MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

CLASS COST-OF-SERVICE

SUMMIT NATURAL GAS OF MISSOURI, INC.

CASE NO. GR-2014-0086

Jefferson City, Missouri
June 2014

**** Denotes Highly Confidential Information ****

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 THOMAS M. IMHOFF

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Thomas M. Imhoff, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that he has participated in the preparation of the accompanying Staff Report on pages _____\, and the facts therein are true and correct to the best of his knowledge and belief.

Thomas M. Imhoff

Subscribed and sworn to before me this 18th day of June, 2014.

LAURA BLOCH
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 21, 2015
Commission Number: 11203914

Notary Public

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 JOEL MCNUTT

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Joel McNutt, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that he has participated in the preparation of the accompanying Staff Report on pages 1 – 8, and the facts therein are true and correct to the best of his knowledge and belief.

Joel McNutt

Subscribed and sworn to before me this 13th day of June, 2014.

LAURA BLOCH
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 21, 2015
Commission Number: 11203914

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

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AFFIDAVIT OF DANIEL I. BECK

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Daniel I. Beck, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that he has participated in the preparation of the accompanying Staff Report on pages 8 – 9, and the facts therein are true and correct to the best of his knowledge and belief.

Daniel I Beck
Daniel I. Beck

Subscribed and sworn to before me this 13th day of June, 2014.

LAURA BLOCH
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 21, 2015
Commission Number: 11203914

Laura Bloch
Notary Public

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 HENRY WARREN

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Henry Warren, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that he has participated in the preparation of the accompanying Staff Report on pages 9 — 14, and the facts therein are true and correct to the best of his knowledge and belief.

Henry E Warren
Henry Warren

Subscribed and sworn to before me this 13th day of June, 2014.

LAURA BLOCH
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 21, 2015
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OF THE STATE OF MISSOURI

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AFFIDAVIT OF LESA JENKINS

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Lesa Jenkins, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that she has participated in the preparation of the accompanying Staff Report on pages 15 – 19, and the facts therein are true and correct to the best of her knowledge and belief..

Lesa A. Jenkins
Lesa Jenkins

Subscribed and sworn to before me this 13th day of June, 2014.

LAURA BLOCH
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 21, 2015
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AFFIDAVIT OF PHIL LOCK

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Phil Lock, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that he has participated in the preparation of the accompanying Staff Report on pages 19 – 20, and the facts therein are true and correct to the best of his knowledge and belief.

Phil Lock

Subscribed and sworn to before me this 13th day of June, 2014.

LAURA BLOCH
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 21, 2015
Commission Number: 11203914

Notary Public

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AFFIDAVIT OF KIM COX

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Kim Cox, employee of the Staff of the Missouri Public Service Commission, being of lawful age and after being duly sworn, states that she has participated in the preparation of the accompanying Staff Report on pages 20 – 22, and the facts therein are true and correct to the best of her knowledge and belief..

Kim Cox

Subscribed and sworn to before me this 13th day of June, 2014.

LAURA BLOCH
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: June 21, 2015
Commission Number: 11203914

Notary Public

CLASS COST-OF-SERVICE REPORT

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CLASS COST-OF-SERVICE REPORT

I. Executive Summary

Staff conducted a Class Cost of Service Study in this case and allocated costs to the customer rate classes of Summit Natural Gas of Missouri Inc. ("SNG" or "Company"). Staff recommends no shift of cost between the classes due to the large increase recommendation and the current economic situation.

Staff's rate design proposal includes the Straight Fixed Variable ("SFV") rate for the Residential, General Service Residential, General Service Commercial and Commercial classes. This recommendation represents a change from SNG's current rate design, which collects some non-gas costs through a volumetric rate component. Staff recommends the remaining Large General Service, Large Volume, and Transportation customer classes continue to use the current rate design in place for these classes.

Staff is recommending additional tariff language and some clarifying tariff language to SNG's School Aggregation and Transportation tariff.

Staff Expert/Witness: Thomas M. Imhoff

II. Class Cost-of-Service

A. Fundamental concepts of gas Class Cost-of-Service

Cost-of-Service: The total of all costs that are prudently incurred by a utility in providing services to its customers in a particular jurisdiction.

Cost-of-Service Study: A study that analyzes total company costs, adjusts them in accordance with regulatory principles (such as annualizations and normalizations), allocates

these costs to the relevant jurisdiction, and compares the allocated costs to the revenues the utility is generating from its retail rates, off-system sales, and other revenues. The results of a cost-of-service study are expressed in terms of additional revenue required for the utility to recover its cost-of-service.

Class Cost-of-Service ("CCOS") Study: A quantitative analysis of the costs incurred by a utility to serve its various classes of customers. A Staff CCOS study consists of these steps: (a) costs are categorized (functionalized) based upon the specific role they play in the operations of a local distribution company ("LDC");(b) costs are classified by whether they are customer related, demand related, or energy related; and, (c) classified costs are functionalized (allocated to customer classes). The sum of all allocated costs to a customer class is called the cost-to-serve that class.

The cost-of-service of each customer class is compared to the annualized, normalized revenues the utility collects from each class through its rates during the test year, plus each class' allocated share of revenues from off-system sales and other revenues. The results of a CCOS study are expressed in terms of additional revenue required from each class for the utility to recover its cost of serving that class.

Relationship between Cost-of-Service and CCOS: Conceptually, class cost of service is a breakdown, by customer class, of the utility's jurisdictional cost-of-service. A cost-of-service study determines what portion of total company costs is attributable to the retail jurisdiction; a CCOS study determines what portion of retail costs is attributable to each customer class.

Cost Allocation: A procedure by which common or joint costs are apportioned among customers or classes of customers.

Cost Functionalization: The grouping of rate base and expense accounts according to the specific function they perform in the operations of an LDC. The most aggregated functional categories are production, storage, transmission, distribution, customer accounting expenses, and other costs.

Customer Class: A group of customers with similar characteristics (usage patterns, conditions of service, usage levels, etc.) that are identified for the purpose of setting rates for gas service. Rate Design: (a) A process used to determine the rates for a gas utility once total cost-of-service is known; (b) characteristics such as rate structure, rate values and availability that define a rate schedule and provide the instructions necessary to calculate a customer's gas bill.

Rate Design Study: While a CCOS study focuses on the revenue responsibility of customer classes, a rate design study focuses on the equitable pricing of the utility service provided to individual customers within each class. The rate design process attempts to recover costs in each time period (e.g., summer/winter or on-peak/off-peak) from each rate component for each customer in a way that equates the cost of providing service with the amount the customer is billed in accordance with the rate schedule.

Rate Schedule: One or more tariff sheets that describe the availability requirements and prices applicable to a particular type of retail gas service. A customer class used in a CCOS study may consist of one or more rate schedules.

Rate Structure: Rate structure is composed of the various types of monthly prices charged for the utility's products. At the most basic level there are: (a) customer charges, which are fixed dollar amounts to be paid each month irrespective of the amount of the product taken; (b) usage (energy) charges, which are prices per unit charged on the total units

of the product consumed over the month; (c) purchased gas adjustments ("PGA") charges, which is a price per unit "pass-through" of gas costs; and, (d) demand charges, which are prices per unit charge for gas consumed over a 24-hour period of time. One criterion for determining the appropriate rate structures is the accuracy with which the structure tracks costs. Another criterion deals with the ease or difficulty in administering the rate, as well as the customers' understanding of how the rate structure works, i.e., what causes the customer to incur a higher or lower monthly bill.

Rate Values ("Rates"): The per-unit prices the utility charges to provide service to its customers. Rates are expressed as dollars per unit of measurement by volume or energy.

Units of Measurement commonly used with natural gas: Btu: British thermal unit it is the amount of energy needed to cool or heat one pound of water by one degree Fahrenheit.

- Ccf: One hundred cubic feet
- Mcf: One thousand cubic feet,
- MMBtu: one million Btu, one MMBtu is approximately the amount of energy contained in 1,000 cf (or 1 Mcf) of natural gas, 83.3 pounds of coal, 10.917 gallons of propane, 8 gallons of gasoline, or 293.083 kWh or electricity.
- Therm: 100,000 Btu, approximately equal to the energy contained in one Ccf (100 cf) of natural gas.
- Tariff: A document filed by a regulated entity with either a federal or state commission; it lists the rates (prices) the regulated entity will charge to provide service to its customers as well as the terms and conditions that it will follow in providing service.

B. General Description of the CCOS study filed in GR-2014-0086

The purpose of the Staff's CCOS study is to provide the Commission with a measure of relative class cost responsibility for the overall revenue requirements of SNG. For individual items of cost, the responsibility of a certain class of customers to pay that cost can be either directly assigned to a class or classes, or allocated between the classes using reasonable methods for estimating the class responsibility for that item of cost. The results are then summarized so that they can be compared to revenues being collected from each class on current rates. The difference between a particular customer class' cost responsibility and the revenues generated by that customer class is the amount that class is either paying in excess of its costs (revenues greater than costs) or less than its costs (revenues less than costs).

