gas Distribution Industry is 0.81. For the Pipeline MLP companies, the average beta is 0.86, and for the Electric Utility – Central companies, the average beta is 0.75[22]. The combined average beta for companies in these three similar industries is 0.81.

When the average small-cap beta of 1.11 is combined with the average beta of the similar industries of 0.81, the overall beta is 0.96, (equally weighting the betas for the similar industries and the small businesses). The equal weighting is justified because SNG is so much smaller than the companies in the three similar industries that the risks associated with a small business overwhelm other considerations. A fair representative beta for SNG should be 0.96, or just slightly less than the market as a whole. This estimated beta reflects the risks SNG's equity holders bear, as outlined in section IV of this testimony.

Q. HOW DOES A HIGHER BETA FOR SNG CHANGE THE CAPM PRICING MODEL USED IN YOUR TESTIMONY?

[22] *Value Line* Investment Survey, September 6, 2013, pages 605 to 626 and September 20, 2013, pages 901 to 920.

A. If the CAPM is recalculated with a beta of 0.96 for SNG, the percentage cost of common equity would have been 12.0%. Using the small company inflation-adjusted average market return from 1926 to 2009 found in Ibbotson[23] of 8.6%, a risk free rate of return of 3.78%, and a beta of 0.96 the formula would be (8.6% X 0.96) + 3.78% = 12.0%.

Q. WHAT IS THE RISK PREMIUM ADJUSTMENT FOR THE TOTAL RETURN AND DCF MODELS?

A. As an advisor to investor clients and an individual investor, I would make an investment in SNG only if its return on equity was well above the average rate of return on the publicly traded gas utilities found by the Total Return and DCF models. I recommend the following risk premium adjustments to the Total Return and DCF models to compensate for the additional risks of SNG:

Construction of Utility Plant –	0%*
Historic Low Rate of Return on Equity -	0.2%
Small Number of Customers -	0.5%
High Ratio of Residential to Commercial Customers -	0.2%
Lack of Geographical and Economic Customer Diversity -	0.2%
High Capital Investment in Utility Plant per Customer -	0.5%
Revenues Heavily Dependent on Gas Consumption -	1.0%
Infrequent Rate Cases -	0.2%
Not a Public Company -	1.0%
Employs Less Debt Leverage -	0.1%
Onerous Debt Terms -	0.5%
Lack of a Dividend -	0.7%
Total -	5.1%

*Because the risk posed by the construction of utility plant correlates so closely with all of the other risk factors, no separate risk premium was assigned to the construction of utility plant.

[23] Ibbotson SBBI 2010 Classic Yearbook, Table 6-8, page 121.

The Total Return model should be adjusted from 12.5% to 17.6%, and the DCF model should be adjusted from 10.2% to 15.3%, in order to undertake the additional risks of holding SNG's equity.

The adjustments of Total Return and DCF models for the added risks of holding equity in SNG are subjective, but justified. As the Total Return model shows, investors are apparently comfortable with a 12.5% return on their investment for the risks posed by investing in a portfolio of the eleven publicly traded *Value Line* utilities. An aggressive investor might forego a 12.5% historic Total Return for the opportunity to earn an additional 510 basis points on the common equity of SNG; however, it is unlikely that the average utility investor would make that exchange, given the added risks.

Comparing SNG to the *Value Line* companies reveals a number of important differences. First, each of the eleven utilities has a remarkably consistent rate of return on equity. It appears that each utility has earned the rate of return authorized by its regulatory body over the past ten years covered in the *Value Line* reports. The smallest of the eleven utilities, in terms of the number of customers, South Jersey Industries, has 348,000 customers, compared to SNG's 15,106. *Value Line* does not report on the mix of residential to commercial customers for all of the companies. For the companies that are reported, the number of commercial customers is very high. Two utilities, Piedmont Natural Gas and South Jersey Industries, report that 60% of their customers are commercial customers.

The eleven utilities have a diverse customer base. Most of the utilities operate in multiple states, and most of these utilities are engaged in other related activities, such as the sale of propane. The investment in utility plant per customer can be calculated from the *Value Line* reports by dividing the referenced utilities' net plant by the number of its customers. The investment in net plant per customer is much smaller than SNG's investment. The cities served by the referenced utilities are much more densely populated than SNG's service area and are similar to the Missouri gas utilities. The rates charged customers and the portion that is fixed versus variable is not shown in *Value Line*; however, it is likely that the percent of revenue recovered by fixed charges by the eleven utilities in *Value Line* is closer to the other Missouri gas utilities shown in Schedule JMA-4 than SNG's mix of fixed and variable rates because the eleven utilities operate in large metropolitan areas.

