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Witness: Timothy R. Johnston

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Sponsoring Party: Summit Natural Gas of Missouri, Inc.

Case No.: GR-2014-0086

Date: August 8, 2014

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO. GR-2014-0086**

**SURREBUTTAL TESTIMONY**

**OF**

**TIMOTHY R. JOHNSTON**

**ON BEHALF OF**

**SUMMIT NATURAL GAS OF MISSOURI, INC.**

**Jefferson City, MO  
August, 2014**

Summit Exhibit No. 6  
Date 8-19-14 Reporter JF  
File No. GR-2014-0086

**TABLE OF CONTENTS**

**SURREBUTTAL TESTIMONY  
OF  
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**SUMMIT NATURAL GAS OF MISSOURI, INC.**

**CASE NO. GR-2014-0086**

	<b>Page</b>
<b>Introduction</b>	<b>1</b>
<b>Purpose of Testimony</b>	<b>1</b>
<b>Response to MPGA Witness Brooks' Testimony</b>	<b>2</b>
<b>Response to OPC Witness Meisenheimer's Testimony</b>	<b>4</b>
<b>Recommendation to Modify the Commission's Order in Case No. GA-94-127</b>	<b>20</b>
<b>Transfer of Distribution Mains to Plant Held for Future Use, FERC Account 105</b>	<b>22</b>

**REBUTTAL TESTIMONY**

**TIMOTHY R. JOHNSTON**

**SUMMIT NATURAL GAS OF MISSOURI, INC.**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. Timothy R. Johnston, 7810 Shaffer Parkway, Littleton, CO 80127.

3 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY AND SCHEDULES IN**  
4 **THIS CASE?**

5 A. Yes. I adopted the Direct Testimony of Ms. Michelle Moorman and I submitted  
6 Rebuttal Testimony in this case on behalf of Summit Natural Gas of Missouri, Inc.  
7 (SNG).

8 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS**  
9 **PROCEEDING?**

10 A. I will: (1) respond to the Rebuttal Testimony of Missouri Propane Gas Association  
11 (MPGA) witness Brian T. Brooks; (2) respond to the recommendation in Office of  
12 the Public Counsel (OPC) witness Barbara Meisenheimer's Rebuttal Testimony  
13 to reject Summit's proposed tariff sheets; (3) propose a modification to the  
14 Commission's Order in GA-94-127, in further response to Ms. Meisenheimer's  
15 Rebuttal Testimony; and, (4) propose a partial plan by which to transfer certain  
16 assets in the Warsaw and Branson Divisions to Plant Held for Future Use, FERC  
17 Account 105, in response to the testimony of Staff witness Amanda McMellen  
18 and Ms. Meisenheimer.

1                   **RESPONSE TO MPGA WITNESS BROOKS' TESTIMONY**

2   **Q.   MR. BROOKS HAS REFERRED TO REPRESENTATIONS MADE IN THE**  
3           **DIRECT TESTIMONIES OF MS. MOORMAN AND MR. TAYLOR**  
4           **CONCERNING SNG's REQUEST TO RECOVER LESS THAN THE FULL**  
5           **COST OF SERVICE FROM THE BRANSON DISTRICT, DUE IN PART TO THE**  
6           **FACT THAT THE CUSTOMER COUNT IN THIS SYSTEM IS STILL GROWING**  
7           **(PAGE 6, LINES 1 THROUGH 18). PLEASE EXPLAIN THE USE OF THE**  
8           **TERM "EARLY MOVER" AS IT IS USED IN MS. MOORMAN'S TESTIMONY.**

9   **A.   Ms. Moorman explained that SNG sought something less than the full revenue**  
10           **requirement in order to avoid assigning the full cost of new systems to early**  
11           **moving customers. Within that context, an Early Mover is a customer who**  
12           **accepts service when service is made available, rather than waiting for a**  
13           **significant customer penetration to occur. Without early movers, systems may**  
14           **never be built.**

15   **Q.   AT PAGE 6, LINE 18, OF MR. BROOKS' TESTIMONY, HE ASSERTS, " IF**  
16           **SNG IS PROPOSING A REVENUE SHORTFALL NOW, ONE CAN**  
17           **LOGICALLY INFER THAT FUTURE SUBSTANTIAL RATE INCREASES WILL**  
18           **BE NECESSARY....". IS THAT ASSERTION ACCURATE?**

19   **A.   No. Distribution mains investments necessary to serve the eventual anticipated**  
20           **customer base have to occur and be placed in-service in advance of customer**  
21           **growth. Approximately 74%<sup>1</sup> of Summit's Branson-related rate base is related to**  
22           **the net plant arising from Distribution Mains, FERC Account 101-376; most of the**

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1 See Schedule TRJ-1, page 1 of 1.

1 amounts posted to this account are the construction costs for the 8 inch and 6  
2 inch steel mainline that brings natural gas to the Branson area from the meter  
3 station on the Southern Star Central Gas Pipeline located just north and west of  
4 the town of Aurora, MO. That investment was made to serve the customer base  
5 that is ultimately contemplated, and building a pipeline with less capacity would  
6 not have been prudent based on the projected ultimate load in the Branson  
7 service area. As the capacity related to that investment is absorbed by new  
8 customers, the costs will also be spread over a larger customer base. So, just  
9 the opposite of Mr. Brooks' assertion is true. One can expect rates to decline  
10 over time as customer growth occurs.

11 **Q. ARE WARSAW'S CAPACITY UTILIZATION ATTRIBUTES SIMILAR TO**  
12 **BRANSON?**

13 A. Somewhat. The primary driver of Warsaw future rate relief will come from  
14 increased transfer of cost responsibility for those mainline assets shared with the  
15 Lake of the Ozarks Division. Similar to Branson, 73%<sup>2</sup> of Warsaw's rate base is  
16 composed of the net plant related to Distribution Mains, FERC Account 101-376.

17 **Q. AT PAGE 7, LINE 2, OF MR. BROOKS' TESTIMONY, HE SUGGESTS THAT**  
18 **THE CUSTOMERS IN OTHER MISSOURI RATE DIVISIONS WILL SUBSIDIZE**  
19 **BRANSON AND WARSAW CUSTOMERS. IS THAT TRUE?**

20 A. No. The revenue requirements of the other SNG divisions are separately  
21 calculated based on cost-causation and do not cause interdivision subsidies.

22 The financial burden of lower-than-cost rates falls squarely on SNG's

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<sup>2</sup> See Schedule TRJ-1, page 1 of 1.

1 shareholder.

2 **RESPONSE TO OPC WITNESS MEISENHEIMER'S TESTIMONY**

3 **Q. PLEASE DESCRIBE YOUR UNDERSTANDING OF MS. MEISENHEIMER'S**  
4 **POSITION AND RECOMMENDATION REFLECTED IN HER REBUTTAL**  
5 **TESTIMONY.**

6 A. Ms. Meisenheimer asserts that SNG and its predecessors have not complied with  
7 past Commission orders to isolate SNG's customers from financial hazards  
8 associated with expansion and therefore the Commission should reject SNG's  
9 request for a rate increase. She quotes the Commission's admonitions in  
10 numerous Commission orders. She discusses each SNG operating division and  
11 offers a comparison of the feasibility studies used to justify the certificates of  
12 public convenience and necessity ("CPCN") with her understanding of current  
13 customer counts and adjusted test period annual sales and transport volumes (as  
14 found in Tables 1 through 4 of Ms. Meisenheimer's Rebuttal Testimony).

15 **Q. ARE THE DATA SHOWN IN TABLES 1 THROUGH 4 OF MS.**  
16 **MEISENHEIMER'S REBUTTAL TESTIMONY CORRECT?**

17 A. No. As demonstrated in SNG Witness Porter's Surrebuttal Testimony, Ms.  
18 Meisenheimer's data contains numerous data interpretation errors and arithmetic  
19 errors. In addition, comparisons of historic per-customer usage figures from past  
20 filings to current per customer usage figures is not valid due to the ongoing  
21 effects of conservation measures and the increases in the efficiency of natural  
22 gas fired equipment.

1 **Q. PLEASE DESCRIBE, FOR EACH RELEVANT OPERATING DIVISION, YOUR**  
2 **RESPONSE TO MS. MEISENHEIMER'S TESTIMONY.**

3 A. First, it is important to state that which may not be obvious. SNG provides a  
4 service in less-populated areas of Missouri in which other utilities have declined  
5 to provide service and, more importantly, saves customers money. SNG is not a  
6 pure monopoly because its customers are not prohibited from fuel switching.

7 **Q. ARE SNG'S EARNINGS ROBUST OR IS IT FAIR TO SAY THAT SNG'S**  
8 **COMMON EQUITY HOLDERS HAVE EXPERIENCED DEGRADED EARNINGS**  
9 **THROUGH THE ASSUMPTION OF FINANCIAL RESPONSIBILITY FOR ITS**  
10 **EXPANSIONS?**

11 A. The latter. SNG's ownership has born the financial responsibility for all the growth  
12 within Missouri. SNG Witness Anderson's Direct Testimony includes Schedule 1,  
13 which provides an historical summary of actual returns to common equity. The  
14 data therein supports my financial responsibility assertion. Building new  
15 distribution systems into areas with existing homes always results in lower  
16 revenues during the time the system is under construction and for a number of  
17 years after construction as customers gradually convert to natural gas. This  
18 tends to put the company in a situation where the return authorized by the  
19 Commission will not be realized until the third year of operation at the least, on  
20 smaller systems, and much later on larger investments such as Branson.

