# 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

File No. GR-2014-0086 Tracking No. YG-2014-0285

# **STAFF'S INITIAL BRIEF**

**COMES NOW** the Staff of the Missouri Public Service Commission, by and through counsel, and hereby submits its *Initial Brief* in this matter:

# I. INTRODUCTION

In this case, parties invite the Commission to depart from long-standing principles of utility law and public policy in order to reach dramatic ratemaking results. Staff's case, including its recommendations on revenue requirement and rate of return, provides for safe and adequate gas service at just and reasonable rates by ensuring that SNG's customers pay for the gas service they actually use—no more, no less.

SNG has pursued a strategy of expansion through acquisition and new construction in rugged areas of rural Missouri. This expansion offers more Missouri residents and businesses a new choice in their energy supply. The Commission should set rates so that SNG's customers pay a just and reasonable price for natural gas service without bearing the consequences of expansion predictions that did not come to pass. To accomplish this goal, Staff has presented the Commission with a case that recommends an annual revenue increase of approximately \$5.15 million.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Ex. 134, Staff Final Reconciliation.

The parties in this case<sup>2</sup> filed partial stipulations and agreements resolving a number of issues. This brief discusses the issues presented for the Commission's consideration during the evidentiary hearing.

# II. THE ISSUES

# A. Rate of Return

# 1. What is the appropriate cost of capital that the Commission should apply in this case to determine a revenue requirement for SNGMO?

# i. What is the appropriate cost of common equity?

Staff recommends 9.8 percent to 10.8 percent.

# ii. What is the appropriate cost of long-term debt?

Staff recommends 5.37 percent.

# 2. What capital structure should the Commission use in this case to determine a revenue requirement for SNGMO?

Staff recommends 40 percent common equity and 60 percent debt.

# Rate of Return Introduction

Staff has determined, based upon its expert analysis of market-driven data using traditional analytical tools, that SNG's cost of common equity<sup>3</sup> is within the range of 9.80 percent to 10.80 percent, mid-point 10.30 percent,<sup>4</sup> which should be combined with Staff's recommended capital structure as of December 31, 2013, of 40 percent equity and 60 percent debt,<sup>5</sup> and with Staff's recommended cost of debt of 5.37 percent,<sup>6</sup> to

<sup>&</sup>lt;sup>2</sup> SNG, Staff, the Office of the Public Counsel and three intervenors: The Missouri Division of Energy, The Missouri Propane Gas Association, and the Missouri School Boards' Association.

<sup>&</sup>lt;sup>3</sup> Also referred to as "return on equity" or ROE.

<sup>&</sup>lt;sup>4</sup> Ex. 103, *Staff's Cost of Service Report,* p. 7.

<sup>&</sup>lt;sup>5</sup> *Id.* 

<sup>&</sup>lt;sup>6</sup> Ex. 130, *Murray Surrebuttal,* p. 8.

arrive at the recommended allowed rate of return ("ROR") in this case: 7.14 percent to 7.54 percent, midpoint 7.34 percent.<sup>7</sup>

#### What is the significance of these issues?

The ROR is the Weighted Average Cost of Capital or "WACC";<sup>8</sup> it is calculated from the capital structure, cost of debt and cost of equity. Capital structure describes how an enterprise is financed; its components are equity and debt. Because equity holders have only a residual claim on the enterprise's assets, the relative proportions of debt and equity define the financial risk inherent in the equity investment. In the present case, the capital structure itself is a matter of controversy. Staff recommends use of a hypothetical capital structure for ratemaking purposes in order to protect the ratepayers from the effects of management's expensive decision to expand into a new service area. For the same reason, Staff recommends use of a hypothetical cost of debt. In many cases, the cost of debt is simply determined from the terms of the debt securities, but that approach is not appropriate here. The cost of common equity is always controversial and is a matter of expert testimony. Staff has presented the authoritative testimony of David Murray, an experienced and well-credentialed expert financial analyst, who has estimated Summit's cost of equity using traditional analytical tools and professional judgment.

In addition to the Company's prudent operating and maintenance expenses, revenue requirement includes both a return "of" and a return "on" the net current value of the shareholders' investment. The former is provided by depreciation expense; the

<sup>&</sup>lt;sup>7</sup> Ex. 103, p. 7. <sup>8</sup> *Id,* p. 6.

latter by the rate of return. The rate of return is a multiplier which, applied to the net current rate base, results in the return or "profit" allowed to the investors in return for the use of their private property in serving the public. The Due Process Clause requires that the shareholders be allowed an opportunity to earn a reasonable return on their investment.9 Pursuant to financial theory, a fair rate of return is an amount sufficient to meet the utility's capital costs.

The recommendations for capital structure, cost of debt and cost of equity offered in this case are set out below.

SUMMARY OF RECOMMENDATIONS:				
CAPITAL STRUCTURE				
Anderson	SNG	57% Equity, 43% Debt <sup>10</sup>		
Murray	Staff	40% Equity, 60% Debt <sup>8</sup>		
COST OF DEBT:				
Anderson	SNG	3.21% <sup>11</sup>		
Murray	Staff	5.37% <sup>8</sup>		
COST OF EQUITY:				
Anderson	SNG	12.00 to 17.60, 15.00 <sup>12</sup>		
Murray	Staff	9.80 to 10.80, 10.30 <sup>13</sup>		
Table 1.				

Although SNG's expert witness recommended 15.00 percent for the cost of equity, the Company has voluntarily reduced its request to 12.00 percent for competitive reasons.14

<sup>&</sup>lt;sup>9</sup> State ex rel. Utility Consumers Council of Missouri, Inc. v. Public Service Commission, 585 S.W.2d 41, 49 (Mo. banc 1979) ("*UCCM*'). <sup>10</sup> Ex. 1, *Anderson Direct*, p. 7.

<sup>&</sup>lt;sup>11</sup> Ex. 103, p. 3.

<sup>&</sup>lt;sup>12</sup> Ex. 1, pp. 56-7.

 <sup>&</sup>lt;sup>13</sup> Ex. 130, *Murray Surrebuttal*, p. 8.
 <sup>14</sup> Ex. 4, *Moorman Direct*, p. 14.

#### **Capital Structure and Cost of Debt**

SNG was created in 2011 when Missouri Gas Utility ("MGU") acquired and merged with Southern Missouri Natural Gas ("SMNG").<sup>15</sup> SNG is a wholly-owned subsidiary of Summit Utilities, Inc. ("Summit"), which in turn is owned by IIF CNG Investment, LLC ("IIF").<sup>16</sup> Summit owns other regulated natural gas utilities, including Colorado Natural Gas ("CNG").<sup>17</sup> Neither SNG nor Summit has a credit rating; however, both entities are able to raise capital and at fairly low cost, but at variable rates and short maturities.<sup>18</sup>

Of crucial importance, from Staff's point of view, is SNG's decision to take on additional business and financial risk with a large construction project in the Lake of the Ozarks ("LOO") district. Even before this expansion, earnings before interest, taxes, depreciation and amortization ("EBITDA") were only about 50 percent of projections.<sup>19</sup> In Case No. GO-2012-0102, before the LOO expansion was contemplated, SNG's projected financial ratios were consistent with a non-investment grade entity.<sup>20</sup> Staff considers that the commencement of the LOO expansion has likely caused further uncertainty regarding SNG's ability to issue long-term permanent debt in the near future.<sup>21</sup>

In most rate cases, Staff recommends either the actual consolidated parent company capital structure or the actual subsidiary capital structure. Staff's decision on which capital structure to use depends on Staff's assessment of whether investors' view

- <sup>16</sup> *Id.,* p. 4.
- <sup>17</sup> *Id.,* pp. 4-5. <sup>18</sup> *Id.*, p. 17.
- <sup>19</sup> *Id*.
- <sup>20</sup> *Id*.