The annualized usage levels and customer bill counts for the Residential Service ("RES"), General Service (for the old Missouri Gas Utilities ("MGU") represents residential customers) Small General Service ("SGS"), and Large General Service ("LGS") classes were provided by Staff witness Jermaine Green, and those for the Large Volume Service ("LVS") class were provided by Staff witness Brad Fortson. Staff witness Robin Kliethermes provided annualized usage levels and customer bill counts for the Transportation Service Class ("TS"). The class peak demand levels for RES, GS/CS, TS, LGS, and LVS customers were provided by Staff witness Daniel I. Beck. All accounting information was developed using costs and revenues produced by the Staff Auditing Department, which are based upon a test year ending September 30, 2013, updated for known and measurable changes through December 31, 2013, except for LVS revenues, which were developed by Staff witness Brad Fortson and TS revenues which were developed by Robin Kliethermes.

C. Customer Classes

The Staff analyzed the costs and revenues of the following customer classes and districts:

Old MGU (Gallatin and Warsaw Districts)

General Service ("GS")

Commercial Service ("CS")

Large Volume Service ("LVS")

Transportation Service ("TS")

These classes correspond to SNG's current Gallatin and Warsaw customer classes. The GS class is available to residential customers for non-business, non-commercial or non-industrial use at a single point of delivery. The CS class comprises those small non-residential customers with annual usage equal to, or more than 3,000 Ccfs per year. LVS customers are those non-residential customers with annual usage that is equal to or greater than 35,000 Ccfs per year. TS customers are those customers whose annual usage exceeds 35,000 Ccfs in any 12-month billing period and has a transportation agreement with SNG. While SNG has an Interruptible Sales Service ("ISS") tariff, it has no customers under that tariff, and therefore, no costs can be allocated to that service at the present time.

Old Southern Missouri Natural Gas Company (Rogersville and Branson Districts)

Residential ("RES")

General Service ("GS")

Large General Service ("LGS")

Large Volume Service ("LVS")

Transportation Service ("TS")

These classes correspond to SNG's current Rogersville and Branson customer classes. The RES class is available to residential customers for non-business, non-commercial or non-industrial use at a single point of delivery. The GS class comprises those small non-residential customers with annual usage that is less than 5,000 Ccfs per year. The LGS class comprises of those non-residential customers with annual usage equal to or greater than 5,000 Ccfs. LVS customers are those non-residential customers with annual usage that is equal to or greater than 50,000 Ccfs per year. TS customers are those whose usage at a single address or location the Company exceeds 1,250 MMBtus average monthly usage and has a transportation agreement with SNG.

Staff first categorized SNG's costs into functional areas that are to be allocated in the same way. This is referred to as cost functionalization. Staff assigns the rate base and expense accounts to one of the following functional categories: Storage, Distribution Mains, Distribution Measuring and Regulating, Purchased Gas Related, Distribution Meters, Distribution Regulators, Distribution Services, Customer Related Billing, Meter Reading, Assigned RES, GS, CS, and LGS, Assigned LVS and TS, and Revenue Related.

Those costs which cannot be directly assigned into any of these specific functional categories are divided among several functions based upon some relational factor. For example, it is reasonable to assume that property taxes are related to gross plant costs and can therefore be functionalized in the same manner as gross plant costs.

The allocation factors for Distribution Mains, as well as those for Distribution Meters, Distribution Regulators, and Distribution Service Lines were determined by using the allocation factors developed by Staff witness Daniel I. Beck. Meter Reading costs were

allocated to SNG's rate classes using weighted customer numbers. Staff allocated revenue-related costs related to SNG's rate classes based upon the Staff's annualized margin revenues.

The results of the Staff's CCOS study for SNG are shown on Schedules; JM1-1, through JM1-4. The CCOS study is presented in terms of class revenue requirements before any increase in the Company's respective revenue requirements. Due to the economy and significant rate increases requested by SNG, Staff is proposing an equal percentage increase for all customer classes and districts. Staff's recommendation is to not make any revenue shifts among classes at this time.

Staff Expert/Witness: Joel McNutt

III. Allocation

CCOS allocators are used to assign certain utility costs across the utility's customer classes. Staff developed CCOS allocators for mains, meters, regulators, and service lines using the same data as the Company. Staff, however, grouped the classes differently (as explained previously by Staff witness Joel McNutt) and also grouped accounts differently. The Company developed one allocator for mains and a second allocator for meters, regulators and service lines.

Staff developed a mains allocator that was identical to the Company's mains allocator, with the only modification being the designation of classes. Instead of a single allocator for meters, regulators and service lines, Staff developed two allocators: one for meters and regulators and one for service lines. Meters and regulators often have separate costs for the hardware, but the cost to install is often hard to separate, so it is logical to combine these two

accounts. Service lines typically have their own set of identifiable costs; therefore, Staff has traditionally developed a separate allocator for service lines.

Staff would note that the Company's engineering estimate for service lines assumes that the length of service lines for all classes is the same. However, Staff's experience has been that the length of service lines and the associated costs vary by class. The assumption that the lengths are equal would allocate more costs to the Residential Class; therefore, evaluating the results of the CCOS Study should take this concern into account. Staff recommends that the Company, Staff and other interested parties work together prior to the next rate case to determine whether it is reasonable to assume that the length of service lines is equal for all classes.

Staff Expert/Witness: Daniel I. Beck

IV. Rate Design

Staff proposes a *Straight Fixed Variable* ("SFV") rate design for SNG's MGU and SMNG Service Areas, GS-Residential ("GS-Res" or "Residential") and GS-Commercial ("GS-Com" or "Small Commercial") rate classes. For other customer classes, Staff generally recommends that CS, LGS, LVS, and TS be increased by an equal percentage of the revenue requirement in this case. The term "revenue requirement" refers to the revenue a utility needs to be able to provide safe and reliable service measured against the utility's existing rates and cost of service.

For rate design, Staff used the following customer classes as designated by SNG in its tariff sheets filed with this case:

SNG's former MGU Areas -- Gallatin, Warsaw, and Lake Service Areas

General Service

Residential Service (“GS-Res/Residential”)

General Service Commercial (“GS-Com/Small Commercial”)

Large and Transportation Service

Commercial Service (“CS”)

Large Volume Service (“LVS”)

Transportation Service (“TS”) (Gallatin)

SNG’s former SMNG Areas – Rogersville and Branson Service Areas

General Service

Residential (“GS-Res”)

General Service Commercial (“GS-Com / Small Commercial”)

Large and Transportation Service

Large General Service (“LGS”)

Large Volume Service (“LVS”) (Rogersville)

Transportation Service (“TS”)

In the context of the Local Distribution Company (“LDC”), the SFV rate design recovers non-gas costs through a monthly fixed charge (as opposed to the traditional rate design, which uses a combination of a fixed monthly customer charge and a volumetric margin rate). In both SFV and traditional rate design, gas costs are recovered through the Purchase Gas Adjustment (“PGA”), a volumetric rate.

When a new customer is connected to the SNG system, there are costs involved – both immediate and long-term. The connection costs are not driven by the amount of gas used by the individual Res or Small Commercial customer.

For example, to connect the typical Residential or Small Commercial customer to its distribution main the utility must provide metering equipment, a service line, an account in its billing system, etc., The costs of these basic components do not vary according to whether the customer plans to use a large amount of gas for space heating and other appliances or a small amount of gas for cooking only. The smallest diameter service line and most common meter are sufficient to serve the load generated by Residential and Small Commercial end-uses, such as space- and/or water-heating, gas fireplaces, ranges, barbecues, clothes dryers, etc.

When making long-term investment decisions, the utility must take into account the ability of Residential and Small Commercial customers to change their gas consumption at any time. This potential variation in use makes it difficult to predict exactly how much gas each individual household is going to demand from the local distribution system in the future. Furthermore, the consequences of missing the mark in sizing lines and meters are expensive – for example, even if it were possible to exactly size a main to meet expected future demand, it would be very expensive to dig up and install a new main if any individual Residential or Small Commercial customer's usage increased or decreased in the future. Thus, even in the long-term, the investments that SNG makes to serve its Residential or Small Commercial customers will not exactly reflect the amount of gas each customer uses. Many of the capital investments have an expected life of over 40 years.

Under a traditional volumetric margin rate design, when a very small user pays a volumetric margin rate to the LDC, they underpay their share of fixed costs, and Residential and Small Commercial customers using more than the average amount of gas pay more than their share through the volumetric margin rate. A fixed charge that accurately reflects the fixed nature of the costs SNG incurs to serve a Residential or Small Commercial customer

sends a clear price signal to customers who are making their energy decisions based on the costs and benefits of that decision. It would be illogical to connect a low-use customer, who clearly would not pay their fair share of the true cost of service. Similarly, it would be unfair to expect one customer to take service while expecting another Residential or Small Commercial customer to pay for the costs of that service.