21 **Q. IS IT YOUR BELIEF THAT THE RECESSION BEGINNING IN LATE 2008 WAS**  
22 **INSTRUMENTAL IN RETARDING SYSTEM GROWTH?**

1 A. Yes. The Branson, Lake of the Ozarks, and Warsaw areas were among the  
2 fastest growing regions in Missouri prior to the recession. The main systems for  
3 Branson and Warsaw were sized in part to accommodate projected growth that  
4 has not occurred.

5 **Q. WERE YOUR BASE RATES AFFECTED BY THE RECESSION?**

6 A. No.

7 **Q. IN YOUR OPINION HAS SNG PROVIDED BENEFITS TO ITS CUSTOMERS  
8 AND VARIOUS AREAS OF THE STATE DUE TO THE AVAILABILITY OF  
9 NATURAL GAS AS A FUEL SOURCE ALTERNATIVE?**

10 A. Yes. The availability of natural gas along a street increases property values, and  
11 its presence in a community is often critical to economic growth. Most recently,  
12 access to natural gas insulated many of our customers from dramatically higher  
13 winter propane price spikes.

14 **GALLATIN**

15 **Q. DOES TABLE 1 ON PAGE 8 OF MS. MEISENHEIMER'S REBUTTAL  
16 TESTIMONY ADEQUATELY REFLECT APPROPRIATE FINANCIAL  
17 RESPONSIBILITY MEASUREMENTS FOR SNG'S GALLATIN DIVISION?**

18 A. No. The table possesses all the flaws described earlier and should be ignored.  
19 See SNG Witness Porter's detailed explanation in his Surrebuttal Testimony.

20 **Q. HAS MS. MEISENHEIMER FULLY ACKNOLWEDGED THE RISKS BORN BY  
21 SNG FOR ITS GALLATIN DIVISION?**

22 A. No. She has focused all her attention on feasibility studies as the only indicator



1 of risk assumption. She has not acknowledged the uncertainties that accompany  
2 a growth utility and the result that SNG has born the financial responsibility as  
3 promised.

4 **Q. DID SNG (THEN MISSOURI GAS UTILITY, INC.) CONSTRUCT THE PRIMARY**  
5 **SYSTEMS THAT MAKE UP THE GALLATIN OPERATING DIVISION?**

6 A. No. The original Gallatin and Hamilton systems were built as municipal systems  
7 in 1995. For a variety of reasons, the residents of these towns and other  
8 communities along the pipeline route did not connect to the system at the rate  
9 anticipated in the original projections. By the summer of 2004, both the Gallatin  
10 and Hamilton town councils had elected to cease payments on the Certificates of  
11 Participation used to finance the original system, and the banks representing the  
12 holders of those Certificates had foreclosed on the systems. The banks had  
13 made arrangements with the towns to continue to operate the systems, but  
14 neither the towns nor the banks were willing to enter into contracts for the gas  
15 necessary to provide service for the 2004/2005 heating season. The gas  
16 transportation contract for the Gallatin and Hamilton system includes some  
17 storage capacity, but the gas remaining in that storage would have only sufficed  
18 to supply the system until early December, 2004. Summit Utilities, Inc. became  
19 aware of this situation in late September, 2004, and was able to obtain approval  
20 from this Commission to form Missouri Gas Utility, purchase this system and take  
21 over the operations by January 1, 2005. Even prior to that approval, Summit  
22 Utilities took steps to purchase additional gas and have it placed into storage to

1 enable the system to continue service to these communities.

2 **Q. CAN YOU PROVIDE AN EXAMPLE OF GALLATIN-RELATED RISKS THAT**  
3 **WERE ASSUMED BY SNG?**

4 A. Yes. A CPCN to serve a single additional customer was approved in  
5 Commission Case No. GA-2007-0421, on June 26, 2007. The construction was  
6 completed before the base rates approved in GR-2008-0060 were in effect. To  
7 the extent the subject expansion underperformed, SNG was on the hook until the  
8 next rate case. This is the next rate case. Underperformance for seven years, if  
9 underperformance has occurred, has been a financial burden for SNG, not the  
10 rate payers.

11 **Q. CAN YOU CITE OTHER FINANCIAL RESPONSIBILITIES BORN BY SNG AND**  
12 **NOT THE RATE PAYERS?**

13 A. Yes. Ms. Meisenheimer fails to mention that SNG purchased natural gas for the  
14 winter of 2004-2005, before it even owned the Gallatin and Hamilton systems.  
15 This was accomplished in anticipation of a successful acquisition transaction, but  
16 represented a significant risk to SNG since it had no assurance of cost recovery  
17 when the transaction was completed. Fortunately, the financial hazard did not  
18 occur. She also failed to mention that Gallatin's assets were brought onto SNG  
19 books at a heavily discounted purchase price and it was that amount, rather than  
20 the significantly higher outstanding municipal debt related to the system's cost of  
21 construction, that became the foundation for Gallatin's rate base going forward.  
22 Gallatin's customers, who would otherwise have been required to pay the costs

1 associated with the original system investment, were relieved of that  
2 responsibility. She also failed to mention that SNG moved quickly to take over  
3 these systems and that such movement was instrumental in allowing the Gallatin  
4 customers to avoid loss of a heat source during the winter of 2004-2005.

5 **Q. TO YOUR KNOWLEDGE, DID OPC PROPOSE A RATE CONDITION OR**  
6 **OTHER CONSTRAINT ON THE GALLATIN SYSTEM DURING THE**  
7 **STATUTORY PERIOD RELATED TO THE GALLATIN RATE CASE YOU HAVE**  
8 **CITED?**

9 A. Ms. Meisenheimer's testimony did not include any mention of revenue  
10 requirement issues in her direct testimony in Case No GR-2008-0060. Mr. Ted  
11 Robertson did provide testimony in that Case related to the amount of utility plant  
12 in service.

13 **Q. PLEASE SUMMARIZE YOUR RESPONSE TO MS. MEISENHEIMER.**

14 A. Ms. Meisenheimer has failed to consider the entire basket of responsibilities born  
15 by SNG in the acquisition and growth of the Gallatin Division. SNG has born  
16 substantial risk and, in some case, the attendant hazards have occurred, causing  
17 SNG to incur degraded earnings.

18 **Q. HAS SNG ACCEPTED THE FINANCIAL RESPONSIBILITY FOR ITS**  
19 **GALLATIN ACQUISITION AND GROWTH?**

20 A. Yes.

21 **Q. DOES SNG INTEND TO ACCEPT FINANCIAL RESPONSIBILITY FOR ITS**  
22 **GALLATIN ACQUISITION AND GROWTH IN THE FUTURE?**

1 A. Yes.

2 **WARSAW**

3 **Q. DOES TABLE 2 ON PAGE 11 OF MS. MEISENHEIMER'S REBUTTAL**  
4 **TESTIMONY ADEQUATELY REFLECT APPROPRIATE FINANCIAL**  
5 **RESPONSIBILITY MEASUREMENTS FOR SNG'S WARSAW DIVISION?**

6 A. No. Ms. Meisenheimer included the billing determinants for the proposed Buffalo  
7 and Bolivar expansion, as approved in Case No GA-2010-0189. This expansion  
8 did not occur, and would not, in any case, have been part of or connected  
9 physically to the Warsaw system. As designed, the Buffalo and Bolivar system  
10 would have been supplied with natural gas from a proposed tap on the Southern  
11 Star Central Gas Pipeline line in Brookline, MO. See SNG Witness Porter's  
12 detailed explanation in his Surrebuttal Testimony.

13 **Q. HAS MS. MEISENHEIMER FULLY ACKNOWLEDGED THE RISKS BORN BY**  
14 **SNG FOR ITS WARSAW DIVISION?**

15 A. No. As was true for Gallatin, she has focused all her attention on feasibility  
16 studies as the only indicator of risk assumption. She has not acknowledged the  
17 uncertainties that accompany a growth utility.

18 **Q. DO YOU BELIEVE THE 2008 RECESSION HAD AN IMPACT ON THE**  
19 **GROWTH IN THE WARSAW DIVISION?**

20 A. Yes. The Commission Order in Case No. GA-2009-0422 occurred on July 8,  
21 2009, and SNG began construction shortly thereafter. I believe the recession  
22 and its persistence have affected SNG's ability to connect new customers, as

1 well as reducing the organic growth in this area that had been occurring for  
2 several years, the effect of which was anticipated in the design of this system.

3 **Q. HOW WERE THE RATES SET FOR THE WARSAW DIVISION?**

4 A. The rates were established by the Commission based on the results of the  
5 original feasibility study in Case No. GA-2009-0264.