<sup>&</sup>lt;sup>15</sup> Ex. 103, p. 5.

<sup>&</sup>lt;sup>21</sup> *Id.,* pp. 17-18.

the subsidiary as being financially managed on a stand-alone basis and whether the credit quality of the subsidiary is assessed primarily on a stand-alone basis.<sup>22</sup> Staff reviewed both Summit's consolidated capital structure and SNG's capital structure, but because of the ongoing LOO expansion and SNG's prior commitments to keep the costs of the LOO expansion out of this rate case, Staff determined it was appropriate to use a hypothetical capital structure and cost of debt based on the assumption that the LOO expansion did not occur.<sup>23</sup> SNG included financing plans in the application it filed in Case No. GO-2012-0102 that did not contemplate the LOO expansion.<sup>24</sup> Staff views this plan as the best available information on which to base a hypothetical capital structure and cost of debt for SNG.<sup>25</sup> Because it is SNG's own financing plan, it is superior to the use of a hypothetical capital structure and cost of debt based on risk-adjusted, proxy-group averages.<sup>26</sup>

SNG's Application in Case No. G0-2012-0102 requested Commission authority to encumber its Missouri assets in order to eventually secure up to \$88 million of debt with a maturity of 20 years. SNG's proposal under this Application was based on its intent to establish a permanent capital structure for its existing operations. SNG indicated that its request was for purposes of recapitalizing the Company in order to target a capital structure of approximately 40 percent equity and 60 percent debt. The Company believed that normalized expected EBITDA for its existing operations would support this targeted capital structure.<sup>27</sup>

SNG projected that they would secure a fixed interest rate of approximately 5.5 percent for the 20-year debt. The Company maintained that it would have been able to do so by entering into a fixed for floating interest rate swap. Staff recommends the use

of the cost of debt associated with a CNG debt issuance because its effective interest

<sup>&</sup>lt;sup>22</sup> *Id.,* p. 18.

<sup>&</sup>lt;sup>23</sup> *Id.*, pp. 18-19; Ex. 130, *Murray Surrebuttal*, p. 3.

<sup>&</sup>lt;sup>24</sup> Ex. 103, pp. 18-19.

<sup>&</sup>lt;sup>25</sup> Ex. 103, p. 19; Ex. 130, *Murray Surrebuttal*, p. 3.

<sup>&</sup>lt;sup>26</sup> Ex. 103, p. 19.

<sup>&</sup>lt;sup>27</sup> Ex. 103, p. 19; and see Ex. 130, Murray Surrebuttal, p. 3

rate is based on a swap arrangement similar to the anticipated arrangement SNG had initially proposed. The cost of the CNG debt issuance was approximately 5.37 percent as of December 31, 2013.<sup>28</sup>

Staff's recommended cost of debt is higher than the Company's at 3.21 percent. The reason is that the Company has inappropriately applied a temporary capital structure and a variable cost of debt to its more established districts.<sup>29</sup> The \$100 million of debt SNG issued on January 28, 2013, is only for a term of three years.<sup>30</sup> SNG decided to issue short-term debt rather than the 20-year debt it originally planned to issue because SNG decided to move forward with the LOO expansion project.<sup>31</sup> The 3year term loan was simply an extension of the previous bridge financing to complete the MGU/SMNG merger (approximately \$43 million) and also to obtain funds for the LOO construction.<sup>32</sup> Staff's proposed hypothetical cost of debt is intended to reflect a permanent, long-term financing plan, with pro forma adjustments to remove capital associated with the LOO expansion.<sup>33</sup> Staff points out that long-term, fixed-rate financing would necessarily be more expensive than SNG's actual short-term, variablerate financing.<sup>34</sup>

SNG attempted to refute Staff's capital structure and cost of debt testimony with the testimony of Rick H. Lawler. However, Staff notes that there is clear evidence that the Company believes its established districts should be able to support a capital

- <sup>30</sup> *Id.,* p. 11.
- <sup>31</sup> *Id.*
- <sup>32</sup> Id. <sup>33</sup> Id.
- <sup>34</sup> *Id.,* p. 12.

<sup>&</sup>lt;sup>28</sup> Ex. 130, p. 8.

<sup>&</sup>lt;sup>29</sup> Ex. 118, *Murray Rebuttal*, pp. 11-12.

structure that contains 40 percent equity and 60 percent debt.<sup>35</sup> Because of SNG's growth initiatives, its current capital structure is not consistent with the capitalization Summit and its ultimate owner, IIF, considers appropriate for its established systems.<sup>36</sup> SNG's ratepayers should not pay a higher revenue requirement because SNG has to maintain more common equity to support its growth initiatives.<sup>37</sup> Staff believes that SNG's affiliate, CNG, which is not engaged in an expansion project, is a fair and reasonable proxy for what SNG's capital structure and cost of debt would have been absent the LOO expansion.<sup>38</sup>

The Commission should discount Mr. Lawler's testimony that SNG's EBITDA cannot support a debt ratio of 60 percent because Mr. Lawler ignores (1) the negative impact of the LOO expansion and (2) SNG's voluntary decision to charge reduced rates in order to increase market penetration in competition with propane.<sup>39</sup> SNG's current short-term, variable-rate financing is a temporary expedient undertaken to support the LOO expansion and to refinance the bridge loan taken out to support the merger.<sup>40</sup>

SNG's witness Jim Anderson implies that Staff's recommended capital structure will unfairly reduce the amount of net income available to shareholders by effectively reducing the ROE to 6.3 percent. But Staff's proposed capital structure and debt cost are necessary to prevent SNG's ratepayers from becoming involuntary subsidizers of the Company's aggressive expansion plans.<sup>41</sup>

- <sup>36</sup> Id.
- <sup>37</sup> Id.
- <sup>38</sup> *Id.,* pp. 3-4. <sup>39</sup> *Id.*, pp. 4-5.
- <sup>40</sup> *Id.,* p. 5
- <sup>41</sup> *Id.,* p. 6.

<sup>&</sup>lt;sup>35</sup> Ex. 130, *Murray Surrebuttal*, p. 2.