Collecting Residential and Small Commercial customers' cost-of-service in a fixed monthly delivery charge is an equitable and reasonable way to recover costs from the customers in these classes. SFV rate design reflects the fact that a difference in the cost of serving two Residential or Small Commercial customers is not driven by the size of the customer's load; in fact, the difference between individual Residential or Small Commercial customers' annual volumes is miniscule when you consider the fact that the larger customers on the SNG system used several hundred thousand Ccf in the test year, while the average Residential usage is about 690 Ccf per year in the MGU North Division and 470 Ccf per year in the Southern Missouri Natural Gas ("SMNG") Division. Similarly, in the Company's proposed Small Commercial class the average customer usage is about 1060 Ccf per year in the MGU North Division and 1,550 Ccf per year in the SMNG Division.

Staff is aware that any Local Distribution Company ("LDC") is going to have a few Residential and Small Commercial customers that are high usage customers in their respective classes; these are the exception, however, rather than the rule. These exceptions cannot be segregated when trying to design fair rates for the majority of the customers in a class. The majority of customers in the Residential class or Small Commercial class fall within a relatively narrow band of usage, and Staff has not seen any evidence that a difference of a few hundred Ccf per year creates a difference in the costs incurred to serve these high usage

customers. Said another way, the cost of serving an individual Residential or Small Commercial customer is not dependent on the amount of gas that flows through the service connection. Any difference in the cost to serve any two Residential or two Small Commercial customers is more likely driven by factors other than customer size, such as distance of the service connection from the service line, customer density in the area, the terrain in the customer's geographical area, or the exact age and depreciated cost of the equipment serving the customer. Traditionally service rates do not reflect differences in these factors.

SFV and Energy Efficiency

The SFV rate design more closely aligns the Company's and customers' interests regarding energy conservation, and would enables SNG to promote conservation without harming its shareholders, because revenues from Residential and Small Commercial customers would not depend on customer usage. This will increase SNG's incentive to educate and assist its customers regarding conservation measures. At this time, cost recovery and profits are directly tied to their customers' use of natural gas through the margin rate, so by promoting energy conservation, the Company would actually harm its shareholders by lowering its ability to recover its cost of service through the margin rate.

In the determination of SNG's Residential and Small Commercial revenue sources for the 2013-14 test year, for SNG's MGU North division, Staff estimated that PGA charges were about 37 percent of the average Residential customer's bill. So, even with the SFV rate design there is still ample economic incentive for customers to reduce gas usage. SFV provides utility companies with a disincentive to promote customer usage, and an incentive to promote energy efficiency through programs that reduce natural gas use and decrease bills by

decreasing the PGA part of their bill. SFV aligns the interest of the utility company and the customers to increase energy efficiency.

Energy efficiency programs should be available to all Residential and Small Commercial customers. The Commission should authorize funding for energy efficiency programs. These programs will be developed with the assistance of an Energy Efficiency Advisory Group to be established for this purpose by the Commission. SNG has funded some low-income weatherization. The low-income weatherization program should be further developed by the proposed Advisory Group. The low income weatherization program would be coordinated with the Missouri Department of Economic Development, Energy Division and Community Action low income weatherization program through Weatherization Agencies in the SNG service areas. The SFV rate design would further the promotion of energy efficiency in the SNG service area. Staff is of the opinion that the SFV rate design should be implemented along with the funding for energy efficiency programs. Staff believes that the Commission should authorize an Energy Efficiency Advisory Group by, however Staff recommends that the expenditures be tracked in the regulatory asset account.

The SFV rate design is both fair to the Residential and Small Commercial customers and fair to the Company. It also provides both customers and the company incentives to engage in energy efficiency.

Staff Expert/Witness: Henry E. Warren

V. School Aggregation and Transportation

A. Transportation Service and Missouri School Program Transportation Service – Miscellaneous Tariff Issues

Staff recommends miscellaneous revisions for the tariffs that apply to SNG's transportation service and school transportation customers.

Schools may obtain gas services from SNG as gas sales customers or as transportation customers. For its gas sales customers, SNG acquires both pipeline capacity and the natural gas supplies that the customers use. Transportation customers are responsible for obtaining their own natural gas supplies, but they may obtain pipeline capacity required to transport their natural gas supplies from SNG as "capacity release" by purchasing some of SNG's contracted pipeline capacity, or from other entities, such as a pool operator (which aggregates the pipeline capacity and supply requirements for a pool of school transportation customers).

SNG's proposed changes to the school transportation service are in the Sheets labeled as Original Sheet Nos. 45 through 49. Capacity release provisions are in the Sheet SNG has labeled as Original Sheet No. 47.

Capacity Release

Staff recommends SNG revise its tariff to clarify its capacity release requirements for school transportation service.

The existing capacity release provisions for school transportation service in SNG's tariff for SMNG, Sheet No. 18.5 and for MGU, Sheet No. 41, are as follows:

> SMNG: "Company will release firm pipeline capacity on the applicable pipeline(s) in aggregate to the Pool Operator, as specified in the Pool Operator Contract. The release will be at the same rate that the applicable pipeline(s) charges the Company for that capacity and will be for a term of one year. The release will

> be made on a recallable basis, but the Company agrees not to recall capacity unless requested to do so by Customer."
> MGU: "It shall be the obligation of the Transporter or the Pool Operator, as Transporter's agent, to obtain sufficient pipeline capacity to deliver Transporter's gas to the Transporter. However, to the extent that the Company has excess capacity available that may be released, the Transporter or Pool Operator, shall purchase Company's excess capacity, at Company's cost, prior to obtaining capacity from other sources."

In response to Staff Data Request 0082, SNG clarified the capacity release charges as follows:

> The Pool Operator accepts the capacity release assignment at the full demand rate charged by the upstream pipeline. In addition, the Pool Operator is directly responsible for any commodity related charges imposed by the upstream pipeline. "Company's cost" is the fixed charges applied to the monthly released capacity otherwise collected from Company. Company makes no pricing distinction as to whether the capacity is recallable or non-recallable. However, the current Pool Operator Agreement prevents Company from recalling capacity.

The Pool Operator requirement for obtaining capacity for the participating schools is covered elsewhere in the SNG tariff.

Staff recommends SNG incorporate some of the clarifying language in its DR 0082 response into its tariff in order to clarify SNG's capacity release requirements and the responsibility of the schools as follows:

> To the extent that the Company has excess capacity available that may be released, any capacity released by the Company to the Pool Operator will be non-recallable for the term of the agreement. Any capacity released by the Company to the Pool Operator will be released at the full demand rate charged by the upstream pipeline and the Pool Operator is directly responsible for any commodity related charges imposed by the upstream pipeline.

The proposed revisions are consistent with provisions in the statute related to capacity release for schools which are as follows:

> Except as may be mutually agreed by the gas corporation and eligible school entities and approved by the commission, such tariffs shall not require eligible school entities to be responsible for pipeline capacity charges for longer than is required by the gas corporation's tariff for large industrial or commercial basic transportation customers. (§ 393.310.5 RSMo)
>
> The commission shall treat the gas corporation's pipeline capacity costs for associated eligible school entities in the same manner as for large industrial or commercial basic transportation customers, which shall not be considered a negative financial impact on the gas corporation, its other customers, or local taxing authorities, and the commission may adopt by order such other procedures not inconsistent with this section which the commission determines are reasonable or necessary to administer the experimental program. (§ 393.310.6 RSMo)(emphasis added).

Pool Operator Agreement

Staff recommends SNG include in its tariff a requirement for the pool operator to execute a written agreement with SNG, and Staff recommends that SNG include in its tariff a standard form for the pool operator agreement.

The existing SNG tariff for SMNG, Sheet No. 18.2 and for MGU, Sheet No. 40, references a pool operator group balancing agreement with SNG for school transportation service as follows:

> SMNG: "Company will prepare a contract for execution by the Pool Operator addressing its obligations in respect to Nominations, Balancing Charges and Cash-Out provisions and other applicable charges."
>
> MGU: "The Pool Operator shall enter into a group balancing agreement with the Company for a term of not less than one year."

SNG's existing tariff for MGU and the Company's proposed tariff revisions include a standard form for a gas transportation agreement, but not a standard form of pool operator agreement related to school transportation service. Staff recommends SNG include in its tariff a requirement for the pool operator to execute an agreement with the Company, and a

requirement that such agreement be executed using a standard form for the pool operator agreement similar to that attached as Schedule LJ 2.

The existing SNG tariffs for MGU and SMNG do not reference Pool Operator Agreements for transportation customers that are not schools. If balancing agreements for pools of other transportation customers may be forthcoming, it is recommend that SNG include in its tariff a Standard Form of Pool Operator Agreement for transportation customers that are not schools.