6 **Q. HAVE THE BASE RATES CHANGED SINCE THE ORIGINAL RATES WERE  
7 SET?**

8 A. No.

9 **Q. FROM YOUR PREVIOUS ANSWER IS IT REASONABLE TO CONCLUDE  
10 THAT WARSAW'S CUSTOMERS HAVE NOT SUFFERED FROM THE POOR  
11 GROWTH PERFORMANCE CITED BY MS. MEISENHEIMER?**

12 A. Yes.

13 **Q. WHY IS SNG REQUESTING LESS THAN FULL COST RECOVERY IN THE  
14 WARSAW DIVISION?**

15 A. Warsaw's existing rate base contains a materially underutilized investment in  
16 Distribution Mains, FERC Account 101-376. SNG believes it is inappropriate to  
17 burden existing customers with the full cost recovery for that investment. The  
18 distribution mains installed were designed to serve a larger population than  
19 currently exists in this area, due in large part to the reduction in growth caused by  
20 the recession. The manner in which the reduction in recovery was calculated  
21 was intended to only assign the existing customers the proportionate cost  
22 recovery for the fraction of the capacity of the system which they are using.

1 **Q. DO YOU BELIEVE THIS APPROACH IS FAITHFUL TO THE COMMISSION**  
2 **ORDER TO INSULATE THE CUSTOMERS FROM FINANCIAL**  
3 **RESPONSIBILITY?**

4 A. Yes.

5 **Q. IS SNG'S POSITION CONSISTENT WITH THE NEED TO ACCEPT THE**  
6 **FINANCIAL RESPONSIBILITY RELATED TO ASSET UNDERUTILIZATION?**

7 A. Yes. Further on in my testimony, I will describe a formal process for assigning  
8 some of the value of the assets in Distribution Mains, FERC Account 101-376, to  
9 Plant Held for Future Use, FERC Account 105 to maintain this financial  
10 responsibility.

11 **Q. IN MS. MEISENHEIMER'S TESTIMONY AT PAGE 10, LINES 1 - 5, SHE CITES**  
12 **THE NEED FOR TRANSPARENCY AND QUESTIONS THE ADEQUACY OF**  
13 **SNG'S PROPOSED REVENUE REDUCTION. HOW DO YOU PROPOSE TO**  
14 **ACCOUNT FOR THE REVENUE REDUCTION?**

15 A. Ms. Meisenheimer questions the use of "management policy decisions" (page 18,  
16 line 12 – 13) as a rate design principle at Warsaw and Branson. Management's  
17 decision to reduce the requested revenue was based on a rough comparison of  
18 the number of current customers to the number of potential customers. This  
19 methodology is fair and results in an adequate reduction.

20 **Q. HAS SNG ACCEPTED THE FINANCIAL RESPONSIBILITY FOR ITS**  
21 **WARSAW EXPANSION?**

22 A. Yes.

1 Q. DOES SNG INTEND TO ACCEPT FINANCIAL RESPONSIBILITY FOR ITS  
2 WARSAW EXPANSION IN THE FUTURE?

3 A. Yes.

4 ROGERSVILLE

5 Q. DOES TABLE 4 ON PAGE 17 OF MS. MEISENHEIMER'S TESTIMONY  
6 ADEQUATELY REFLECT APPROPRIATE FINANCIAL RESPONSIBILITY  
7 MEASUREMENTS FOR SNG'S ROGERSVILLE DIVISION?

8 A. No. The table possesses all the flaws described earlier and should be ignored.  
9 See SNG Witness Porter's detailed explanation in his Surrebuttal Testimony.

10 Q. IN MS. MEISENHEIMER'S TESTIMONY AT PAGE 15, LINE 5 – 7, SHE CITES  
11 THE IMPUTED VOLUME FOR ROGERSVILLE WHICH EMERGED FROM THE  
12 ORIGINAL CERTIFICATE FILING, CASE NO. GA-94-127 (ISSUED  
13 SEPTEMBER 16, 1994). THAT COMMISSION ORDER CONTAINED AN OPEN-  
14 ENDED REQUIREMENT FOR INITIAL BASE RATES AND BASE RATES  
15 FROM SUBSEQUENT FILINGS TO USE A MINIMUM THROUGHPUT OF  
16 1,797,000 MCF. IS MS. MEISENHEIMER'S ASSERTION CONSISTENT WITH  
17 YOUR UNDERSTANDING?

18 A. Yes.

19 Q. DO THE VOLUMES FOR ROGERSVILLE IN SNG'S FILED CASE REFLECT  
20 THE IMPUTED VOLUME?

21 A. Yes, because the total throughput in SNG's filed case are greater than the  
22 imputed volume.

1 **Q. PLEASE DESCRIBE YOUR UNDERSTANDING OF ROGERSVILLE TEST**  
2 **PERIOD THROUGHPUT.**

3 A. SNG's Rogersville filed throughput was 1,755,522 Mcf. In addition, SNG'S  
4 transportation study included an additional 104,049 Mcf<sup>3</sup> of throughput, the  
5 revenues from which were included as a revenue credit to the cost-of-service and  
6 therefore excluded from billing determinants. So, the filed adjusted test-period  
7 throughput was 1,859,571. This exceeds the imputed volume of 1,797,000 Mcf.

8 **Q. DOES STAFF'S FILED CASE AGREE WITH SNG'S ANNUAL VOLUMES?**

9 A. Yes. Staff updated its cost-of-service study by moving the test period forward  
10 three months. Staff's billing determinant calculations are still under review.  
11 However, it appears Staff's throughput will be close to 1,900,000 Mcf.

12 **Q. DO YOU BELIEVE THE IMPUTED VOLUMES FROM CASE NO. GA-94-127**  
13 **SHOULD BE RELEVANT IN THIS RATE CASE OR FUTURE RATE CASES?**

14 A. No. Even though SNG's and Staff's billing determinants in this case are greater  
15 than the imputed volumes now, circumstances have changed substantially since  
16 1994 and this throughput requirement should no longer have an impact. For  
17 example, the average residential customer usage is less than 60% of that which  
18 was assumed in the original 1994 Rogersville feasibility studies. The  
19 Commission should acknowledge that the antiquated annual residential customer  
20 usage that formed the foundation for the imputed volume should be discarded in  
21 the wake of customer conservation efforts in the last twenty years. Later in my  
22 testimony, I will discuss in more detail SNG's recommendation to eliminate or

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3 Highly Confidential TDP-4, Exhibit 4, p. 1 of 2 modified to reflect Mcf (106,650 MMBTU ÷ 1.025)



1 materially modify the rate condition primarily because customer conservation  
2 efforts have successfully reduced annual residential consumption.

3 **Q. DOES THE MISSOURI PUBLIC SERVICE COMMISSION ENCOURAGE**  
4 **CONSERVATION PROGRAMS?**

5 A. Yes.

6 **Q. DOES IT MAKE SENSE THAT THE COMMISSION WOULD PENALIZE A**  
7 **UTILITY BY ADHERING TO A 20 YEAR OLD PER CUSTOMER USAGE**  
8 **STANDARD THAT NO LONGER REFLECTS REASONABLE**  
9 **EXPECTATIONS?**

10 A. No.

11 **Q. HOW DO YOU RECOMMEND THE COMMISSION DEAL WITH THE IMPUTED**  
12 **VOLUME ISSUE?**

13 A. Although the imputed volume has been exceeded by the Company in this case, I  
14 recommend the Commission eliminate the Rogersville imputed volume  
15 requirement from this and future rate cases.

16 **BRANSON**

17 **Q. HOW WERE CURRENT RATES SET FOR THE BRANSON DIVISION?**

18 A. The initial base rates were established by the Commission based on the results  
19 of the original feasibility study in Case No. GA-2007-0168 (the certificate case),  
20 and then again by the Commission in Case No. GR-2010-0347 (a rate case). In  
21 both cases, the rates were set by adding a fixed volumetric charge to the base  
22 rates then in effect for the Rogersville Division.

1 **Q. WHY WERE BASE RATES LINKED TO ROGERSVILLE IN CASE NO. GR-**  
2 **2010-0347?**

3 A. Retail sales service was initiated in Branson in December 2010. There was no  
4 useable operating history for Branson when the rates from GR-2010-0347 went  
5 into effect in early 2011.

6 **Q. FROM YOUR PREVIOUS ANSWERS, IS IT REASONABLE TO CONCLUDE**  
7 **THAT BRANSON'S CUSTOMERS HAVE NOT SUFFERED FROM THE POOR**  
8 **GROWTH PERFORMANCE CITED BY MS. MEISENHEIMER?**

9 A. Yes.

10 **Q. WHY IS SNG REQUESTING LESS THAN FULL COST RECOVERY?**

11 A. Like Warsaw, Branson's existing rate base contains a materially underutilized  
12 investment in Distribution Mains, FERC Account 101-376. As mentioned  
13 previously for Warsaw, SNG believes it is inappropriate to burden existing  
14 customers with the full cost recovery for that investment. Much of this  
15 underutilization is in the 8 inch and 6 inch steel mainline that brings natural gas to  
16 the Branson area from the meter station on the Southern Star Central Gas  
17 Pipeline located just north and west of the town of Aurora, MO. SNG sized this  
18 line to serve the existing natural gas load in Branson and also load from the  
19 anticipated future growth in the area. The area around Branson includes over  
20 20,000 platted residential lots in subdivisions that were designed and registered  
21 prior to the recession. SNG does not believe it would have been prudent to build  
22 this line without building in the capacity to supply these developments; most of

1 the developers had stated their intention to work with the company to provide  
2 access to natural gas for these future residents.