# Determination of the Cost of Common Equity

The cost of common equity capital must be estimated. This is a difficult task, as academic commentators have recognized.<sup>42</sup> It is said that this "is an area of ratemaking in which agencies welcome expert testimony and yet must often make difficult choices between conflicting testimony."<sup>43</sup> The evaluation of expert testimony is left to the Commission, which "may adopt or reject any or all of any witness's [sic] testimony."<sup>44</sup>

## **Constitutional Parameters**

The United States Supreme Court, in two frequently-cited decisions, has established the constitutional parameters that must be met in setting the cost of common equity.<sup>45</sup> Each of the experts has affirmed that he conducted his studies and made his recommendations with these parameters in mind. In the earlier of these two cases, *Bluefield Water Works*, the Court stated that:

Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the services are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment.<sup>46</sup>

<sup>&</sup>lt;sup>42</sup> C.F. Phillips, Jr., *The Regulation of Public Utilities: Theory & Practice* 394 (PUR: Arlington, VA, 1993); L.S. Goodman, 1 *The Process of Ratemaking*, 606 (PUR: Vienna, VA, 1998).

<sup>&</sup>lt;sup>43</sup> Goodman, *supra*, 606.

<sup>&</sup>lt;sup>44</sup> State ex rel. GS Technologies Operating Company, Inc. v. Public Service Commission of Missouri, 116 S.W.3d 680, 690 (Mo. App., W.D. 2003); State ex rel. Associated Natural Gas Company v. Public Service Commission, 37 S.W.3d 287, 294 (Mo. App., W.D. 2000) (quoting State ex rel. Associated Natural Gas Company v. Public Service Commission, 706 S.W.2d 870, 880 (Mo. App., W.D. 1985)).

 <sup>&</sup>lt;sup>45</sup> Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333 (1943); Bluefield Water Works & Improvement Company v. Public Service Commission of West Virginia, 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed. 1176 (1923).
 <sup>46</sup> Physical Learner Company V. Public Service Commission of West Virginia, 262 U.S. 679, 43 S.Ct. 675, 67 L.Ed. 1176 (1923).

<sup>&</sup>lt;sup>46</sup> *Bluefield*, *supra*, 262 U.S. at 690, 43 S.Ct. at 678, 67 L.Ed. at 1181.

In the same case, the Court provided the following guidance as to the return due to equity owners:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.<sup>47</sup>

The Court restated these principles in Hope Natural Gas Company, the later

of the two cases:

'[R]egulation does not insure that the business shall produce net revenues.' But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.<sup>48</sup>

From these two decisions, three guiding principles can be discerned:

(1) An adequate return is commensurate to the returns realized from other

businesses with similar risks. This is the principle of the commensurate return.

(2) An adequate return is sufficient to assure confidence in the financial integrity

of the utility and to maintain the utility's credit rating. This is the principle of financial

integrity.

<sup>&</sup>lt;sup>47</sup> *Id.,* 262 U.S. at 692-93, 43 S.Ct. at 679, 67 L.Ed. at 1182-1183.

<sup>&</sup>lt;sup>48</sup> *Hope, supra,* 320 U.S. at 603, 64 S.Ct. 288, 88 L.Ed. 345 (citations omitted).

(3) An adequate return is sufficient to enable the utility to obtain necessary capital. This is the principle of capital attraction.

The first of these principles is based on risk and requires a comparative process. The return on common equity set by the Commission must be about as much as investors would realize from other investments with similar risks. What entities are those? Other public utilities. Financial analysts and investors recognize that every line of business is, by its very nature, subject to a set of unique risks. Consequently, the business entities that face corresponding risks and uncertainties to the utility under consideration are necessarily other utilities engaged in delivering the same service under similar conditions. Therefore, the Commission must look to the returns realized by a proxy group of comparable companies in setting the utility's return on common equity.

The second principle, simply stated, refers to the effect of the Commission's decision on the utility's credit rating. If the Commission's decision will not cause it to drop, then the utility's credit is maintained and confidence is unimpaired that the utility will continue in business in the future, meeting its obligations as they come due, providing safe and adequate service to its customers, and yielding a fair return to its shareholders.

The third principle refers to the utility's ability to compete in the market place for necessary capital. Summit competes for capital with other utilities and utilities likewise compete with unregulated businesses.

# Methodology for Determining the Cost of Equity:

Two principal methods have emerged for determining the cost of common equity: these are the "market-determined" approach and the "comparable earnings" approach.<sup>49</sup> The market-determined approach relies upon stock market transactions and estimates of investor expectations.<sup>50</sup> Examples of market-determined methods are the Discounted Cash Flow method ("DCF") and the Capital Asset Pricing Model ("CAPM").<sup>51</sup> The comparative earnings approach is a comparative method and relies upon the concept of "opportunity cost," that is, the return the investment would have earned in the next best alternative use.<sup>52</sup> The comparative earnings approach requires a comparative study of earnings on common equity in both regulated and unregulated enterprises of similar risk.<sup>53</sup> Another frequently-encountered method that does not fall within the boundaries of either of the principal approaches referred to above is the Risk Premium method ("RP"). This method is "relatively straightforward" and requires that the analyst "(1) determine the historic spread between the return on debt and the return on common equity, and (2) add this risk premium to the current debt yield to derive an approximation of current equity return requirements."54

In the final analysis, the method employed to estimate the cost of common equity is unimportant, as long as the result that is reached satisfies the constitutional requirements.<sup>55</sup> "If the total effect of the rate order cannot be said to be unjust or

<sup>&</sup>lt;sup>49</sup> Phillips, *supra*, 394.

<sup>&</sup>lt;sup>50</sup> Id.

<sup>&</sup>lt;sup>51</sup> Id.

<sup>&</sup>lt;sup>52</sup> *Id.,* at 397.

<sup>&</sup>lt;sup>53</sup> *Id.*, at 397-98.

<sup>&</sup>lt;sup>54</sup> *Id.,* at 399.

<sup>&</sup>lt;sup>55</sup> State ex rel. Arkansas Power & Light Company v. Missouri Public Service Commission, 736 S.W.2d 457, 462 (Mo. App., W.D. 1987); State ex rel. Associated Natural Gas Company v. Public Service Commission of Missouri, 706 S.W.2d 870, 879 (Mo. App., W.D. 1985).

unreasonable, judicial inquiry is at an end."<sup>56</sup> "It is the impact of the rate order which counts; the methodology is not significant."<sup>57</sup> Within a wide range of discretion, the Commission may select the methodology.<sup>58</sup> It may employ a combination of methodologies and vary its approach from case-to-case and from company-tocompany.<sup>59</sup> "No methodology being statutorily prescribed, and ratemaking being an inexact science, requiring use of different formulas, the Commission may use different approaches in different cases."60 The Constitution "does not bind ratemaking bodies to the service of any single formula or combination of formulas."<sup>61</sup> "Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances."62

<sup>&</sup>lt;sup>56</sup> Hope, supra, 320 U.S. at 602, 64 S.Ct. at 287, 88 L.Ed. 345 at \_\_\_\_ .