Transportation Supply Balancing

The existing transportation tariff sheets for MGU and SMNG have different provisions related to gas supply balancing responsibilities, treatment of inadequate or excess supplies, and any cash-out and/or penalty provisions pertaining to inadequate or excess supplies (supplies that are received into the SNG system for a transportation customer that are different than the deliveries to the customer's facility). Staff recommends SNG provide revised tariff sheets for the combined service area resolving these different provisions.

Staff also recommends SNG make additional revisions to address the obligations of the pool operator who aggregates pipeline capacity and supply requirements for a pool or group of transportation customers. Failure of transportation customers or pool operators to balance gas supply receipts and deliveries can cause SNG to buy additional higher priced gas in the daily gas market for those imbalances, inject or withdraw natural gas in storage for those imbalances (which impacts the planned availability of storage to serve firm sales customers), and/or increase or decrease monthly nominations because storage balances are not on target. All of these actions can result in higher cost of gas to serve firm sales customers.

Because inadequate or excess gas supplies from transportation customers can cause additional costs to firm gas sales customers , Staff recommends SNG revise its tariff

according to Staff's recommendations. These revisions will encourage transport customers to stay in balance and incorporate cash-out and penalty provisions as necessary, so that imbalances of transport customers do not cause extra costs to gas sales customers.

SNG has proposed revised tariff language addressing these issues in its direct filing, and Staff may comment on this proposed language in Staff's rebuttal filing.

Staff Expert/Witness: Lesa Jenkins

B. Transportation Service and Missouri School Program Transportation Service – Miscellaneous Tariff Issues

Staff recommends the following revisions to the tariffs governing SNG's transportation service, which includes school transportation customers. The tariffs, with Staff's recommended changes, will apply to all towns and communities within SNG's certificated service areas.

Missouri School Program Transportation Service (Existing tariff sheet 18.2(f) for SMNG and sheet 40(f) for MGU)

Staff recommends that SNG modify its tariff language for fees that are charged to school transportation customers (shippers) and/or pool operators that aggregate the pipeline capacity and supply requirements for a pool of school transportation customers and include the following changes (changes underlined):

"The Pool Operator shall be responsible for pipeline imbalances on the LDC's system, cash-outs, penalties, overrun gas charges or other charges it may create with the pipeline suppliers. All balancing charges or balancing-related obligations shall be the responsibility of the Pool Operator. Should the Pool Operator fail to satisfy such obligation, each individual Shipper within such Pool Group shall remain responsible for their obligations. The Pool

Operator shall enter into a group balancing agreement with the Company for a term of not less than one year. Revenues collected from cash-out charges, imbalances, penalties, overrun charges and other similar charges the pool operator may create will be credited back to the PGA/ACA account."

Transportation Service (Existing tariff sheets 23-37C for MGU and Existing tariff sheets 6-17 for SMNG)

Staff recommends that SNG include the following tariff language in its transportation service tariffs:

"The Company shall credit any revenues collected from Transportation customers (including schools) for any cashouts, imbalances, penalties, overrun charges and other similar charges to be used in the development of the Actual Cost Adjustment ("ACA") factor of the Company's Purchased Gas Adjustment ("PGA") Clause."

Staff Expert/Witness: Phil Lock

C. Missouri School Program – Transportation Service Rate Schedule

SNG currently has two tariff books. P.S.C MO No.1 applies to the Missouri Gas Utility ("MGU") service territory and P.S.C MO No. 2 applies to the Southern Missouri Natural Gas Company ("SNMG"). Each has a Missouri School Program-Transportation Service Rate Schedule. SNG is proposing to combine the two tariff books into one book that will be called P.S.C. MO No. 3. In doing so, SNG has proposed changes to the Availability and Application sections of the tariff.

Availability

The Missouri School Program -Transportation Service Rate Schedule is available to eligible school entities within SNG's service area that purchase natural gas from a third-party supplier and request transportation of volumes through its facilities. SNG's proposed transportation tariff sheets contain a numbering error: SNG's proposed Tariff Sheet 45, Availability, refers to all provisions of the Transportation Service, Tariff Sheet Nos. 23 to 41C. Tariff Sheet Nos. 23-24A pertain to Large Volume Service ("LVS"), which is for gas sales, not transportation service. The Transportation Service Tariff Sheet Nos. in the proposed tariff are 25 to 43C.

Applicability of Missouri School Program -Telemetry or Special Metering

SNG's proposed Applicability of Missouri School Programs, Tariff Sheet 46 has six ("6") conditions listed as "a" through "f."

Proposed Tariff Sheet 46, Condition "e" states:

> The Pool Operator will be responsible for forecasting the Daily Gas Supply Requirements of participating eligible school entities. The Company will initially provide historical monthly consumption information to the Pool Operator to assist it in the determination of the Daily Gas Supply Requirements of participating school entities. **Telemetry will not be required for all participants in the school aggregation program.** The Pool Operator will be responsible for taking the Forecasted Daily Gas Supply Requirement determined by the Pool Operator and the Company and provide a nomination to the interstate pipeline supplier and the Company. Nomination Procedures and Balancing Charges will be handled in accordance with Sections 3, and 4 set forth below (emphasis added).

SNG's proposed language in bold above does not match the applicable statute. Section 393.310.4(3) RSMo. provides that school aggregation program tariffs, among other

things, "shall… not require telemetry or special metering, except for individual school meters over one hundred thousand therms annually."

In order to align the tariff and statutory language, Staff proposes that the following be added to the proposed Tariff Sheet 46, e; "Telemetry of special metering that provides the Company with electronic meter reading to determine each transportation customers daily usage will not be required for school transportation program, except for individual school meters over one hundred thousand therms annually (10,000 dekatherms/year)."

Staff Expert/Witness: Kim Cox

Joel McNutt

Present Position:

I am a Regulatory Economist with the Tariffs/Rate Design Energy Unit, Operations Division of the Missouri Public Service Commission. My unit participates and makes recommendations on tariff filings, and cases filed at the Commission such as rate, complaint, applications, territorial agreements, sales, and merger cases. We also perform and provide technical support on the issues of rate design, class-cost-of-service studies and customer weather normalizations.

Educational Background and Experience:

I attended Central Missouri State University at Warrensburg, Missouri, from which I received a Bachelor of Science degree in Economics, with a minor in Business Management, in May 2002. In 2007, I received my M.B.A. from William Woods University. I began employment with the Commission in June, 2013. Prior to joining the Commission, I was employed with the Missouri Department of Economic Development for seven years as a Marketing Specialist. In this role, I worked with existing Missouri companies throughout the state for the purposes of retention and expansion through the use of various Missouri tax credit incentive programs. I also served as the Department's liaison to the Missouri Partnership, a quasi-governmental marketing arm of DED, whose sole responsibility was the attraction of new companies to Missouri through the use of state and local incentives. It was my role as a Marketing Specialist to represent the Missouri Department of Economic Development to a variety of local, state, and federal organizations.

Prior to beginning employment with the State of Missouri in 2006, I worked for different Jefferson City companies in the fields of healthcare, banking, and nuclear security.

Summary of Cases in which prepared testimony was presented by:
Joel R. McNutt

Company Name	Case No.
Liberty Utilities	GO-2014-0006
Missouri Gas Utility	GR-2014-0007

Daniel I. Beck, P.E.
Manager of Engineering Analysis Section
Tariff, Safety, Economic and Engineering Analysis Department
Regulatory Review Division

Missouri Public Service Commission
P.O. Box 360
Jefferson City, MO 65102

I graduated with a Bachelor of Science Degree in Industrial Engineering from the University of Missouri at Columbia. Upon graduation, I was employed by the Navy Plant Representative Office in St. Louis, Missouri as an Industrial Engineer. I began my employment at the Commission in November, 1987, in the Research and Planning Department of the Utility Division (later renamed the Economic Analysis Department of the Policy and Planning Division) where my duties consisted of weather normalization, load forecasting, integrated resource planning, cost-of-service and rate design. In December, 1997, I was transferred to the Tariffs/Rate Design Section of the Commission's Gas Department where my duties include weather normalization, annualization, tariff review, cost-of-service and rate design. Since June 2001, I have been in the Engineering Analysis Section of the Energy Department, which was created by combining the Gas and Electric Departments. I became the Supervisor of the Engineering Analysis Section, Energy Department, Utility Operations Division in November 2005 and my current title is Manager of Engineering Analysis.

I am a Registered Professional Engineer in the State of Missouri. My registration number is E-26953.