3 **Q. DO YOU BELIEVE THIS APPROACH IS FAITHFUL TO THE COMMISSION**  
4 **ORDER TO INSULATE THE CUSTOMERS FROM FINANCIAL**  
5 **RESPONSIBILITY?**

6 A. Yes.

7 **Q. IS SNG'S POSITION CONSISTENT WITH THE NEED TO ACCEPT THE**  
8 **FINANCIAL RESPONSIBILITY RELATED TO ASSET UNDERUTILIZATION?**

9 A. Yes.

10 **Q. IN MS. MEISENHEIMER'S TESTIMONY AT PAGE 10, LINES 1 - 5, SHE CITES**  
11 **THE NEED FOR TRANSPARENCY AND QUESTIONS THE ADEQUACY OF**  
12 **SNG'S PROPOSED REVENUE REDUCTION. HOW DO YOU PROPOSE TO**  
13 **ACCOUNT FOR THE REVENUE REDUCTION?**

14 A. Ms. Meisenheimer questions the use of "management policy decisions" (page 18,  
15 line 12 – 13) as a rate design principle at Warsaw and Branson. As mentioned  
16 earlier in my comments concerning Warsaw, SNG proposes to transfer a portion  
17 of Distribution Mains, Account 376, assigned to the Warsaw and Branson  
18 Divisions, to Plant Held for Future Use, FERC Account 105.

19 **Q. PLEASE DISCUSS MS. MEISENHEIMER'S ADEQUACY ARGUMENT AS**  
20 **PRESENTED ON PAGE 19, LINE 2, OF HER TESTIMONY.**

21 A. The reduced revenue request for Branson included in SNG's filed cost-of-service  
22 study represents the continued acceptance of financial responsibility by SNG.

1 Q. DO YOU OFFER A DEFINITIVE PROPOSAL FOR THE ACCOUNT 105  
2 TRANSFER?

3 A. As mentioned earlier, SNG has submitted a proposal which it hopes will be  
4 acceptable and to which the Parties can agree. A more detailed proposal which  
5 embraces Branson and Warsaw is offered later in my testimony.

6 Q. HAS SNG ACCEPTED THE FINANCIAL RESPONSIBILITY FOR ITS  
7 BRANSON EXPANSION?

8 A. Yes.

9 Q. DOES SNG INTEND TO ACCEPT FINANCIAL RESPONSIBILITY FOR ITS  
10 BRANSON EXPANSION IN THE FUTURE?

11 A. Yes.

12 RECOMMENDATION TO MODIFY THE COMMISSION'S ORDER IN  
13 CASE NO. GA-94-127

14 Q. IS IT YOUR BELIEF THAT THE IMPUTED VOLUME REQUIREMENT  
15 REFLECTED IN THE COMMISSION'S ORDER IN CASE NO. GA-94-127  
16 SHOULD BE ELIMINATED IN THIS PROCEEDING ON A GOING FORWARD  
17 BASIS?

18 A. Yes.

19 Q. WHY SHOULD THE IMPUTED VOLUME REQUIREMENT BE REMOVED?

20 A. The imputed volume requirement no longer represents a reasonable residential  
21 customer usage expectation. The feasibility study that formed the basis upon  
22 which the Commission relied to set the imputed volume, an excerpt from which is

1 attached as Schedule TRJ-2, assumed residential customers would use 100 Mcf  
2 per year. The Rogersville Division began operations at a volume lower than 100  
3 Mcf per residential customer per year and has steadily decreased since. Today,  
4 the average Rogersville annual residential volume from the test period in the  
5 instant Case is 55.82 Mcf per year. Although there are doubtless numerous  
6 reasons for the decrease, a substantial portion of that decrease is likely related to  
7 enhanced customer conservation.

8 **Q. HAVE YOU PERFORMED A STUDY TO SUPPORT YOUR ASSERTIONS?**

9 A. Yes. It is contained in Schedule TRJ-3.

10 **Q. ARE THERE OTHER REASONS YOU WOULD CITE TO JUSTIFY THE**  
11 **REMOVAL OF THE IMPUTED VOLUME REQUIREMENT?**

12 A. Yes. The original Commission Order contemplated the inclusion of several towns  
13 which were not included in the system build-out. At a minimum, the volumes  
14 associated with those towns should be eliminated. This issue is further addressed  
15 in SNG Witness Porter's Surrebuttal Testimony.

16 **Q. PLEASE SUMMARIZE THE RESULTS OF YOUR CONSERVATION STUDY.**

17 A. The annual usage for residential customers which formed the basis upon which  
18 the imputed volume was established as shown in the original feasibility study,  
19 may have been a fair representation of expected customer usage twenty years  
20 ago. But the clear trend of reduced customer usage is persuasive evidence that  
21 current reliance on such an estimate is inappropriate and should be discarded.

22  
23

1 **TRANSFER OF DISTRIBUTION MAINS TO PLANT HELD FOR FUTURE USE, FERC**  
2 **ACCOUNT 105**  
3

4 **Q. ON PAGE 2 OF HER REBUTTAL TESTIMONY, STAFF WITNESS MCMELLEN**  
5 **STATES THAT “ANY REDUCTIONS IN THE RATES CHARGED TO SNG’S**  
6 **BRANSON AND WARSAW DISTRICT CUSTOMERS, AS COMPARED TO THE**  
7 **LEVELS BASED UPON CURRENT COST-OF-SERVICE VALUES, SHOULD**  
8 **ONLY BE PREMISED UPON A REASONABLE MEASUREMENT OF**  
9 **CURRENT EXCESS PLANT-IN-SERVICE CAPACITY THAT IS NOT NEEDED**  
10 **TO SERVICE CURRENT CUSTOMER LEVELS IN EACH DISTRICT.” DOES**  
11 **SNG HAVE A PROPOSAL THAT WILL SATISFY STAFF’S REQUIREMENT?**

12 **A. Yes. SNG is proposing that a portion of its mainline investments in Warsaw and**  
13 **Branson be transferred into Plant Held for Future Use, FERC Account 105.**

14 **Q. PLEASE DESCRIBE THE BACKGROUND RELATED TO SNG'S DECISION**  
15 **TO MOVE FORWARD WITH A PROPOSAL TO TRANSFER A PORTION OF**  
16 **ITS MAINLINE INVESTMENTS INTO PLANT HELD FOR FUTURE USE, FERC**  
17 **ACCOUNT 105.**

18 **A. During settlement negotiations and also in the testimony offered by Ms.**  
19 **Meisenheimer, intervenors expressed concern with the method by which SNG**  
20 **proposed to acknowledge the underutilization of mainline assets at Branson and**  
21 **Warsaw. In an attempt to assuage their concerns, SNG has developed a method**  
22 **it believes will address these concerns.**

23 **Q. PLEASE DESCRIBE THE ANALYTICAL STEPS YOU PERFORMED TO**  
24 **PROVIDE A MEASUREMENT FOR YOUR ADJUSTMENT.**

1 A. The analytical steps are shown below:  
2 (1) calculate the peak capacity of the relevant mainline segments;  
3 (2) identify the current peak day utilization related to test period billing  
4 determinants;  
5 (3) calculate the percentage of total peak day capacity that is currently  
6 utilized;  
7 (4) calculate the underutilized portion; and,  
8 (5) multiply the underutilized percentage by the appropriate gross plant and  
9 reserve for depreciation account balances at December 31, 2013, to  
10 determine the amount of plant and reserves to transfer.

11 **Q. HAVE YOU PERFORMED AN ANALYSIS?**

12 A. Yes. It is attached as Schedule TRJ-4.

13 **Q. THE UNIFORM SYSTEM OF ACCOUNTS REQUIRES A UTILITY TO**  
14 **POSSESS A PLAN FOR THE REPATRIATION OF THOSE ASSETS**  
15 **TRANSFERRED TO PLANT HELD FOR FUTURE USE. DO YOU PROPOSE**  
16 **SUCH A PLAN?**

17 A. Yes. SNG proposes to repatriate a portion of the balance in FERC Account 105  
18 annually based on the analytical process described below: .