<sup>&</sup>lt;sup>57</sup> State ex rel. GTE North, Inc. v. Public Serv. Commission, 835 S.W.2d 356, 361, 371 (Mo. App., W.D. 1992).

<sup>&</sup>lt;sup>58</sup> Missouri Gas Energy v. Public Service Commission, 978 S.W.2d 434 (Mo. App., W.D. 1998), rehearing and/or transfer denied; State ex rel. Associated Natural Gas Company v. Public Service Commission, 706 S.W.2d 870, 880, 882 (Mo. App., W.D. 1985); State ex rel. Missouri Public Service Company v. Fraas, 627 S.W.2d 882, 888 (Mo. App., W.D. 1981).

<sup>&</sup>lt;sup>59</sup> State ex rel. City of Lake Lotawana v. Public Service Commission, 732 S.W.2d 191, 194 (Mo. App., W.D. 1987).

<sup>&</sup>lt;sup>60</sup> Arkansas Power & Light, supra, 736 S.W.2d at 462.

<sup>&</sup>lt;sup>61</sup> Federal Power Commission v. Natural Gas Pipeline Company, 315 U.S. 575, 586, 62 S.Ct. 736, 743, 86 L.Ed. 1037, 1049-50 (1942). <sup>62</sup> Id.

# **The Proxy Groups**

Guided by the principle of the commensurate return, and because Summit's stock is not publicly traded, each analyst employed a proxy group of publicly-traded companies:

MURRAY <sup>63</sup>	ANDERSON <sup>64</sup>
AGL Resources	AGL Resources
Atmos Energy Corp.	Atmos Energy Corp.
Laclede Group, Inc.	Laclede Group, Inc.
New Jersey Resources	New Jersey Resources
Northwest Natural Gas	Northwest Natural Gas
Piedmont Natural Gas	Piedmont Natural Gas
Southwest Gas Corp.	Southwest Gas Corp.
WGL Holdings, Inc.	WGL Holdings, Inc.
	NiSource Inc.
	South Jersey Ind.
	UGI Corp.

Mr. Murray selected a proxy group of eight companies from an initial group of 17

market-traded natural gas utilities, applying six criteria to ensure that his proxy group

was appropriately constructed and was reflective of SNG's risk characteristics:<sup>65</sup>

- Stock publicly traded;
- At least 65 percent operating income from distribution;
- At least 65 percent of assets are distribution assets;
- Two analysts for long-term projected EPS growth available within the last 90 days;
- Positive historical 5-year compound annual growth rate in dividends per share; and
- At least investment grade credit rating.

The average credit rating of Mr. Murray's proxy companies is "A."<sup>66</sup>

 <sup>&</sup>lt;sup>63</sup> Ex. 105, Staff's Cost of Service Report – Appendix 2, Sch. 8-2.
 <sup>64</sup> Ex. 1, Anderson Direct, p. 44, Table 2.
 <sup>65</sup> Ex. 103, p. 22.
 <sup>66</sup> Ex. 105, Sch. 8-2.

Mr. Anderson, by contrast, used a proxy group of 11 natural gas utilities reported by Value Line. His proxy group included all eight of Mr. Murray's proxy companies, as well as three others: NiSource, South Jersey Industries and UGI Corporation.

In Staff's view, Mr. Anderson's proxy group is not appropriately constructed. While both UGI Corporation and NiSource, Inc. do have some regulated gas distribution operations, the gas distribution operations do not constitute at least 50 percent of their operations.<sup>67</sup> During calendar year 2013, NiSource only derived 38.95 percent of its operating income from its gas distribution operations.<sup>68</sup> NiSource's gas pipeline operations (Columbia Pipeline Operations) made up 38.60 percent of its total operating income.<sup>69</sup> UGI's gas distribution operations only contributed 23.64 percent to the total operating income, while its AmeriGas Propane operations contributed 47.46 percent to its total operating income.<sup>70</sup> Mr. Murray rejected South Jersey Industries because it lacked at least two analyst reports for long-term projected EPS growth within the last 90 davs.71

#### The Experts' Analytical Methods

Mr. Murray and Mr. Anderson used variants of the same analytical methods. Mr. Murray relied upon the Constant Growth Discounted Cash Flow ("DCF") method and checked his results using the Capital Asset Pricing Model ("CAPM") and a variant of the Risk Premium Analysis ("RPA") termed the "Rule of Thumb." He also tested his results against average authorized returns as reported by Revenue Research Associates

<sup>&</sup>lt;sup>67</sup> Ex. 118, *Murray Rebuttal,* p. 12. <sup>68</sup> *Id.* 

<sup>&</sup>lt;sup>69</sup> Id.

<sup>&</sup>lt;sup>70</sup> Id.

<sup>&</sup>lt;sup>71</sup> Ex. 105, Sch. 8-1.

("RRA"). Mr. Anderson used the Constant Growth DCF, the CAPM, and the Total Return Method.

#### The Constant Growth Discounted Cash Flow (DCF)

The Constant Growth DCF is simply the sum of the dividend yield<sup>72</sup> plus a growth rate:

	Murray	Anderson
Dividend Yield	3.8 <sup>73</sup>	3.6 <sup>74</sup>
Growth Rate	4.0-5.0 <sup>75</sup>	6.4 <sup>76</sup>
Result	7.8-8.8 <sup>77</sup>	10.2 <sup>78</sup>

The dividend yield figure used by each analyst is the average of the dividend yield calculated for each member of the proxy group.<sup>79</sup> For the growth rate, Mr. Anderson simply used the average of the Value Line earnings forecasts for his 11 proxy companies.<sup>80</sup> Staff devoted a significant effort to determining the rage of growth rates it finally used, 4.0 percent to 5.0 percent.<sup>81</sup> In estimating a growth rate, Staff analyzed both actual and projected dividends per share ("DPS"), earnings per share ("EPS") and book value per share ("BVPS") for each of the comparable companies and also equity analysts' consensus estimates for long-term compound annual growth rates.<sup>82</sup> The average consensus long-term growth rate for the proxy group is currently 3.96

<sup>75</sup> Ex. 103, p. 23. <sup>76</sup> Ex. 1, p. 46, Table 3.

<sup>&</sup>lt;sup>72</sup> The dividend yield is the annual dividend divided by the market value of the shares; Ex. 1, p. 45.

<sup>&</sup>lt;sup>73</sup> Ex. 103, p. 23.

<sup>&</sup>lt;sup>74</sup> Ex. 1, p. 46, Table 3.

<sup>&</sup>lt;sup>77</sup> Ex. 103, p. 23.
<sup>78</sup> Ex. 1, 46, Table 3.

<sup>&</sup>lt;sup>79</sup> Ex. 1, p. 45; Ex. 103, p. 23.