List of Cases in which prepared testimony was presented by:
DANIEL I. BECK

Company Name	Case No.
Union Electric Company	EO-87-175
The Empire District Electric Company	EO-91-74
Missouri Public Service	ER-93-37
St. Joseph Power & Light Company	ER-93-41
The Empire District Electric Company	ER-94-174
Union Electric Company	EM-96-149
Laclede Gas Company	GR-96-193
Missouri Gas Energy	GR-96-285
Kansas City Power & Light Company	ET-97-113
Associated Natural Gas Company	GR-97-272
Union Electric Company	GR-97-393
Missouri Gas Energy	GR-98-140
Missouri Gas Energy	GT-98-237
Ozark Natural Gas Company, Inc.	GA-98-227
Laclede Gas Company	GR-98-374
St. Joseph Power & Light Company	GR-99-246
Laclede Gas Company	GR-99-315
Utilicorp United Inc. & St. Joseph Light & Power Co.	EM-2000-292
Union Electric Company d/b/a AmerenUE	GR-2000-512
Missouri Gas Energy	GR-2001-292
Laclede Gas Company	GR-2001-629
Union Electric Company d/b/a AmerenUE	GT-2002-70
Laclede Gas Company	GR-2001-629
Laclede Gas Company	GR-2002-356
Union Electric Company d/b/a AmerenUE	GR-2003-0517
Missouri Gas Energy	GR-2004-0209
Atmos Energy Corporation	GR-2006-0387
Missouri Gas Energy	GR-2006-0422
Union Electric Company d/b/a AmerenUE	GR-2007-0003
The Empire District Electric Company	EO-2007-0029/EE-2007-0030
Laclede Gas Company	GR-2007-0208
The Empire District Electric Company	EO-2008-0043
Missouri Gas Utility, Inc.	GR-2008-0060
The Empire District Electric Company	ER-2008-0093
Trigen Kansas City Energy Corporation	HR-2008-0300
Union Electric Company d/b/a AmerenUE	ER-2008-0318
Kansas City Power & Light Company	ER-2009-0089

KCP&L Greater Missouri Operations Company	ER-2009-0090
Missouri Gas Energy	GR-2009-0355
The Empire District Gas Company	GR-2009-0434
Union Electric Company d/b/a AmerenUE	ER-2010-0036
Laclede Gas Company	GR-2010-0171
Atmos Energy Corporation	GR-2010-0192
Kansas City Power & Light Company	ER-2010-0355
KCP&L Greater Missouri Operations Company	ER-2010-0356
Union Electric Company d/b/a Ameren Missouri	GR-2010-0363
Kansas City Power & Light Company	ER-2012-0174
KCP&L Greater Missouri Operations Company	ER-2012-0175
Chaney vs. Union Electric Company	EO-2011-0391
Veach vs. The Empire District Electric Company	EC-2012-0406
The Empire District Electric Company	ER-2012-0345
KCP&L Greater Missouri Operations Company	ET-2014-0059
Kansas City Power & Light Company	ET-2014-0071
Union Electric Company d/b/a Ameren Missouri	ET-2014-0085
Missouri Gas Energy	GR-2014-0007
Union Electric Company d/b/a Ameren Missouri	EA-2012-0281
Union Electric Company d/b/a Ameren Missouri	EA-2014-0136

HENRY WARREN, PHD

REGULATORY ECONOMIST
UTILITY OPERATIONS DIVISION
ENERGY DEPARTMENT

EDUCATION AND EXPERIENCE

I received my Bachelor of Arts and my Master of Arts in Economics from the University of Missouri-Columbia, and a Doctor of Philosophy (PhD) in Economics from Texas A&M University. Prior to joining the PSC Staff (Staff), I was an Economist with the U.S. National Oceanic and Atmospheric Administration (NOAA). At NOAA I conducted research on the economic impact of climate and weather. I began my employment at the Commission on October 1, 1992 as a Research Economist in the Economic Analysis Department. My duties consisted of calculating adjustments to test-year energy use based on test-year weather and normal weather, and I also assisted in the review of Electric Resource Plans for investor owned utilities in Missouri. From December 1, 1997, until May 2001, I was a Regulatory Economist II in the Commission's Gas Department, where my duties included analysis of issues in natural gas rate cases and were expanded to include reviewing tariff filings, applications and various other matters relating to jurisdictional gas utilities in Missouri. On June 1, 2001 the Commission organized an Energy Department and I was assigned to the Tariff/Rate Design Section of the Energy Department. My duties in the Energy Department have included analysis of issues in rate cases of natural gas and electric utilities, tariff filings, applications, and various other matters relating to jurisdictional gas and electric utilities in Missouri, including review of Electric Resource Plans and Regulatory Plans for investor owned electric utilities in Missouri. I have also served on various task forces, collaboratives, and working groups dealing with issues relating to jurisdictional natural gas and electric utilities.

MISSOURI PUBLIC SERVICE COMMISSION

CASES IN WHICH PREPARED TESTIMONY,

REPORT, OR REVIEW WAS SUBMITTED BY:

HENRY E. WARREN, PHD

COMPANY NAME	CASE NUMBER
St. Joseph Light and Power Company	GR-93-042[1]
Laclede Gas Co.	GR-93-149
Missouri Public Service	GR-93-172[1]
Western Resources	GR-93-240[1]
Laclede Gas Co.	GR-94-220[1]
Kansas City Power & Light Co.	EO-94-360[2 & 1]
United Cities Gas Co.	GR-95-160[1]
UtiliCorp United, Inc.	EO-95-187[2]
The Empire District Electric Co.	ER-95-279[1]
The Empire District Electric Co.	EO-96-56[2]
St. Joseph Light and Power Company	EO-96-198[2]
Laclede Gas Co.	GR-96-193[1]
Missouri Gas Energy	GR-96-285[1]
The Empire District Electric Co.	ER-97-081[1]
Union Electric Co.	GR-97-393[1]
Missouri Gas Energy	GR-98-140[1]
Laclede Gas Co.	GR-98-374[1]
St. Joseph Light & Power Company	GR-99-246[1]
Laclede Gas Co.	GR-99-315[1]
Union Electric Company (d/b/a AmerenUE)	GR-2000-512[1]
Missouri Gas Energy	GR-2001-292[1]
Laclede Gas Co.	GR-2001-629[1]

MISSOURI PUBLIC SERVICE COMMISSION

[1]Testimony includes computations to adjust test year volumes, therms, or kWh to normal weather.

[2]Staff Report or Review

CASES IN WHICH PREPARED TESTIMONY,

REPORT OR REVIEW WAS SUBMITTED BY:

HENRY E. WARREN, PHD

(CONTINUED)

COMPANY NAME	CASE NUMBER
Laclede Gas Company	GC-2002-0110[2]
Laclede Gas Company	GR-2002-0356[1]
Aquila, Inc.	GC-2003-0131[2]
Laclede Gas Company	GC-2003-0212[2]
Laclede Gas Company	GT-2003-0117
Aquila, Inc., (d/b/a Aquila Networks MPS and L&P)	GR-2004-0072[1]
Missouri Gas Energy	GR-2004-0209
Laclede Gas Company	GC-2004-0240[2]
Kansas City Power & Light Company	EO-2005-0329[2]
Union Electric Company (d/b/a AmerenUE)	EO-2006-0240[2]
The Empire District Electric Company	ER-2006-0315
The Atmos Energy Corporation	GR-2006-0387[1]
Missouri Gas Energy	GR-2006-0422[1]
Union Electric Company (d/b/a AmerenUE)	GR-2007-0003[1]
Kansas City Power & Light Company	EO-2007-0008[2]
Aquila, Inc., (d/b/a Aquila Networks MPS and L&P)	EO-2007-0298[2]
Laclede Gas Company	GR-2007-0208[1]
Missouri Gas Energy – The Empire District Gas Company	GA-2007-0289, et al
Union Electric Company (d/b/a AmerenUE)	EO-2007-0409[2]
The Empire District Electric Company	EO-2008-0069[2]
Union Electric Company (d/b/a AmerenUE)	ER-2008-0318
Missouri Gas Energy	GR-2009-0355[2]
The Empire District Gas Company	GR-2009-0434

[1]Testimony includes computations to adjust test year volumes, therms, or kWh to normal weather.

[2]Staff Report or Review
[2]Testimony includes computations to adjust test year volumes, therms, or kWh to normal weather.