19 (1) Annual determination based on December 31 (year end) plant balances;

20 (2) Warsaw only - Calculate the amount of FERC Account 376 and FERC  
21 Account 378 that should be assigned to Lake of the Ozarks based on most  
22 recent winter peak usage/transportation percentages. The amount by

1 which to multiply the percentages will be the sum of year end FERC  
2 Accounts 105-376 and 105-378 for plant and reserves, and the year end  
3 FERC Accounts 101-376, 101-378, 108-376, and 108-378 balances;

4 (3) Warsaw only - The applicable Warsaw plant amounts from the calculation  
5 in (2) will be subjected to the same calculation shown in Schedule TRJ-4  
6 after subtracting the portion applicable to Lake of the Ozarks;

7 (4) Warsaw only - The resultant unutilized capacity investment will be  
8 compared to the plant balances in FERC Account 105, and an accounting  
9 adjustment made to transfer a portion of the year end balance of FERC  
10 Account 105 to FERC Accounts 101-376, 101-378, 108-376 and, 108-378;

11 (5) Branson calculations will occur similar to Warsaw except without the need  
12 for the intermediate analytical step to split shared assets;

13 (6) Depreciation expense will not be calculated on FERC Account 105 gross  
14 plant balances; and,

15 (7) Depreciation expense on repatriated gross plant will begin on January 1 of  
16 the year that succeeds the year-end calculations.

17 **Q. DOES THAT CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

18 **A. Yes.**

19



**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 TIMOTHY R. JOHNSTON**

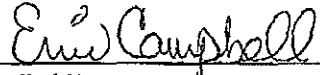
**STATE OF COLORADO**            )  
  )  
**COUNTY OF JEFFERSON**        )  
  )  
  ) ss

Timothy R. Johnston, being first duly sworn on his oath, states:

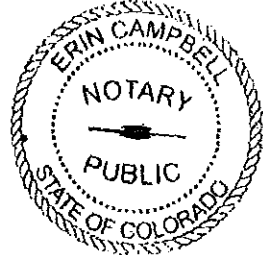
1. My name is Timothy R. Johnston and I work in Littleton, Colorado and I am employed by Summit Utilities, Inc. as the Executive Vice President & Chief Strategy Officer.
2. Attached hereto and made a part of hereof for all purposes is my Surrebuttal Testimony on behalf of Summit Natural Gas of Missouri, Inc. consisting of 22 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.

  
\_\_\_\_\_  
Timothy R. Johnston

Subscribed and sworn to before me this 6th day of August, 2014.

  
\_\_\_\_\_  
Notary Public

My commission expires: 10/7/16



**MPSC CASE NO GR-2014-0086**

**SURREBUTTAL TESTIMONY OF TIMOTHY R JOHNSTON**

**SCHEDULE TRJ - 1**

---

**Summit Natural Gas of Missouri, Inc.**  
**MPSC Case No. GR-2014-0086**  
**Percentage of Distribution Mains Net Plant to Total Rate Base**  
**All Data taken from Summit Filed**

GR-2014-0086  
 Surrebuttal Schedule TRJ-1

Line No	Particulars (a)	Direct Filing Reference (b)	Amounts (c)
<b>Warsaw</b>			
1	Account 101-376 - Distribution Mains at 9-30-13	Sch TDP-2, Exh 2, page 2	\$ 12,821,542
2	Account 108-376 - Distribution Mains at 9-30-13	Sch TDP-2, Exh 3, page 2	(912,293)
3	Net Plant related to Distribution Mains		<u>\$ 11,909,250</u>
4	Total Rate Base as filed	Sch TDP-2, Exh 1, page 1 of 2	<u>\$ 16,228,847</u>
5	Percentage of Net Plant Related to Distribution Mains to Total Rate Base	line 3 + line 4	<u>73.38%</u>
<b>Branson</b>			
6	Account 101-376 - Distribution Mains at 9-30-13	Sch TDP-2, Exh 2, page 4	\$ 36,789,304
7	Account 108-376 - Distribution Mains at 9-30-13	Sch TDP-2, Exh 3, page 4	(1,932,841)
8	Net Plant related to Distribution Mains		<u>\$ 34,856,463</u>
9	Total Rate Base as filed	Sch TDP-2, Exh 1, page 2 of 2	<u>\$ 46,976,037</u>
10	Percentage of Net Plant Related to Distribution Mains to Total Rate Base	line 8 + line 9	<u>74.20%</u>

**MPSC CASE NO GR-2014-0086**

**SURREBUTTAL TESTIMONY OF TIMOTHY R JOHNSTON**

**SCHEDULE TRJ - 2**

**TARTAN ENERGY COMPANY, L.C.**

dba

**SOUTHERN MISSOURI GAS COMPANY**

**FILED**

JUL 1 1994

MISSOURI  
PUBLIC SERVICE COMMISSION

Supplement #1 to the

**FEASIBILITY STUDY**

(Highway 60/63 Project Demand and Economics Sensitivities)

EXHIBIT 4

JANUARY 1994

GR-2014-0086  
Surrebuttal Schedule TRJ-2

Filename: Demand4  
Page:

SOUTHERN MISSOURI COMPANY  
HIGHWAY 60/63 PROJECT  
EXHIBIT FS-17 DEMAND FORECAST  
SENSITIVITY #2 - LOW CONVERSION

**Section 1: RESIDENTIAL DEMAND**  
Assumed Data/Calculations:

City:	1990 Population	Estimated Residences	Estimated % Conversions (End 3rd Yr)	Estimated # Conversions (End 3rd Yr)	Estimated Demand per Residence (MCF/Yr)	Est. Res. Demand per City (MCF/Yr) (End 3rd Yr)	1st Construction Season % per City	2nd Construction Season % per City	3rd Construction Season % per City	Estimated Annual Growth (Post Yr 0)
Mansfield	1,429	695	60.0%	657	100	35,725	70.0%	20.0%	10.0%	1.30%
Marshfield	4,374	1,823	60.0%	1,094	100	109,350	70.0%	20.0%	10.0%	1.30%
Ava	2,638	1,224	60.0%	703	100	73,450	0.0%	70.0%	30.0%	1.30%
Mountain Grove	4,182	1,743	60.0%	1,048	100	104,550	70.0%	20.0%	10.0%	1.30%
Cabool	2,008	839	60.0%	502	100	50,150	70.0%	20.0%	10.0%	1.30%
Willow Springs	2,008	849	60.0%	510	100	50,950	70.0%	20.0%	10.0%	1.30%
West Plains	8,013	3,714	60.0%	2,228	100	222,825	70.0%	20.0%	10.0%	1.30%
Mountain View	2,038	848	60.0%	509	100	50,600	0.0%	70.0%	30.0%	1.30%
Houston	2,118	883	60.0%	530	100	52,950	0.0%	70.0%	30.0%	1.30%
Licking	1,028	553	60.0%	332	100	33,200	0.0%	70.0%	30.0%	1.30%
<b>Total</b>	<b>31,382</b>	<b>13,068</b>		<b>7,841</b>		<b>784,050</b>				
Probable Additional Cities:										
Rogersville	995	415	60.0%	249	100	24,875	0.0%	70.0%	30.0%	1.0%
Fordland	523	218	60.0%	131	100	13,075	0.0%	0.0%	100.0%	1.0%
Diggins	268	108	60.0%	65	100	6,450	0.0%	0.0%	100.0%	1.0%
Seymour	1839	882	60.0%	499	100	49,900	0.0%	70.0%	30.0%	1.0%
Norwood	449	187	60.0%	112	100	11,225	0.0%	0.0%	100.0%	1.0%
<b>Total</b>	<b>3,881</b>	<b>1,609</b>		<b>885</b>		<b>88,625</b>				

Section 1 (continued):

City:	Year 1 (MCF/Yr)	Year 2 (MCF/Yr)	Year 3 (MCF/Yr)	Year 4 (MCF/Yr)	Year 5 (MCF/Yr)	Year 6 (MCF/Yr)	Year 7 (MCF/Yr)	Year 8 (MCF/Yr)	Year 9 (MCF/Yr)	Year 10 (MCF/Yr)
<b>Total Residential Demand:</b>	<b>401,485</b>	<b>683,545</b>	<b>784,050</b>	<b>794,243</b>	<b>804,588</b>	<b>818,027</b>	<b>826,823</b>	<b>836,358</b>	<b>847,228</b>	<b>858,242</b>
Probable Additional Cities:										
Rogersville	0	17,413	24,875	25,124	25,376	25,628	25,885	26,144	26,405	26,689
Fordland	0	0	13,075	13,208	13,338	13,471	13,603	13,742	13,879	14,018
Diggins	0	0	6,450	6,616	6,786	6,955	7,122	7,288	7,458	7,618
Seymour	0	26,630	40,600	41,909	41,722	42,139	42,561	42,988	43,418	43,850
Norwood	0	0	11,225	11,937	11,451	11,569	11,681	11,798	11,918	12,035
<b>Total Additional City Demand:</b>	<b>0</b>	<b>48,043</b>	<b>86,525</b>	<b>97,490</b>	<b>99,485</b>	<b>100,444</b>	<b>101,444</b>	<b>102,483</b>	<b>103,488</b>	<b>104,503</b>

Total Project Residential Demand: 401,485 709,588 880,575 891,733 903,033 914,477 926,067 937,804 949,691 961,730