<sup>&</sup>lt;sup>80</sup> Ex. 1, p. 45. <sup>81</sup> Ex. 103, pp. 23-30. <sup>82</sup> *Id.,* pp. 23-24.

percent.<sup>83</sup> Staff also reviewed long-range gross domestic product ("GDP") growth rate forecasts from a number of authoritative sources, historical growth trends for such of the proxy companies for which such information was available, and conducted correlation studies of gas industry growth to GDP growth.<sup>84</sup> Staff concluded:

Because the gas distribution industry only achieved growth in the low 4 percent range during a period of high capital investment and higher economic growth (see Schedule 9-8), Staff believes investors are likely using constant-growth rates closer to 4 percent. However, because some of the more recent historical growth rates are closer to 5 percent, Staff will use an overall range of 4 percent to 5 percent.<sup>85</sup>

## The Capital Asset Pricing Model (CAPM)

Staff used the CAPM as a test of reasonableness, while Mr. Anderson gave it equal weight with his other analyses. In the CAPM, the cost of equity is determined by comparing the risk of a given investment compared to the risk of the market as a whole.<sup>86</sup> To the risk-free rate (Rf) is added the product of  $\beta$  and the market-risk premium (Rm – Rf), where  $\beta$  is a measure of the divergence of the risk of the subject security from that of the market as a whole. For the risk-free rate, both analysts used the yield on long-term (30 years) U.S. Treasury bonds.<sup>87</sup> For the market-risk premium, Mr. Anderson averaged Ibbotson's long-term inflation-adjusted market rate of 6.6 percent for large companies and 8.6 percent for small companies.<sup>88</sup> Staff, in turn, relied on the long-term (from 1926 to 2013) arithmetic and geometric average historical differences between earned returns on stocks and earned returns on bonds, but did not average the two figures but, instead, calculated a result using each. For  $\beta$ , Mr.

<sup>&</sup>lt;sup>83</sup> Ex. 103, p. 24, and Ex. 105, Sch. 9-4.

<sup>&</sup>lt;sup>84</sup> Ex. 103, pp. 24-30, and Ex. 105, Sch's 9-5 through 9-8.

<sup>&</sup>lt;sup>85</sup> Ex. 103, p. 30.

<sup>&</sup>lt;sup>86</sup> Ex. 103, pp. 31-32; Ex. 1, pp. 42-45.

<sup>&</sup>lt;sup>87</sup> Ex. 1, p. 45; Ex. 103, p. 32.

<sup>&</sup>lt;sup>88</sup> Ex. 1, p. 45.

Anderson used the average beta of the gas utility stocks followed by *Value Line*.<sup>89</sup> Mr. Murray calculated  $\beta$  by dividing the covariance of the weekly returns on the NYSE index and the weekly returns on the subject company by the variance of the weekly returns on the NYSE index, and then adjusting the raw result using the Blume adjustment formula as used by *Value Line*.<sup>90</sup>

	Murray	Anderson
Risk Free Rate	3.60 <sup>91</sup>	3.78 <sup>92</sup>
Market Risk Premium	4.64, 6.20 <sup>93</sup>	7.60 <sup>94</sup>
Beta	0.80 <sup>95</sup>	0.70 <sup>96</sup>
Result	7.31, 8.55 <sup>97</sup>	9.1 <sup>98</sup>

## The Total Return Model

SNG's expert witness also used a Total Return analysis to which he gave equal weight.<sup>99</sup> The Total Return is the rate of return representing the actual price appreciation of a stock, with cash dividends reinvested on their payment date, over a given period.<sup>100</sup> The period Mr. Anderson used was December 31, 2007, to October 15, 2013, a period of 69 ½ months.<sup>101</sup> Mr. Anderson explained:

This five-plus-year period was chosen because it includes the 2008-09 financial panic, the stock market crash, the greatest recession in the past 65 years and the slow recovery that followed. During this period, the Dow Jones Utility Index hit a high of 557.69 on January 31, 2008, and then fell by almost one-half to 287.29. As of October 15, 2013, it stood at 491.68,

<sup>89</sup> Id.

<sup>90</sup> Ex. 103, p. 32.

<sup>91</sup> *Id.,* p. 32.

<sup>92</sup> Ex. 1, p. 44.

<sup>93</sup> Ex. 103, pp. 32-33.
<sup>94</sup> Ex. 1, p. 44.

<sup>95</sup> Ex. 103, p. 32.

- <sup>96</sup> Ex. 1, p. 45.
- <sup>97</sup> Ex. 103, p. 33.
- <sup>98</sup> Ex. 1, p. 45.
- <sup>99</sup> *Id.*, pp. 42-43, 46-47.
- <sup>100</sup> *Id.,* pp. 42-43.
- <sup>101</sup> *Id.,* pp. 43, 46.

having never regained its January 31, 2008 high, and 40.85 points lower than on December 31, 2007. In spite of the price decline among utility stocks in the index, the referenced utilities produced a 12.5 percent Total Return over the five-plus-years.<sup>102</sup>

The average Total Return for his proxy group over the selected period was 12.5 percent.<sup>103</sup>

# The Rule of Thumb

Mr. Murray also used a "rule of thumb" analysis as an additional test of reasonableness.<sup>104</sup> This method allows estimation of the cost of equity by adding a risk premium to the yield-to-maturity (YTM) of the subject company's long-term debt.<sup>105</sup> The typical risk premium, based on experience in the U.S. markets, is 3 to 4 percent.<sup>106</sup>

Risk Premium	3.0	4.0
"A" rated 30-year utility bonds	4.51	4.51
Result	7.51	8.51
Risk Premium	3.0	4.0
"Baa" rated 30-year utility bonds	5.28	5.28
Result	8.28	9.28

Source: Ex. 103, p. 33.

# **Risk Adjustments**

Both analysts adjusted their results upward to reflect SNG's additional risk as compared to the larger, higher-rated gas utilities in their proxy groups. Mr. Murray explained that his adjustment is based on the average spread between BB and BBB rated bond yields to that of the proxy group's A rating because SNG's hypothetical cost

<sup>&</sup>lt;sup>102</sup> *Id.,* pp. 46-47.

<sup>&</sup>lt;sup>103</sup> *Id.,* p. 47.

<sup>&</sup>lt;sup>104</sup> Ex. 103, p. 33.

<sup>&</sup>lt;sup>105</sup> Id. <sup>106</sup> Id.

of debt, 5.50 percent, falls between the two yields.<sup>107</sup> This approach resulted in an upward adjustment of 200 basis points.<sup>108</sup> "Applying this 200 basis point adjustment to Staff's proxy group cost of common equity estimate of 7.8 to 8.8 percent, results in a cost of common equity estimate of 9.8 to 10.8 percent."<sup>109</sup>

Mr. Anderson also adjusted his results upward, explaining that the adjustment "is the additional return on equity needed to induce investors to invest in a utility, like SNG, that poses more risks than other utilities."<sup>110</sup> As he explains at length in his testimony, Mr. Anderson applied an average adjustment of 440 basis points (4.4 percent), raising his cost of equity recommendation to a range from 12 percent to 17.6 percent, midpoint approximately 15 percent.<sup>111</sup> As Mr. Anderson freely admits, his adjustment is subjective.<sup>112</sup>

#### **Analytical Flaws and Errors**

Mr. Anderson presented a laundry list of specific, quantified risk adjustments to apply to his Total Return and DCF results.<sup>113</sup> While this list of numbers looks authoritative, it consists entirely of estimations made by Mr. Anderson.<sup>114</sup> While some of the specific risks enumerated by Mr. Anderson were valid and were considered by Staff, others were not. Mr. Murray noted that Mr. Anderson's proposed adjustment for less debt leverage was "a violation of the basic tenet of financial risk and return. As a company employs more leverage, equity investors will demand a higher return because

- <sup>110</sup> Ex. 1, p. 47. <sup>111</sup> *Id.,* pp. 47-56.
- <sup>112</sup> *Id.*, p. 53.
- <sup>113</sup> *Id.,* p. 52.