[2]Staff Report or Review

MISSOURI PUBLIC SERVICE COMMISSION

CASES IN WHICH PREPARED TESTIMONY,

REPORT OR REVIEW WAS SUBMITTED BY:

HENRY E. WARREN, PHD

(CONTINUED)

The Empire District Electric Company	ER-2010-0130
Laclede Gas Company	GR-2010-0171[2]
Atmos Energy Corporation	GR-2010-0192
Chairman's Request for Status Report Regarding Energy Efficiency …	AO-2011-0035[2]
Kansas City Power & Light	ER-2010-0355[2]
Kansas City Power & Light (Surrebuttal)	ER-2010-0355
KCP&L - Greater Missouri Operations	ER-2010-0356[2]
KCP&L - Greater Missouri Operations (Surrebuttal)	ER-2010-0356
Union Electric Company (d/b/a Ameren Missouri)	GR-2010-0363[2]
Union Electric Company (d/b/a Ameren Missouri) (Rebuttal)	GR-2010-0363
Union Electric Company (d/b/a Ameren Missouri)	ER-2011-0028[2]
Empire District Electric Company	ER-2011-0004[2]
Veolia Energy Kansas City, Inc.	HR-2011-0241
Union Electric Company (d/b/a Ameren Missouri) (Surrebuttal)	GT-2011-0410
Union Electric Company (d/b/a Ameren Missouri)	ER-2012-0166[2]
Union Electric Company (d/b/a Ameren Missouri) (Rebuttal)	ER-2012-0166
Union Electric Company (d/b/a Ameren Missouri) (Surrebuttal)	ER-2012-0166
Kansas City Power & Light	ER-2012-0174[2]
KCP&L - Greater Missouri Operations	ER-2012-0175[2]
Summit Natural Gas	GR-2013-0257[2 & 1]
Laclede Gas Company	GR-2013-0171
Laclede Gas Company	JG-2014-0215
Missouri Gas Energy	GR-2014-0007[1 & 2]
Summit Natural Gas	GR-2013-0257[2]

[1]Testimony includes computations to adjust test year volumes, therms, or kWh to normal weather.

[2]Staff Report or Review

Lesa A. Jenkins, P.E.
Utility Regulatory Engineer II

Educational Background & Certification

Bachelor of Science, Industrial Engineering, Magna Cum Laude and Honors Scholar - University of Missouri – Columbia

Master of Business Administration - William Woods University

Registered as a professional engineer in the state of Missouri, registration number E-25510

Work Experience

1999 – Current, Missouri Public Service Commission, Procurement Analysis:
My duties include the investigation and review of Missouri natural gas local distribution companies in the annual actual cost adjustment (ACA) reviews. These reviews include natural gas reliability/peak day plans, peak day reserve margin and its rationale, gas supply plans for various weather conditions, and gas purchasing practices. I have also been involved in a complaint cases and in the review of energy efficiency programs of Missouri natural gas local distribution companies. My duties also include supervision of the engineering work in the Procurement Analysis Unit.

Prior Work Experience

Missouri Department of Natural Resources, Division of Energy:
I held various engineering and then management positions with duties related to energy efficiency and alternative fuels, including low-income weatherization program, loan programs for energy efficiency projects, energy efficiency in state facilities, and alternative fuels in state vehicles.

Missouri Department of Natural Resources, Division of Environmental Quality, Solid Waste Management Program:
I was employed as an environmental engineer with duties related to regulation of infectious waste, solid waste processing facilities, waste tires, and special waste.

Procter & Gamble:
I held various positions as a production and quality control/quality assurance team manager in Cape Girardeau, Missouri and then in Cincinnati, Ohio. In Cincinnati, I also managed teams related to laboratory materials testing and documentation of product specifications.

Summary of Testimony

Company Name	Case Number	Issues
Missouri Gas Energy	GR-2014-0007	School Transportation Customers – Capacity Release Requirements
Missouri Gas Energy	GT-2010-0261	Transportation Tariff
Laclede Gas Company	GR-2010-0171	Company Reliance on On-System Storage; Energy Efficiency Programs and Collaborative
Laclede Gas Company	GR-2007-0208	Energy Efficiency and Low-Income Weatherization
Missouri Gas Energy	Consolidated GR-2003-0330, GR-2002-348	Excess Transportation Capacity
Missouri Gas Energy	GR-2004-0209	Gas Purchasing Practices
Missouri Gas Energy	GR-2001-382, GR-2000-425, GR-99-304, GR-98-167 Consolidated	Purchasing Practices - Minimum Level of Hedging; Purchasing Practices - Storage; Reliability Analysis
Aquila, Inc.	Consolidated GR-2000-520, GR-2001-461	Purchasing Practices-Eastern System; Purchasing Practices-Southern System; Reliability Analysis
Atmos Energy Corporation and United Cities Gas Company	Consolidated GR-2001-396, GR-2001-397	Purchasing Practices – General; Purchasing Practices – Southeast Missouri Integrated, Neelyville, and Consolidated districts; Reliability Analysis

ACA and Other Recommendations

Company Name	Case Number		Company Name	Case Number
2011/2012 ACA Reviews				
Ameren Missouri	GR-2013-0100		Missouri Gas Energy	GR-2012-0262
Atmos Energy/ Liberty Energy	GR-2012-0129		Summit Natural Gas of Missouri (formerly Missouri Gas Utilities)*	GR-2013-0257
Empire District Gas	GR-2013-0250		Summit Natural Gas of Missouri (formerly Southern Missouri Natural Gas)*	GR-2013-0256
Laclede Gas Company	GR-2013-0253			
2010/2011 ACA Reviews				
Ameren Missouri *	GR-2012-0077		Missouri Gas Energy	GR-2011-0290
Atmos Energy *	GR-2011-0161		Missouri Gas Utilities*	GR-2012-0115
Empire District Gas *	GR-2012-0124		Southern Missouri Natural Gas	GR-2012-0123
Laclede Gas Company	GR-2012-0133			

Company Name	Case Number		Company Name	Case Number
Report in Complaint Case				
Laclede Gas Company	GC-2011-0294			
2009/2010 ACA Reviews				
AmerenUE *	GR-2010-0180		Missouri Gas Energy	GR-2010-0372
Atmos *	GR-2010-0238		Missouri Gas Utilities*	GR-2011-0117
Empire District Gas *	GR-2011-0108		Southern Missouri Natural Gas	GR-2010-0218
Laclede Gas Company	GR-2011-0055			
2008/2009 ACA Reviews				
AmerenUE *	GR-2009-0337		Missouri Gas Energy	GR-2009-0268
Atmos *	GR-2009-0417		Missouri Gas Utilities*	GR-2009-0306
Empire District Gas *	GR-2009-0397		Southern Missouri Natural Gas	GR-2009-0287
Laclede Gas Company	GR-2010-0138			
Expansion Case				
Southern Missouri Natural Gas	GA-2010-0114			
2007/2008 ACA Reviews				
AmerenUE *	GR-2008-0366		Missouri Gas Utilities*	GR-2009-0161
Atmos *	GR-2008-0364		Southern Missouri Natural Gas	GR-2008-0379
Empire District Gas *	GR-2008-0368		Laclede Gas Company	GR-2008-0387
Missouri Gas Energy	GR-2008-0367			
2006/2007 ACA Reviews				
AmerenUE*	GR-2008-0107		Missouri Gas Energy	GR-2007-0256
Atmos*	GR-2007-0403		Missouri Gas Utilities*	GR-2008-0136
Empire District Gas*	GR-2008-0123		Southern Missouri Natural Gas	GR-2007-0484
Laclede Gas Company	GR-2008-0140			
2005/2006 ACA Reviews				
AmerenUE *	GR-2006-0333		Laclede Gas Company	GR-2006-0288
Atmos *	GR-2006-0300		Missouri Gas Energy	GR-2006-0291
Empire District Gas (Previously Aquila Networks - MPS)*	GR-2006-0297		Missouri Gas Utilities	GR-2007-0178
Fidelity Natural Gas/ Laclede Gas Company	GR-2007-0179		Southern Missouri Natural Gas	GR-2006-0352
2004/2005 ACA Reviews				
Aquila Networks -MPS	GR-2005-0271		Missouri Gas Utilities	GR-2006-0200
Laclede Gas Company	GR-2005-0203		Southern Missouri Natural Gas	GR-2005-0279
Missouri Gas Energy	GR-2005-0169			

Company Name	Case Number		Company Name	Case Number
2003/2004 ACA Reviews				
AmerenUE	GR-2005-0102		Laclede Gas Company	GR-2004-0273
Aquila L & P	Consolidated GR-2004-0538, GR-2004-0539		Missouri Gas Energy	GR-2005-0104
Aquila Networks -MPS	GR-2004-0539		Southern Missouri Gas Company	GR-2005-0064
Atmos	GR-2004-0479			
2002/2003 ACA Reviews				
Aquila L & P	GR-2003-0369		Laclede Gas Company	GR-2003-0224
Aquila Networks -MPS	GR-2003-0311		Missouri Gas Energy	GR-2003-0330
Atmos	GR-2003-0219		Southern Missouri Gas Company	GR-2004-0193
Fidelity Natural Gas	GR-2003-0323			
2001/2002 ACA Reviews				
AmerenUE	GR-2002-438		Fidelity Natural Gas	GR-2003-0148
Aquila L & P (old St. Joseph Light & Power)	GR-2002-468		Missouri Gas Energy	GR-2002-348
Aquila Networks -MPS	GR-2002-392		Southern Missouri Gas Company	GR-2002-440
Atmos	GR-2003-0150			
2000/2001 ACA Reviews				
Ameren UE	GR-2001-488		Fidelity Natural Gas	GR-2001-495
Aquila Networks -MPS	GR-2001-461		Laclede Gas Company	GR-2001-387
Atmos - Area G (Greeley)	GR-2001-394		Missouri Gas Energy	GR-2001-382
Atmos - Areas B, K, & S (old ANG)	GR-2001-396		Southern Missouri Gas Company	GR-2001-388
Atmos - Areas P&U (old United Cities)	GR-2001-397			
1999/2000 ACA Reviews				
AmerenUE	GR-2000-579		Missouri Gas Energy	GR-2000-425
Associated Natural Gas (ANG)/ Atmos	GR-2000-573		Missouri Public Service /UtiliCorp	GR-2000-520
Fidelity Natural Gas	GR-2001-250		Southern Missouri Gas Company	GR-2001-39
Greeley Gas Company /Atmos	GR-2001-36		St. Joseph Light & Power / UtiliCorp	GR-2000-574
Laclede Gas Company	GR-2000-622		United Cities Gas Company / Atmos	GR-2000-392
1998/1999 ACA Reviews				
AmerenUE	GR-99-396		Missouri Gas Energy	GR-99-304