Note: Probable demand resulting from farm taps not included

**Section 2: COMMERCIAL DEMAND**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1st calculation: <-- Industry percentages										
Post yr. 3 annual growth:	1.0%									
As % of Res. Demand:	08.0%	162,584	269,843	334,619	337,955	341,344	344,758	348,205	351,697	355,204
*(typical per AGA study)										
2nd calculation: <-- Missouri-specific data										
Post yr. 3 annual growth:	1.0%									
As MO avg** ratio comm/res:	50.4%	202,410	357,748	443,652	448,391	452,875	457,404	461,978	466,598	471,264
** (87-91 avg. per NGA 91)										

Assumed (conservative) Commercial Demand for this Study:

(1st calc. + 2nd calc.)/2: 44.2% 177,489 313,695 389,285 393,178 397,110 401,091 405,092 409,143 413,234 417,368

**Section 3: INDUSTRIAL DEMAND**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1st calculation: <-- Missouri-specific data										
Post yr. 3 annual growth:	1.0%									
As MO avg** ratio ind./res:	45.1%	180,919	319,767	398,808	401,838	404,928	412,005	417,308	422,697	427,654
** (87-91 avg. per NGA 91)										
2nd empirical determination: <-- Noncomprehensive direct data for Highway 60/63 project										
Post yr. 3 annual growth:	1.0%									
Identified Industrial Yr. 3 Volumes (MCF/Yr)										
Seymour	140,000	0	70,000	140,000	141,400	142,814	144,242	145,685	147,141	148,613
Mansfield	70,000	35,000	65,000	70,000	70,700	71,407	72,121	72,842	73,571	74,309
Mt. Grove	80,000	40,000	65,000	80,000	80,800	81,209	81,618	82,028	82,438	82,848
Cabool	100,000	100,000	150,000	180,000	181,900	183,819	185,757	187,715	189,692	191,689
W. Plains	120,000	30,000	80,000	120,000	121,200	122,412	123,639	124,872	126,121	127,382
<b>Total</b>	<b>580,000</b>	<b>205,000</b>	<b>410,000</b>	<b>580,000</b>	<b>585,600</b>	<b>591,658</b>	<b>597,675</b>	<b>603,550</b>	<b>609,598</b>	<b>615,662</b>

Assumed (conservative) Industrial Demand for this Study:

(1st calc. + 2nd emp. determination)/2: 192,959 384,879 488,404 493,818 499,293 504,830 510,429 516,092 521,818 527,609

Total 10 Year SMGC Highway 60/63 Project System Demand (Residential + Commercial + Industrial):

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
SYSTEM DEMAND BY YEAR-->	771,933	1,388,181	1,758,284	1,778,729	1,789,438	1,820,389	1,841,589	1,863,038	1,884,743	1,906,705

1,189,083

**MPSC CASE NO GR-2014-0086**

**SURREBUTTAL TESTIMONY OF TIMOTHY R JOHNSTON**

**SCHEDULE TRJ - 3**

**Summit Natural Gas of Missouri  
MPSC Case No GR-2014 - 0086  
Conservation Study  
Prepared by Tim Johnston August 5, 2014**

**Conclusion**

The billing determinant rate condition under which Summit Natural Gas of MissouriGas, Inc. ("SNG") is required to calculate retail sales and transportation rates should be modified/eliminated to acknowledge the effects of conservation since the system was placed in service in the mid-1990's.

Summit's analysis justifies the complete elimination of the rate condition.

**Background**

In October 1993, Tartan Energy filed an application with the Missouri Public Service Commission (MPSC) to build a natural gas utility along the Highway 60/63 corridor in southern Missouri<sup>1</sup>. Tartan provided analytical support in the form of a feasibility study. The feasibility study included a base case and a number of sensitivity studies. Each sensitivity analysis varied the initial customer counts and assumed growth rates, yielding annual sales volumes.

The base case and all sensitivity analyses assumed annual residential customer usage at 100 Mcf.

The settlement and MPSC Order, issued September 16, 1994, required SNG's predecessor company, Southern Missouri Natural Gas ("SMNG"), to use a minimum annual throughput of 1,797,000 Mcf as the basis upon which to design rates for start-up and subsequent rate increase filings.

**Fundamental Propositions**

- (1) The rate condition imposed on SMNG in 1994 was designed to protect the customers from the detrimental effects of a too-rosy system growth projection. The rate condition requires the utility to accept the risks related to reduced system growth. By simply requiring the utility to design rates with a minimum annual sales volume in the denominator, the MPSC was able to mitigate the potential risk born by ratepayers. The residential volumes shown in the sensitivity analyses performed by Tartan only varied the annual customer count.

---

<sup>1</sup> MPSC Case No GA-94-127.



- (2) The residential portion of the rate condition was calculated by multiplying the relevant customer counts each year from start-up by 100 Mcf per year. SNG has been unable to find any suggestion that the annual 100 Mcf per year of residential usage was an inappropriate assumption or that a sensitivity analysis contemplated something different. Further, we can find no suggestion that the 100 Mcf per year assumption was challenged by the intervenors.
- (3) SNG should not be held responsible for customer conservation since the system was placed in service. System growth is SNG's responsibility and it is reasonable to hold SNG responsible for deficient system growth, but not residential conservation.
- (4) The MPSC should not punish utilities for customer conservation.

## Analysis

### Reduced Residential Demand

SNG examined three different data sources in order to support the hypothesis that SNG's residential customers have materially reduced their annual usage since the system initiated operations.

- Fifteen year trend analysis of annual residential usage per customer.
- Billing determinants in the current rate increase filing.

### **Analysis #1 - Fifteen Year Residential Usage per Customer**

The table displayed below shows the residential usage per customer for as far back as data is available. The data is from internal sources.

Calendar Year	Weather Adjusted Sales per Customer (Mcf)		
	Residential annual usage	Residential – optional annual usage	Combined Residential
1999	NA	NA	124.7
2000	NA	NA	76.4
2001	72.2	57.3	64.6
2002	69.1	55.9	63.1
2003	67.1	56.2	62.7
2004	67.7	55.6	63.3
2005	62.0	50.5	58.2
2006	58.8	48.8	57.1
2007	60.7	50.3	58.7
2008	59.0	50.1	57.3
2009	57.8	49.8	56.1
2010	58.8	50.4	57.2
2011	57.7	47.8	54.4
2012	61.4	50.6	57.1
2013	60.7	49.4	55.1

The trend is clear. During the last fifteen years, the annual demand per residential customer has declined precipitously.

**Analysis #2 – Previous MPSC Staff Annual Residential Demand**

The residential billing determinants developed by MPSC Staff in Case No GR-2014-0086, as shown on page 4 of 6, show 55.15 Mcf per year on a combined basis.

**Comparison of Current Projected Usage per Customer with CPCN Feasibility Studies.**

Page 5 of 6 calculates the reduction necessary to acknowledge the effects of residential conservation. Rather than use the baseline annual usage of 100 Mcf, it uses 84 Mcf. The lower usage was published in SMNG's 1996 annual report and may represent a more realistic beginning estimate than the 100 Mcf. The relevant excerpt is attached as page 6 of 6. The 84 Mcf represents the closest representation of actual usage and suggests that the 100 Mcf as used in the initial feasibility study was overstated.

**Analytical Summary** - The table shown below shows the reconciliation. The calculated annual base volume is 1,797,000 Mcf. Support for the data shown below is provided in Exhibit 2.

Particulars	Volumes in Mcf
Feasibility Study total sales volume	1,797,000
Residential reduction	(270,220)
Commercial reduction	(118,891)
Industrial reduction	(129,319)
Revised rate condition	1,278,569

**Conclusions** – The original rate condition, as modified, is less than the current system sales and transportation volumes. Therefore, the rate condition should be eliminated for the entire system or, as an alternative, reduced to a level that adequately acknowledges system conservation.

**Summit Natural Gas of Missouri, Inc.**  
**Conservation Study Support - for Southern Missouri Natural Gas**  
**Rate Condition Volume Reduction from Conservation Study - Adjusted for 84 Mcf per day**

Line No	Particulars	1994 Feasibility Study Rate Condition (1)		Conservation Based on Feasibility Study Volume	
		Customers	Volumes	84 Mcf Base Conservation Adjustment (2)	Adjusted Rate Condition
	(a)	(b)	(c)	(d)	(e)
1	Residential	9,366	936,644	(270,220)	666,424
2	Commercial	687	412,105	(118,891)	293,214
3	LVS/Industrial	4	448,251	(129,319)	318,932
4	Total	<u>10,057</u>	<u>1,797,000</u>	<u>(518,431)</u>	<u>1,278,569</u>

Notes (1) Customers and volumes taken from Exhibit 17 from Case No. GA-94-127  
(2) The conservation adjustment for the Residential customer class was calculated in the Conservation Analysis tab. The Commercial and LVS/Industrial Conservation adjustment was calculated using a percentage of the total residential volume as was the methodology used in the original GA-94-127 Feasibility study to determine commercial load.