<sup>&</sup>lt;sup>107</sup> *Id.,* pp. 35-36.

<sup>&</sup>lt;sup>108</sup> *Id.,* p. 36. <sup>109</sup> *Id.* 

<sup>&</sup>lt;sup>114</sup> *Id.*, p. 53; Ex. 118, *Murray Rebuttal*, pp. 14-15.

there are higher fixed obligations before the equity investor will receive a return on his/her investment. I have never seen an investment analyst recommend a risk premium adjustment because a company has less financial risk than the proxy group."<sup>115</sup> Mr. Murray also questioned Mr. Anderson's recommended upward adjustments for onerous debt terms and chronic underperformance.<sup>116</sup> The first of these conditions is due to the debt taken on for the LOO expansion while the second is due to SNG's inability to displace propane in certain districts.<sup>117</sup>

Mr. Murray also criticized Mr. Anderson's cost of equity analysis.<sup>118</sup> Mr. Anderson used growth rates that exceed the actual rate of growth historically achieved by the natural gas industry.<sup>119</sup>

Mr. Anderson's DCF analysis assumes that his proxy group's dividends can grow at an annual compound growth rate of 6.4 percent into perpetuity. This is simply not possible and is not an assumption investors make for purposes of evaluating potential returns for natural gas utility stocks. While it is possible that the natural gas distribution industry may be able to grow its earnings and dividends at a rate higher than economic growth in the near term due to policy initiatives promoting the industry's replacement of gas distribution infrastructure because of safety concerns, these replacement programs will not last into perpetuity. It is reasonable to assume that the natural gas distribution industry's long-term growth rate will not be any higher than long-term historical experience. This is especially true considering these historical growth rates capture a period of economic growth that is not expected to be matched going forward.<sup>120</sup>

The historical actual performance of the natural gas industry over the last

40 years has been an annual growth rate of 4.4 percent.<sup>121</sup>

<sup>117</sup> *Id.* 

- <sup>119</sup> *Id.,* p. 19.
- <sup>120</sup> *Id.*, p. 20. <sup>121</sup> *Id.*

<sup>&</sup>lt;sup>115</sup> Ex. 118, pp. 15-16.

<sup>&</sup>lt;sup>116</sup> *Id.,* pp. 16-17.

<sup>&</sup>lt;sup>118</sup> *Id.,* pp. 19-28.

Likewise, Mr. Murray criticized Mr. Anderson's Total Return analysis:

Mr. Anderson assumes that market returns achieved for the period December 2007 through October 2013 are driven by the fundamentals of the natural gas distribution industry. However, this assumption ignores the impact the macroeconomic environment has had on yield investments, such as bonds and dividend-yielding stocks. Similar to bond prices, utility stock prices increase as interest rates decrease. The increase in utility stock prices in such a situation is caused by investors lowering their required return to invest in utility stocks. The higher the price the shareholder is willing to pay per share for a utility's earnings, the less it costs the utility to raise equity capital.<sup>122</sup>

Because investors buy utility stocks for the dividends, an analysis based on the

assumption that all returns are reinvested is inherently flawed.<sup>123</sup>

Mr. Murray criticized Mr. Anderson's use of inflation-adjusted, that is, real returns, as his proxy for the equity risk premium in his CAPM.<sup>124</sup> He stated, "I have never seen a rate of return expert estimate the market risk premium by simply using real returns achieved in the market."<sup>125</sup> Mr. Anderson also used two different risk-free rates (Rf) in his CAPM, rather than using the same rate twice as the model's logic requires.<sup>126</sup> This resulted in an upward bias.<sup>127</sup> Mr. Anderson also committed a mismatch of data error in his CAPM inputs.<sup>128</sup>

# Rate of Return Conclusion

Staff recommends that the Commission, for the reasons discussed herein, set SNG's authorized cost of common equity within the range of 9.80 percent to 10.80 percent, mid-point 10.30 percent, combined with Staff's recommended capital structure of 40 percent equity and 60 percent debt and with Staff's recommended cost of debt of

- <sup>123</sup> Id. <sup>124</sup> *Id.,* p. 24.
- <sup>125</sup> *Id.,* pp. 24-25.
- <sup>126</sup> *Id.,* p. 25.
- <sup>127</sup> Id.
- <sup>128</sup> *Id.,* pp. 25-26.

<sup>&</sup>lt;sup>122</sup> *Id.,* p. 21.

5.37 percent, to arrive at the recommended allowed rate of return ("ROR") in this case:
7.14 percent to 7.54 percent, midpoint 7.34 percent.<sup>129</sup>

#### **B.** Revenue Requirement

1. Should the Commission grant the Company a rate increase? If so, in what amount?

# 2. Should the Commission require SNGMO to impute a level of volumes, customer levels, and/or revenues in any of the four rate divisions in this case?

SNG's service area comprises four rate divisions, each with its own revenue requirement. Staff recommends that the Commission grant SNG the following rate increases by division, based on the Staff's cost of service analysis: Branson, \$1,278,526;<sup>130</sup> Gallatin, \$180,972;<sup>131</sup> Rogersville, \$3,050,981;<sup>132</sup> Warsaw, \$637,508.<sup>133</sup> This represents a total revenue increase of \$5,147,987.<sup>134</sup>

The Commission should not set rates by imputing a level of volumes, customer levels, and/or revenues in any of the four divisions in this case, as recommended by The Office of the Public Counsel (OPC), because it would violate the regulatory laws and principles that have governed this Commission for a century.

<sup>&</sup>lt;sup>129</sup> Ex. 103, Staff's Cost of Service Report, p. 7.

<sup>&</sup>lt;sup>130</sup> Ex. 135, Branson District Final Staff Accounting Schedules.

<sup>&</sup>lt;sup>131</sup> Ex. 136, Gallatin District Final Staff Accounting Schedules.

<sup>&</sup>lt;sup>132</sup> Ex. 137, Rogersville District Final Accounting Schedules.

<sup>&</sup>lt;sup>133</sup> Ex. 138, Warsaw District Final Accounting Schedules.