Company Name	Case Number		Company Name	Case Number
Associated Natural Gas	GR-99-392		Missouri Public Service	GR-99-435
Fidelity Natural Gas	GR-2000-285		Southern Missouri Gas Company	GR-2000-288
Greeley Gas Company	GR-2000-319		St. Joseph Light & Power	GR-99-394
Laclede Gas Company	GR-99-316		United Cities Gas Company	GR-99-280
** Reviewed engineering work of Other Staff*				

Phil Lock

Present Position

I am a Regulatory Auditor III with the Procurement Analysis Unit of the Utility Services Department of the Missouri Public Service Commission (Commission). From 1987-1993, I conducted rate case audits under the direction of the Chief Accountant of the Commission's Accounting Department. From 1993 to the present, I have, under the direction of the Manager of Procurement Analysis, conducted audits and examinations of the books and records of gas utility companies operating within the state of Missouri.

Educational Background and Work Experience

I attended Central Missouri State University at Warrensburg, Missouri, and received a Bachelor of Science degree in Business Administration, with a major in Finance in May 1980 and a major in Accounting in December 1986. Since November 1996, I have been accredited as a Certified Government Financial Manager. Prior to employment with the Commission, I was employed as a Tax Auditor with the Missouri Highway Reciprocity Commission. I also held a position as a Research Analyst with the Division of Family Services.

Summary of Testimony

Company Name	Case Number	Issues
Grand River Mutual Telephone	TR-87-25	Cash Working Capital
Kansas Power and Light	GR-89-48	Lost & Unaccounted for gas
St. Joe Light and Power	GR-90-84	PGA costs
Associated Natural Gas	GR-90-152	Revenues, Gas Costs, Bad Debts
United Cities Gas Company	GR-92-21	Take-or-Pay Refunds
Laclede Gas Company	GR-92-165	Weather Normalization, Customer Annualization, Unbilled Revenue, Postage & Card Stock Expense, Uncollectible Accounts, E&D Expense, Gas Expense
United Cities Gas Company	GR-93-47	Revenues, Gas Costs, Uncollectible Expense, Postage Expense, Customer Bypass
Laclede Gas Company	GR-93-149	Transportation within Contract Demand
Laclede Gas Company	GR-94-328	Capacity Reservation Charges
Missouri Public Service	GR-95-273	Capacity Release
Missouri Public Service	GA-97-132	Establish Optimal Gas Cost and Transportation Level
Missouri Public Service	GR-99-435	Put and Call Transactions
Greeley Gas Company	GR-2001-394	Purchasing Practices
Atmos Energy	GR-2001-396	Agency Fees, Overrun gas, Storage, purchasing practices
Aquila Networks D/B/A Missouri Public Service	GR-2001-461	Purchasing Practices, Deferred Carrying Cost Balance, Puts/Calls

Gateway pipeline Company	GM-2001-585	PGA Costs
Aquila Networks D/B/A Missouri Public Service & L&P	GR-2004-0072	Gas Storage Inventory
Atmos Energy	GR-2006-0387	Gas Storage Inventory, Uncollectible Expense in PGA and Gas cost tariff change
Empire District Gas	GR-2009-0434	Staff Report (Direct) Gas Storage Inventory
Summit Natural Gas	GR-2014-0086	Customer Charge-Schools

KIM COX

Education and Employment Background and Credentials

I attended Central Missouri State University at Warrensburg, Missouri. In May 1996, I received a Bachelor of Science degree.

I am currently employed as a Utility Policy Analyst II with the Energy Rate Design & Tariffs Unit within the Tariff, Safety, Economic & Engineering Analysis Department of the Missouri Public Service Commission (Commission). I have been employed by the Commission since July, 2009. From July 2009 to June 2013, I worked in the Tariffs/Rate Design Section of the Energy Unit as a Rate and Tariff Examiner III, where my duties consisted of analyzing applications, reviewing tariffs and making recommendations based upon those evaluations. On June 16, 2014, I assumed my current position as Utility Policy Analyst II within the same Section, where my duties consist of coordinating highly complex activities, analyzing applications, reviewing tariffs, and making recommendations based upon my evaluations. Prior to joining the Commission, I held the position of a Quality Assurance Analyst in the regulatory field for ten years.

KIM COX

Summary of Case Involvement

	Company	Issue	Type of Filing
GR-2017-0152	Liberty Utilities	Special Contract, Large and Industrial Customers	Staff Report
GR-2014-0086	Summit Natural Gas	Lake Ozark Transportation	Staff Report
GR-2009-0434	The Empire District Gas Company	Weather Normalized Sales and Coincident-Peak Day Demand	Staff Report
GR-2010-0171	Laclede Gas Company	Weather Normalized Sales, Blocks and Coincident-Peak Day Demand	Staff Report
GR-2010-0171	Laclede Gas Company	Weather Normalized Sales	Rebuttal
GR-2010-0363	Union Electric d/b/a Ameren UE	Weather Normalized Sales, Blocks and Coincident-Peak	Staff Report

		Day Demand	
GR-2010-0347	Southern Missouri Natural Gas	Weather Normalized Sales	Staff Report
GR-2010-0192	Atmos	Weather Normalized Sales and Coincident-Peak Day Demand	Staff Report
HR-2011-0241	Veolia	Weather Normalized Sales	Staff Report
ER-2012-0175	KCP&L and GMO	L&P Weather Normalization and Annualization	Staff Report
GR-2014-0007 Coordinated	Missouri Gas Energy	Direct COS sponsor of Weather, Weather Normalization and Large Volume Customer Revenue Adjustment	Direct Testimony
GR-2014-0007 Coordinated	Missouri Gas Energy	Direct CCOS sponsor of Rate Design, Miscellaneous Tariff Issues, School Transportation Capacity, Gas Supply Incentive Plan and Staff's CCOS	Direct Testimony

SUMMIT NATURAL GAS
CASE NO. GR-2014-0086 (Branson District)
TEST YEAR ENDED September 30, 2013, Updated Through 12/31/13

	TOTAL	RESIDENTIAL	GENERAL SERVICE	LARGE GENERAL SERVICE	LARGE VOLUME
RATE BASE	$47,256,104	$6,636,853	$6,519,648	$11,697,692	$0
REQUESTED RETURN	7.1200%	7.1200%	7.1200%	7.1200%	7.1200%
RETURN ON RATE BASE	$3,364,635	$472,544	$464,199	$832,876	$0
O & M EXPENSES	$421,831	$114,107	$92,603	$144,601	$0
DEPRECIATION EXPENSE	$903,778	$130,122	$124,916	$218,857	$0
TAXES OTHER THAN INCOME	$1,048,220	$143,818	$141,614	$254,550	$0
INCOME TAXES	$1,171,891	$164,585	$161,679	$290,088	$0
TOTAL EXPENSES	$3,545,720	$552,632	$520,811	$908,096	$0
TOTAL C-O-S	$6,910,355	$1,025,176	$985,010	$1,740,972	$0
OTHER REVENUES	$433,266	$122,536	$114,529	$196,201	$0
REQUIRED MARGIN REVENUE	$6,477,089	$902,640	$870,482	$1,544,770	$0
CURRENT MARGIN REVENUES	$2,443,237	$184,071	$344,529	$763,735	$0
ZERO REVENUE INCREASE PLUG	$4,033,852	$562,153	$542,125	$962,064	$0
C-O-S MARGIN REVENUES @ 0%	$2,443,237	$340,487	$328,356	$582,706	$0
REVENUE ABOVE (BELOW) COS	$0	($156,416)	$16,173	$181,029	$0
% INCREASE WITHOUT GAS COSTS	0.00%	84.98%	-4.69%	-23.70%	#DIV/0!
CLASS' SHARE OF TOTAL MARGIN REVENUES	100.00%	13.94%	13.44%	23.85%	0.00%
AVERAGE GAS COSTS	$0				
% INCREASE WITH GAS COSTS	0.00%	84.98%	-4.69%	-23.70%	#DIV/0!
CLASS' SHARE OF TOTAL REVENUES	100.00%	13.94%	13.44%	23.85%	0.00%