GR-2014-0086  
Surrebuttal Schedule TRJ-3

**Summit Natural Gas of Missouri, Inc.**  
**Calculation of Current Residential Annual Demand and Appropriate Reduction to Rate Condition**  
**Replaces 100 Mcf Average Annual Residential Usage with 84 Mcf**  
**Volumes in Mcf**

Line No	Month (a)	Residential (note 1)			Residential - Optional (note 1)			Residential - combined		
		Customer Count (b)	monthly average (c)	Usage (d)	Customer Count (e)	monthly average (f)	Usage (g)	Total customers (h)	Total usage (i)	Average Usage (j)
1	January	4,934	11.78	58,107.60	4,670	9.67	45,167.49	9,604	103,275.09	10.75
2	February	4,964	9.98	49,549.48	4,733	8.37	39,599.14	9,697	89,148.61	9.19
3	March	4,974	9.24	45,938.63	4,754	7.37	35,033.23	9,728	80,971.86	8.32
4	April	4,950	7.67	37,985.42	4,743	6.32	29,988.43	9,693	67,973.85	7.01
5	May	4,855	3.95	19,168.15	4,680	3.10	14,506.06	9,535	33,674.22	3.53
6	June	4,776	1.84	8,768.49	4,653	1.41	6,551.31	9,429	15,319.80	1.62
7	July	4,736	0.92	4,363.76	4,590	0.71	3,236.70	9,326	7,600.46	0.81
8	August	4,702	0.92	4,327.62	4,575	0.69	3,169.27	9,277	7,496.89	0.81
9	September	4,701	1.46	6,862.63	4,577	1.14	5,211.39	9,278	12,074.01	1.30
10	October	4,775	0.29	1,383.12	4,676	0.15	709.38	9,451	2,092.51	0.22
11	November	4,865	4.65	22,608.22	4,788	3.71	17,740.84	9,653	40,349.06	4.18
12	December	4,961	7.99	39,638.28	4,899	6.77	33,156.35	9,859	72,794.62	7.38
13		<u>58,192</u>	<u>60.68</u>	<u>298,701</u>	<u>56,338</u>	<u>49.40</u>	<u>234,070</u>	<u>114,529</u>	<u>532,771</u>	<u>55.15</u>
14		Annual residential customer usage per 1996 annual report - Replaces 100 Mcf with 84 Mcf								<u>84.00</u>
15		Annual conservation per customer since start-up								<u>28.85</u>
16		Annual residential customer class conservation (9,366 customers)								<u>270,220</u>

Notes: (1) all data from MPSC Staff Accounting Schedules from e-mail July 23, 2014

Surrebuttal Schedule TRJ-3  
GR-2014-0086

Name of Respondent Southern Missouri Gas Company, L.P.	This Report Is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr)	Year of Report Dec. 31, 1996
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**RESIDENTIAL AND COMMERCIAL SPACE HEATING CUSTOMERS**

A residential space heating customer is a customer whose major fuel for heating is gas.

Line No.	Item (a)	Residential (b)	Commercial (c)
1	Average Number of Space Heating Customers for the Year <i>(Estimate if not known. Designate with an asterisk if estimated.)</i>	2,125	120
2	For Space Heating Only, Estimated Average Mcf (14.73 psia at 60°F) Per Customer for the Year	84.28	245.33
3	Number of Space Heating Customers Added During the Year	3,251	222
4	Number of Unfilled Applications for Space Heating at End of Year	3,785	268

**INTERRUPTIBLE, OFF PEAK, AND FIRM SALES TO DISTRIBUTION SYSTEM INDUSTRIAL CUSTOMERS**

1. Report below the average number of interruptible, off peak, and firm industrial customers on local distribution systems of the respondent, and the Mcf of gas sales to these customers for the year.

2. Interruptible customers are those to whom service may be interrupted under terms of the customer's gas contract, or to whom service is required to be interrupted, regardless of contractual arrangements in emergency periods, by law,

ordinance, directive, or other requirement of government authority. State in a footnote the basis on which interruptible customers are reported.

3. Off peak sales are seasonal and other sales which do not occur during wintertime demands.

4. Report pressure base of gas volumes at 14.73 psia at 60°F.

Line No.	Item (a)	Number/Amount (b)
1	Interruptible Customers	
2	Average Number of Customers for the Year	0
3	Mcf of Gas Sales for the Year	0
4	Off Peak Customers	
5	Average Number of Customers for the Year	0
6	Mcf of Gas Sales for the Year	0
7	Firm Customers	
8	Average Number of Customers for the Year	6
9	Mcf of Gas Sales for the Year	106,178
10	TOTAL Industrial Customers	
11	Average Number of Customers for the Year	6
12	Mcf of Gas Sales for the Year	106,178

**MPSC CASE NO GR-2014-0086**

**SURREBUTTAL TESTIMONY OF TIMOTHY R JOHNSTON**

**SCHEDULE TRJ - 4**

Summit Natural Gas of Missouri, Inc.  
 MPSC Case No. GR-2014-0086  
 Account 105 Transfer from Warsaw and Branson

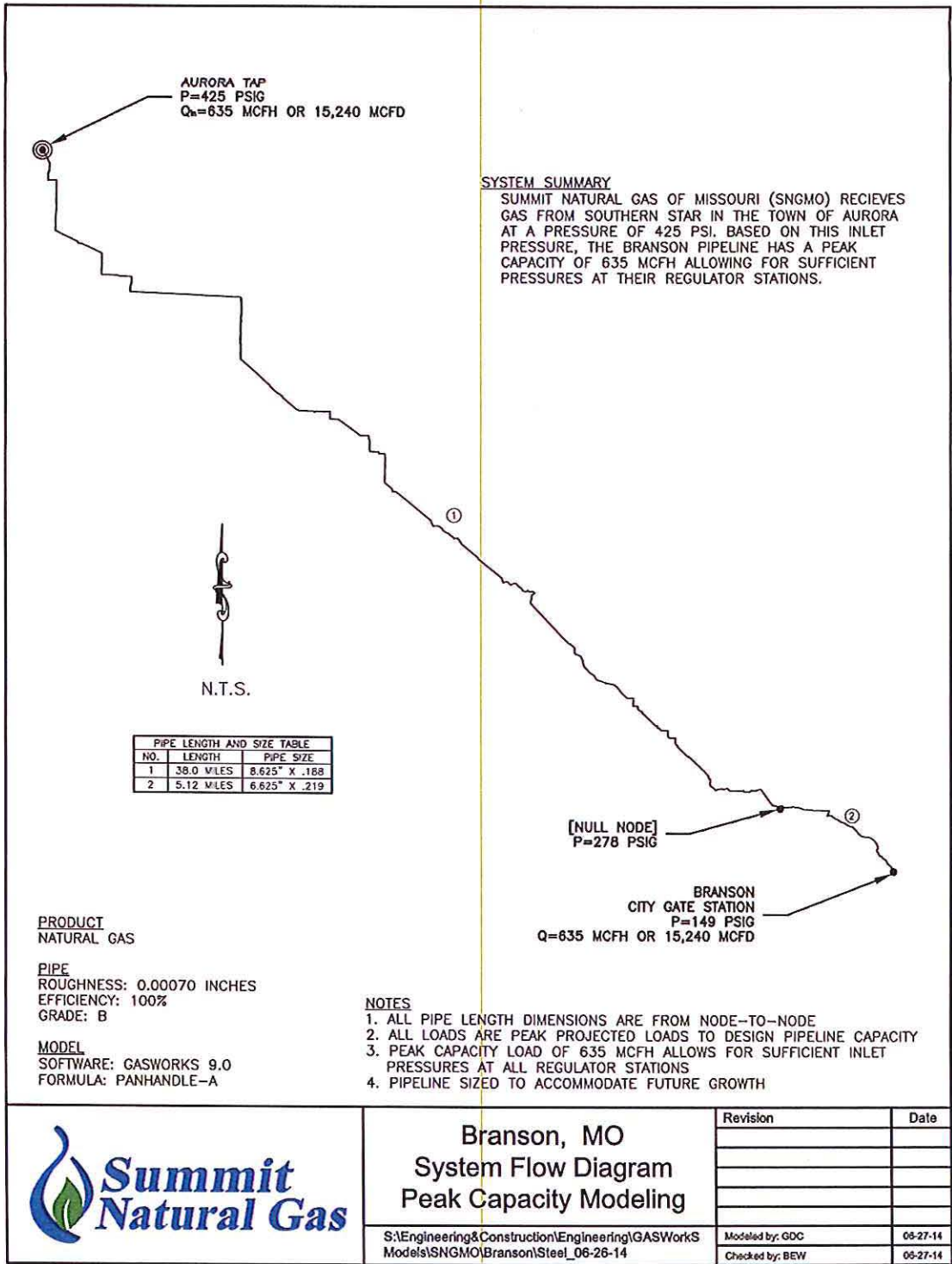
Line No	Particulars (a)	SNG filed data at 9-31-13			Staff EMS runs 12-31-13	
		References (b)	Warsaw (c)	Branson (d)	Warsaw (e)	Branson (f)
<b>Rate Base Adjustment</b>						
<u>Gross Plant</u>						
1	Account 101-376 - SNG as filed	as filed, TDP-2, exh 2	\$ 12,821,542	\$ 36,789,304	\$ 13,310,226	\$ 36,985,144
2	Account 101-378 - SNG as filed	as filed, TDP-2, exh 2	49,057	304,960	79,254	319,932
3	percent of account to acct 105	capacity percent tab	63.92%	81.18%	63.92%	81.18%
4	reduction to settlement gross plant - acct 101-376	line 10 * line 13	\$ 8,195,144	\$ 29,865,161	\$ 8,507,496	\$ 30,024,142
5	reduction to settlement gross plant - acct 101-378	line 11 * line 13	31,356	247,564	50,657	259,717
6	<b>total Gross Plant reduction</b>	line 4 + line 5	<b>\$ 8,226,499</b>	<b>\$ 30,112,725</b>	<b>\$ 8,558,153</b>	<b>\$ 30,283,859</b>
<u>Reserve for Depreciation</u>						
7	Account 108-376 - SNG as filed	as filed, TDP-2, exh 3	\$ (912,293)	\$ (1,932,841)	(1,090,989)	(2,117,624)
8	Account 108-378 - SNG as filed	as filed, TDP-2, exh 3	(3,422)	(6,667)	(6,823)	(8,242)
9	percent of account to acct 105	capacity percent tab	63.92%	81.18%	63.92%	81.18%
10	reduction to settlement RDA - acct 108-376	line 21 * line 24	\$ (583,110)	\$ (1,569,060)	\$ (697,327)	\$ (1,719,064)
11	reduction to settlement RDA - acct 108-378	line 22 * line 14	(2,187)	(5,412)	(4,361)	(6,691)
12	<b>total Reserve for Depreciation reduction</b>	line 10 + line 11	<b>\$ (585,297)</b>	<b>\$ (1,574,472)</b>	<b>\$ (701,688)</b>	<b>\$ (1,725,755)</b>