<sup>&</sup>lt;sup>134</sup> Ex. 134, *Final Staff Reconciliation.* 

#### Missouri law requires rates to be based on a utility's cost of service

The Missouri General Assembly has vested in the Missouri Public Service Commission the state's police power to set "just and reasonable" rates for natural gas service.<sup>135</sup>

Missouri law requires that "[i]n determining the price to be charged for gas... the commission may consider all facts which in its judgment have any bearing upon a proper determination of the question... with due regard, among other things, to a reasonable average return upon capital actually expended and to the necessity of making reservations out of income for surplus and contingencies."<sup>136</sup>

The Supreme Court of the United States explained that setting just and reasonable rates "involves a balancing of the investor and the consumer interests."<sup>137</sup> The purpose of regulation is not to insure that the utility shall produce a profit, but rather to meet the investor's "legitimate concern with the financial integrity of the company whose rates are being regulated... it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business."<sup>138</sup>

In articulating the role of the Missouri Public Service Commission, the Missouri Supreme Court explained:

The enactment of the Public Service Act marked a new era in the history of public utilities. *Its purpose is to require the general public not only to pay rates which will keep public utility plants in proper repair for effective public service, but further to insure to the investors a reasonable return upon funds invested.* The police power of the state demands as much. We can never have efficient service, unless there is a reasonable guaranty of fair returns for capital invested... These instrumentalities are a part of the very life blood of the state, and of its people, and a fair administration of the act is

<sup>&</sup>lt;sup>135</sup> Section 393.130 RSMo, Section 393.140 RSMo.

<sup>&</sup>lt;sup>136</sup> Section 393.270.4 RSMo.

<sup>&</sup>lt;sup>137</sup> Federal Power Commission et al. v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944).

<sup>&</sup>lt;sup>138</sup> *Id*.

mandatory. When we say "fair," we mean fair to the public and fair to the investors.<sup>139</sup>

Therefore, a utility's revenue requirement is the amount of revenue the utility must receive to pay the cost of producing utility service while yielding a reasonable return to investors.<sup>140</sup> This Commission has typically expressed the revenue requirement as the result of the following formula:

# RR = C + (V - D)R

Where:	RR C	=	Revenue Requirement; Prudent Operating Costs, including Depreciation, Expenses and Taxes;
	V	=	Gross Value of Utility Plant in Service;
	D	=	Accumulated Depreciation; and
	R	=	Overall Rate of Return or Weighted Cost of Capital <sup>141</sup>

Chapter 393 RSMo. authorizes the Commission to prescribe uniform methods of accounting for utilities and, in addition, to examine a utility's books and records and, after hearing, determine the accounting treatment of any particular transaction.<sup>142</sup> These powers allow the Commission to determine the utilities prudent operating costs and establish the utility's revenue requirement.

# Staff's Cost of Service Calculation

In this case, Staff conducted an audit of SNG's operations during the test year and produced a report<sup>143</sup> and accounting schedules<sup>144</sup> describing the utility's current

 <sup>&</sup>lt;sup>139</sup> State e. rel. Washington University et. al. v. Public Service Commission, 272 S.W. 971, 973 (Mo. banc 1925) (Emphasis added). For a concise summary of the Commission's ratemaking standards and practices see also GR-2008-0355, *Report and Order*, p. 7-10.
 <sup>140</sup> State ex rel. Capital City Water Co. v. Missouri Public Service Commission, 850 S.W.2d 903, 916 n. 1

 <sup>&</sup>lt;sup>140</sup> State ex rel. Capital City Water Co. v. Missouri Public Service Commission, 850 S.W.2d 903, 916 n. 1 (Mo. App. 1993).
 <sup>141</sup> Energy Utility Rate Setting, Lowell E. Alt. Jr. p. 22. See also GR-2008-0355, Report and Order p. 9.

 <sup>&</sup>lt;sup>141</sup> Energy Utility Rate Setting, Lowell E. Alt. Jr. p. 22. See also GR-2008-0355, Report and Order p. 9.
 <sup>142</sup> Section 393.140 RSMo; Section 393.240 RSMo. See also GR-2008-0355 Report and Order p. 10.

<sup>&</sup>lt;sup>143</sup> Ex. 103, Staff Report—Cost of Service; Ex. 105, Staff Report—Cost of Service Appendices.

<sup>&</sup>lt;sup>144</sup> Ex. 106, *Staff Accounting Schedules* 

cost of service.<sup>145</sup> Staff submitted numerous data requests seeking information from SNG and other parties. After reviewing testimony and additional information supplied by the SNG, Staff made additional adjustments to its case—including significant reductions to the revenue requirements for the Warsaw and Branson rate divisions based on Staff's determination of excess capacity<sup>146</sup> in those divisions.<sup>147</sup>

Based on all the evidence in this case, Staff prepared an updated reconciliation<sup>148</sup> and updated accounting schedules<sup>149</sup> showing Staff's final revenue requirements for each of SNG's four rate divisions. These calculations comport with the legal principles described above and state a revenue requirement sufficient to provide safe and adequate gas natural gas service at just and reasonable rates, and to provide SNG with a reasonable return on its investment used for public service. Staff's revenue requirement is therefore fair to both the company and its ratepayers.

# Staff's Capacity Adjustment insulates customers from SNG's failure to attain expected customer growth in the Branson and Warsaw districts.

While Staff's analysis concluded that the Gallatin and Rogersville districts are economically viable and that customers in those districts should pay their full cost of service, Staff concluded that SNG has not met its sales projections in the Branson and Warsaw systems, and as a result those systems serve significantly fewer customers than the infrastructure is designed to accommodate.<sup>150</sup> Thus, if customers in Warsaw

<sup>&</sup>lt;sup>145</sup> Ex. 102, *Direct Testimony of Amanda C. McMellen.* 

<sup>&</sup>lt;sup>146</sup> Ex. 126, Surrebuttal Testimony of Lesa Jenkins.

<sup>&</sup>lt;sup>147</sup> Ex. 128, Surrebuttal Testimony of Amanda C. McMellen.

<sup>&</sup>lt;sup>148</sup> Staff Ex. 134, *Final Staff Reconciliation*.

<sup>&</sup>lt;sup>149</sup> Staff Exhibits 135, 136, 137, 138.

<sup>&</sup>lt;sup>150</sup> Ex. 128, *McMellen Surrebuttal* pgs 5-8.

and Branson are charged the full cost of service for those districts, they will pay for more infrastructure than they actually use.

In order to address this problem, witness Lesa Jenkins calculated mainline capacity usage factors representing the percentage of mainline capacity required for reasonable peak day service to the Branson and Warsaw areas.<sup>151</sup> Staff witness Amanda McMellen used Jenkins' factors to calculate an "excess capacity" adjustment to apply to SNG's plant and depreciation reserve balances.<sup>152</sup> Staff recommends that the amount of SNG's current plant and depreciation reserve balances deemed to be excess capacity should be moved into Account 105 (Plant Held For Future Use), with recovery to be considered in a future rate case. Staff calculated excess capacity adjustments to net rate base of \$27.64 million for Branson and \$6.97 million for Warsaw.<sup>153</sup> In this way, SNG receives its cost to serve its customers, while SNG's customers pay for the utility service they actually consume-no more, no less-and therefore Staff's revenue requirement calculation takes all relevant factors into account, protects customers from the risks of SNG's expansion, and provides sufficient revenue to for the utility to provide safe and adequate service at just and reasonable rates, as defined by Missouri statute and long-standing case law.