SUMMIT NATURAL GAS
CASE NO. GR-2014-0086 (Gallatin District)
TEST YEAR ENDED September 30, 2013, Updated Through 12/31/13

	TOTAL	GENERAL SERVICE	COMMERCIAL SERVICE	TRANSPORTATION SERVICE	LARGE VOLUME
RATE BASE	$7,897,987	$5,538,796	$1,325,611	$577,116	$456,464
REQUESTED RETURN	7.1200%	7.1200%	7.1200%	7.1200%	7.1200%
RETURN ON RATE BASE	$562,337	$394,362	$94,383	$41,091	$32,500
O & M EXPENSES	$252,915	$180,400	$41,766	$16,546	$14,202
DEPRECIATION EXPENSE	$225,070	$158,000	$37,942	$16,228	$12,900
TAXES OTHER THAN INCOME	$183,665	$128,732	$30,757	$13,435	$10,741
INCOME TAXES	$196,326	$137,682	$32,952	$14,346	$11,347
TOTAL EXPENSES	$857,976	$604,814	$143,417	$60,555	$49,190
TOTAL C-O-S	$1,420,313	$999,176	$237,800	$101,646	$81,691
OTHER REVENUES	$52,879	$48,275	$4,604	$0	$0
REQUIRED MARGIN REVENUE	$1,367,434	$950,901	$233,197	$101,646	$81,691
CURRENT MARGIN REVENUES	$1,267,991	$638,738	$340,630	$182,434	$106,189
ZERO REVENUE INCREASE PLUG	$99,443	$69,152	$16,959	$7,392	$5,941
C-O-S MARGIN REVENUES @ 0%	$1,267,991	$881,749	$216,238	$94,254	$75,750
REVENUE ABOVE (BELOW) COS	($0)	($243,011)	$124,392	$88,180	$30,439
% INCREASE WITHOUT GAS COSTS	0.00%	38.05%	-36.52%	-48.34%	-28.67%
CLASS' SHARE OF TOTAL MARGIN REVENUES	100.00%	69.54%	17.05%	7.43%	5.97%
AVERAGE GAS COSTS	$0				
% INCREASE WITH GAS COSTS	0.00%	38.05%	-36.52%	-48.34%	-28.67%
CLASS' SHARE OF TOTAL REVENUES	100.00%	69.54%	17.05%	7.43%	5.97%

SUMMIT NATURAL GAS
CASE NO. GR-2014-0086 (Rogersville District)
TEST YEAR ENDED September 30, 2013, Updated Through 12/31/13

	TOTAL	RESIDENTIAL	GENERAL SERVICE	LARGE GENERAL SERVICE	LARGE VOLUME
RATE BASE	$75,509,533	$32,593,066	$13,863,057	$4,391,925	$3,911,967
REQUESTED RETURN	7.1200%	7.1200%	7.1200%	7.1200%	7.1200%
RETURN ON RATE BASE	$5,376,279	$2,320,626	$987,050	$312,705	$278,532
O & M EXPENSES	$1,894,293	$1,115,534	$440,159	$131,029	$113,581
DEPRECIATION EXPENSE	$2,045,588	$879,503	$371,468	$118,778	$106,036
TAXES OTHER THAN INCOME	$729,794	$311,051	$131,975	$42,761	$38,259
INCOME TAXES	$1,886,669	$814,365	$346,380	$109,736	$97,744
TOTAL EXPENSES	$6,556,344	$3,120,452	$1,289,982	$402,304	$355,619
TOTAL C-O-S	$11,932,623	$5,441,078	$2,277,032	$715,009	$634,151
OTHER REVENUES	$98,095	$87,489	$10,606	$0	$0
REQUIRED MARGIN REVENUE	$11,834,528	$5,353,589	$2,266,426	$715,009	$634,151
CURRENT MARGIN REVENUES	$10,034,751	$3,717,806	$1,895,892	$660,338	$547,613
ZERO REVENUE INCREASE PLUG	$1,799,777	$814,166	$344,675	$108,737	$96,441
C-O-S MARGIN REVENUES @ 0%	$10,034,751	$4,539,424	$1,921,752	$606,271	$537,711
REVENUE ABOVE (BELOW) COS	($0)	($821,618)	($25,860)	$54,067	$9,902
% INCREASE WITHOUT GAS COSTS	0.00%	22.10%	1.36%	-8.19%	-1.81%
CLASS' SHARE OF TOTAL MARGIN REVENUES	100.00%	45.24%	19.15%	6.04%	5.36%
AVERAGE GAS COSTS	$0				
% INCREASE WITH GAS COSTS	0.00%	22.10%	1.36%	-8.19%	-1.81%
CLASS' SHARE OF TOTAL REVENUES	100.00%	45.24%	19.15%	6.04%	5.36%

SUMMIT NATURAL GAS
CASE NO. GR-2014-0086 (Warsaw District)
TEST YEAR ENDED September 30, 2013, Updated Through 12/31/13

	TOTAL	GENERAL SERVICE	COMMERCIAL SERVICE	TRANSPORTATION SERVICE	LARGE VOLUME
RATE BASE	$16,323,511	$6,324,998	$4,566,839	$0	$5,431,674
REQUESTED RETURN	7.1200%	7.1200%	7.1200%	7.1200%	7.1200%
RETURN ON RATE BASE	$1,162,234	$450,340	$325,159	$0	$386,735
O & M EXPENSES	$227,063	$95,318	$60,753	$0	$70,992
DEPRECIATION EXPENSE	$438,659	$169,351	$123,080	$0	$146,227
TAXES OTHER THAN INCOME	$342,786	$131,401	$96,124	$0	$115,261
INCOME TAXES	$425,153	$164,737	$118,945	$0	$141,470
TOTAL EXPENSES	$1,433,661	$560,807	$398,903	$0	$473,951
TOTAL C-O-S	$2,595,895	$1,011,147	$724,062	$0	$860,686
OTHER REVENUES	$8,810	$7,745	$1,065	$0	$0
REQUIRED MARGIN REVENUE	$2,587,085	$1,003,402	$722,997	$0	$860,686
CURRENT MARGIN REVENUES	$1,261,854	$393,886	$345,880	$0	$522,088
ZERO REVENUE INCREASE PLUG	$1,325,231	$513,991	$370,354	$0	$440,885
C-O-S MARGIN REVENUES @ 0%	$1,261,854	$489,411	$352,643	$0	$419,801
REVENUE ABOVE (BELOW) COS	$0	($95,525)	($6,763)	($0)	$102,287
% INCREASE WITHOUT GAS COSTS	0.00%	24.25%	1.96%	#DIV/0!	-19.59%
CLASS' SHARE OF TOTAL MARGIN REVENUES	100.00%	38.79%	27.95%	0.00%	33.27%
AVERAGE GAS COSTS	$0				
% INCREASE WITH GAS COSTS	0.00%	24.25%	1.96%	#DIV/0!	-19.59%
CLASS' SHARE OF TOTAL REVENUES	100.00%	38.79%	27.95%	0.00%	33.27%

Missouri School Program

Transportation Service Rate Schedule
Standard Form of Pool Operator Agreement/Group Balancing Agreement

This Agreement is made and entered into this ___ day of _____, _____ by and between Summit Natural Gas of Missouri, Inc., 7810 Shaffer Parkway, Suite 120, Littleton, CO 80127, hereinafter called "Company" and _____, having a mailing address of _____, _____, _____, hereinafter called "Pool Operator."

Term: This Pool Operator agreement shall continue in full force and effect for a term of _____, scheduled to begin on _____.

Pool Operator acknowledges that it is the agent for one or more Missouri School Program Transportation Service customers and it is authorized to act on behalf of customers identified in Exhibit _____ which have separately executed Transportation Service Agreements with Company. As agent, Pool Operator is authorized to (a) make nominations to Company on behalf of its Missouri School Program Transportation Service customers; (b) receive from Company, for the purposes related to the Missouri School Program Transportation Service, usage information, copies of billings, and such other information related to the Missouri School Program Transportation Service.

Pool Operator acknowledges that Missouri School Program Transportation Service is subject to the terms and conditions of Company's Transportation Service tariff sheets, Missouri School Program Transportation Service Rate Schedule tariff sheets, the Rules and Regulations as on file and in effect with the Missouri Public Service Commission, and as may be amended, modified, reissued and made effective from time to time as provided by law.

To the extent this agreement is inconsistent with the tariff, the terms of the tariff will be controlling.

IN WITNESS WHEROF, the parties have executed this Gas Transportation Service Agreement as of the day and year first above written.

Company: Summit Natural Gas of Missouri, Inc.	Pool Operator: _____
By: _____	By: _____
Title: _____	Title: _____
Witness/Attest: _____	Witness/Attest: _____