Summit Natural Gas of Missouri, Inc.  
MPSC Case No. GR-2014-0086  
Main Line Capacity Utilization Percentage Calculation

Line No	Particulars (a)	Reference (b)	Warsaw (c)	Branson (d)
1	Relevant pipe capacity (Mcf/day)	note 1	6,288	15,240
	<b>Relevant Peak day calculations</b>			
	<b>Warsaw</b>			
	2012-2013 winter regression statistics			
2	base load per retail customer - Dt's	2013-14 Gas Supply Plan	0.0983	
3	retail usage per HDD - Dt's	2013-14 Gas Supply Plan	0.0241	
4	peak HDD'S - Sedalia WTP	2013-14 Gas Supply Plan	82	
5	test period total retail customer count	Rebuttal Schedule TDP-3	1,111	
6	peak retail usage in Dt's	(In 4 * In 3 + In 2) * In 5	2,301	
7	peak retail usage in Mcf at 1.014 BTU factor - 2013 PGA	In 6 + 1.014	2,269	
8	transportation customer usage	NA	-	
9	Mainline capacity usage factor	In 7 + In 1	36.08%	
10	Mainline capacity reduction factor	1 - In 9	63.92%	
	<b>Branson</b>			
	2013-2014 winter regression statistics			
11	base load per retail customer	2014-15 Gas Supply Plan		0.4018
12	retail usage per HDD	2014-15 Gas Supply Plan		0.0223
13	peak HDD'S	2014-15 Gas Supply Plan		73
14	test period total retail customer count	Rebuttal Schedule TDP-3		843
15	peak retail usage in Dt's	(In 13 * In 12 + In 11) * In 14		1,709
16	peak retail usage in Mcf at 1.025 BTU factor - 2013 PGA	In 15 + 1.025		1,667
17	transportation customer usage - Jan 6, 2014 - Mcf	imbalance management analysis		1,201
18	total usage in Mcf	In 16 + In 17		2,868
19	Mainline capacity usage factor	In 18 + In 1		18.82%
20	Mainline capacity reduction factor	1 - In 19		81.18%

Notes (1) capacity values taken from System Flow Diagrams attached





**Branson, MO**  
**System Flow Diagram**  
**Peak Capacity Modeling**

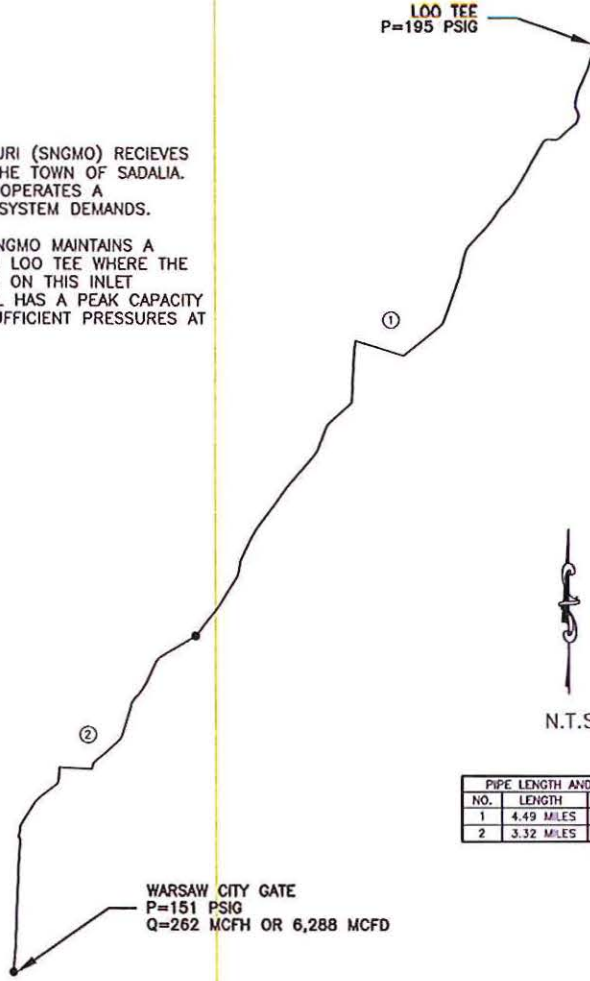
S:\Engineering&Construction\Engineering\GASWorkS  
 Model\SNGMO\Branson\Steel\_06-26-14

Revision	Date
Modeled by: GDC	06-27-14
Checked by: BEW	06-27-14

**SYSTEM SUMMARY**

SUMMIT NATURAL GAS OF MISSOURI (SNGMO) RECEIVES GAS FROM SOUTHERN STAR IN THE TOWN OF SADALIA. ALONG WITH THEIR TAP, SNGMO OPERATES A COMPRESSOR STATION TO MEET SYSTEM DEMANDS.

UNDER CURRENT CONDITIONS, SNGMO MAINTAINS A PRESSURE OF 195 PSI AT THEIR LOO TEE WHERE THE WARSAW LATERAL BEGINS. BASED ON THIS INLET PRESSURE, THE WARSAW LATERAL HAS A PEAK CAPACITY OF 262 MCFH ALLOWING FOR SUFFICIENT PRESSURES AT THEIR REGULATOR STATIONS.



PIPE LENGTH AND SIZE TABLE		
NO.	LENGTH	PIPE SIZE
1	4.49 MILES	6.625" X .188
2	3.32 MILES	6.625" X .188

**PRODUCT**  
 NATURAL GAS

**PIPE**  
 ROUGHNESS: 0.00070 INCHES  
 EFFICIENCY: 100%  
 GRADE: B

**MODEL**  
 SOFTWARE: GASWORKS 9.0  
 FORMULA: PANHANDLE-A

**NOTES**

1. ALL PIPE LENGTH DIMENSIONS ARE FROM NODE-TO-NODE
2. ALL LOADS ARE PEAK PROJECTED LOADS TO DESIGN PIPELINE CAPACITY
3. PEAK CAPACITY LOAD OF 262 MCFH ALLOWS FOR SUFFICIENT INLET PRESSURES AT ALL REGULATOR STATIONS
4. PIPELINE SIZED TO ACCOMMODATE FUTURE GROWTH



**Warsaw, MO  
 System Flow Diagram  
 Peak Capacity Modeling**

S:\Engineering&Construction\Engineering\GASWorkS  
 Models\SNGMO\Warsaw\Warsaw\_Steel\_RC

Revision	Date
Modeled by: GDC	06-27-14
Checked by: BEW	06-27-14

**Panhandle-A Equation**

$$Q = 435.87 \left( \frac{T_{sc}}{P_{sc}} \right)^{1.0788} * \left( \frac{P_1^2 - P_2^2}{G^{.8539} * L_e * T_m * Z} \right)^{.5394} * D^{2.6182} * E$$

$$L_e = \frac{(e^S - 1)L}{S}$$

$$S = \frac{.0375 * G * \Delta z}{T_m}$$

**Variables**

$T_{sc}$  = Temperature at standard conditions

$P_{sc}$  = Pressure at standard conditions (atmospheric pressure)

$T_m$  = Average temperature of the pipeline (Absolute)

$P_1$  &  $P_2$  = Pressure at the pipeline entrance and exit (absolute)

$L$  = Length of pipe in miles

$G$  = Gas density with respect to water

$Z$  = Compressibility factor for gas

$E$  = Pipeline efficiency

$L_e$  = Effective length of the pipeline

$\Delta z$  = Elevation difference from entrance to the exit of the pipe