As mentioned above, the eleven utilities have a consistent rate of return on equity. This is an indication that these utilities have made frequent rate increase requests of their regulators and have been successful in passing on increased costs to customers in the form of higher rates. Because all eleven utilities are mature companies with long operating histories, it is doubtful that these utilities are securing new customers by constructing utility plant, but are relying on the reimbursement method. Of course, all of the companies covered in *Value Line* are publicly traded. The Value Line utilities' debt to equity structure is shown in Table 2. SNG has 43% debt, where the eleven utilities, on average,

had 48% debt. The *Value Line* utilities also offer a consistent dividend that is generally increased annually.

Q. WAS AN AVERAGE RISK PREMIUM ADJUSTMENT CALCULATED?

A. Yes. The average SNG Risk Premium Adjustment for the three models is shown below.

SNG Risk Premium Adjustment Table 6

SNG Risk Premium Adjustment	% Cost of Common Equity
CAPM – Long-term	12.0%
DCF model (with consensus growth forecasts)	15.3%
Total Return (Dividends Reinvested 2008 -2013)	17.6%
Average of Models with Risk Premium	15.0%
Unadjusted Average of Models	10.6%
SNG Risk Premium Adjustment	4.4%

Q. IF SNG'S RATES ARE INCREASED AS REQUESTED BY THE COMPANY WOULD SNG'S ADDITIONAL RISKS BE ELIMINATED?

A. No. All of the risk factors will remain, even if a rate increase is authorized. SNG's customer base will not grow, any time soon, to the size of the other Missouri gas utilities. There do not appear to be sufficient un-served areas in Missouri to allow SNG to grow to that size. The diversity and character of its customers will remain the same, particularly if additional service territory is not added. Because the fixed portion of SNG's rates would need to be so large in order to provide it with a revenue structure similar to the other Missouri utilities, such rates would probably cause smaller consumers to drop off the SNG system.

As a result, a major change in the rate design is probably not advisable. Without significant growth, there is unlikely to be any change in SNG's cost of utility plant per customer. The per-customer costs of a rate case will not materially change without adding more customers. The Company's primary lender will only increase SNG's total long-term debt if SNG can reach certain earnings to debt ratios. At the Company's current earnings, SNG cannot meet the ratios required to increase the Company's long-term debt.

If SNG's growth is limited to the construction of in-fill systems within existing service areas, the risks caused by future utility plant construction and the associated forecasts may be reduced. The risks caused by the prior forecast will remain until the existing territories have received rates that properly reflect the actual number of customers, gas usage, and capital investment. In the future, SNG may be become part of a public company if its parent company, Summit Utilities, goes public; however, Summit Utilities is not currently large enough to become a public company on its own. It would need to be at least double, if not triple its current size to consider becoming a public company.

VIII. SUMMARY AND RECOMMENDATIONS

Q. BASED ON YOUR EDUCATION, EXPERIENCE AND ANALYSIS DESCRIBED ABOVE, DID YOU COME TO A CONCLUSION REGARDING THE COST OF COMMON EQUITY CAPITAL FOR SNG?

A. Yes. The cost of common equity capital for SNG ranges from 12% to 17.6%, as determined from the widely accepted approaches of estimating the cost of equity capital, adjusted for a risk premium. The average of the three approaches is

15%, which I recommend as the appropriate rate to be used for ratemaking purposes.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Summit Natural Gas of Missouri Inc.'s Filing of Revised Tariffs To Increase its Annual Revenues For Natural Gas Service	))))	Case No. GR-2014-0086

AFFIDAVIT OF JAMES M. ANDERSON

STATE OF COLORADO)
) **ss**
COUNTY OF JEFFERSON)

James M. Anderson, being first duly sworn on his oath, states:

1. My name is James M. Anderson. I work in Littleton, Colorado and I am employed by Municipal Capital Markets Group, Inc. as the Senior Vice President.

2. Attached hereto and made a part of hereof for all purposes is my Direct Testimony on behalf of Summit Natural Gas of Missouri, Inc. consisting of 57 pages, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

James M. Anderson

Subscribed and sworn to before me this 2nd day of January, 2014.

Erin Campbell
Notary Public

My commission expires: 6/7/2016

ERIN CAMPBELL NOTARY PUBLIC STATE OF COLORADO