<sup>&</sup>lt;sup>151</sup> Ex. 126, *Jenkins Surrebuttal*, p. 8 lns 19 – 22.

<sup>&</sup>lt;sup>152</sup> Ex. 128, *McMellen Surrebuttal*, p. 7, In 11 – p. 8 ln 2.

<sup>&</sup>lt;sup>153</sup> Id.

OPC's revenue requirement recommendation is not based on the utility's cost of service.

OPC witness Barbara Meisenheimer calculated a revenue requirement by comparing feasibility studies in SNG's various certificate applications with her determination of actual numbers of customers and volumes.<sup>154</sup>

OPC's revenue requirement is not based on SNG's prudent operating costs. It is not based on the current value of its investment used for public service. OPC's revenue requirement was not calculated to include an opportunity for the utility to earn a reasonable return on that investment. OPC's revenue requirement is not based on SNG's current cost of service.<sup>155</sup> As such it does not comport with the law and policy of cost-of-service ratemaking to which this Commission has adhered for the past century. The Commission should not accept this invitation to depart from the traditional legal principles of utility ratemaking in Missouri.

# How should the former SMNG assets be booked to plant in service in light of MGU's merger with SMNG that was approved in GM-2011-0354?

The former SMNG assets should be booked to plant in service at the original costs of the assets, adjusted for depreciation. This practice is known as the "original cost rule" or the "net book value rule."<sup>156</sup> The accounting practices contained within the Uniform System of Accounts (USOA) applicable to plant-in-service are premised upon

<sup>&</sup>lt;sup>154</sup> Ex. 202, *Rebuttal Testimony of Barbara Meisenheimer*, pgs. 5-18.

<sup>&</sup>lt;sup>155</sup> Transcript Volume 12, p. 292, ln 21-p. 293 ln 7.

<sup>&</sup>lt;sup>156</sup> In re Utilicorp United., EM-2000-292, Second Report and Order, February 26, 2004, pgs 4-5, 2004 WL 431561 pgs. In this case, the Commission authorized a merger between UtiliCorp. United Inc. and St. Joseph Power & Light. The Missouri Supreme Court remanded the matter to the Commission so that it could consider and decide the issue of recoupment of an acquisition premium. See *State ex. rel AG Processing Inc. v. PSC*, 120 S.W.3d 732, 737 (Mo. banc 2003).

the net book value rule.<sup>157</sup> For the reasons outlined below, the Commission should reject OPC's recommended acquisition adjustment.

An "acquisition adjustment" is the difference between the purchase price of utility assets and the net book value of those assets.<sup>158</sup> The general rule, to which this Commission has adhered followed for decades, is that only the original cost of utility plant to the first owner devoting the property to public service, adjusted for depreciation, should be included in the utility's rate base.<sup>159</sup>

An acquisition adjustment can be either positive or negative, depending on whether a utility purchases an asset at more or less than the net original cost of the asset. When the utility pays more than the net original cost, it has paid an "acquisition premium." In other cases, a utility may purchase assets at less than net original cost, in which case the utility has a "negative acquisition adjustment."<sup>160</sup>

<sup>&</sup>lt;sup>157</sup> 18 CFR Part 201, USOA Prescribed for Natural Gas Companies. See, e.g., Definition 26: "Original cost, as applied to gas plant, means the cost of such property to the person first devoting it to public service." See USOA Instruction for Account 101 Gas Plant In Service: "This account shall include the original cost of gas plant..." See USOA Gas Plant Instruction No. 2 Gas Plant To Be Recorded At Cost: "All amounts included in the accounts for gas plant acquired as an operating unit or system... shall be stated at the cost incurred by the person who first devoted the property to utility service." See also Gas Plant Instruction No. 5 Gas plant purchased or sold B.(1): "The original cost of plant, estimated if not known, shall be credited to account 102. Gas Plant Purchased or Sold, and concurrently charged to the appropriate gas plant in service accounts ... "

 <sup>&</sup>lt;sup>158</sup> In re Utilicorp United, Second Report and Order, p. 4-5.
 <sup>159</sup> Id. See also In the Matter of Kansas City Power & Light Co. of Kansas City, 1974 WL 30040, 18 Mo. P.S.C. (N.S.) 453; In the Matter of Verona Telephone Co. of Verona, Mo., 1972 WL 26183 (Mo. P.S.C.), 17 Mo. P.S.C. (N.S.) 62; In the Matter of Osage Natural Gas Co. of Salem, Illinois, 1973 WL 29336 (Mo. P.S.C.); Re The Gas Service Co., 6 P.U.R. 4<sup>th</sup> 99, 1974 WL 391924 (Mo. P.S.C.); Complaint of Capital City Water Co., 1976 WL 30995 (Mo. P.S.C.), 21 Mo. P.S.C. (N.S.) 198; In the Matter of Great River Gas Co., of Hannibal, Missouri, GR-85-136, Report and Order, 1985 WL 260793 (Mo.P.S.C.), 28 Mo.P.S.C. (N.S.) 8; Re Missouri Public Service. A Division of UtiliCorp United, Inc., ER-90-101, 118 P.U.R. 4<sup>th</sup> 215, 1990 WL 488941 (Mo. P.S.C.), In re House Springs Sewer Co., Inc., Case No. SR-2001-303, Order Granting Waiver, Granting Rate Increase, Approving Tariff and Closing Case, 2000 WL 33254489 (Mo.P.S.C.); In re UtiliCorp United, Inc., EM-2000-292, Second Report and Order, 2004 WL 431561; In re Trigen-Kansas City Energy Corp., Order Approving Unanimous Stipulation and Agreement, Case No. HM-2004-0618, 2004 WL 2996855 (Mo.P.S.C.);

<sup>&</sup>lt;sup>160</sup> In re Utilicorp United, EM-2000-292, Second Report and Order p. 4-5. OPC uses the term "bargain purchase discount" to refer to the negative acquisition adjustment at issue in this proceeding.

Traditionally, Missouri applies the "net original cost rule" to utility mergers, which means that, for ratemaking purposes, utilities are not allowed to recover an acquisition premium from its ratepayers.<sup>161</sup> Application of the rule also means that ratepayers do not receive lower rates through a decreased rate base when the utility purchases assets at less than net book value. Even if a utility acquires an asset at a bargain price, the Commission allows the utility to put the assets into rate base at its net original cost. Those gains flow only to shareholders.<sup>162</sup>

For example, in WR-88-255, OPC recommended that the Commission reduce a water utility's rate base to reflect what OPC asserted was the "true market value" of the assets.<sup>163</sup> The Commission determined that OPC recommended negative acquisition adjustment was unreasonable and should be rejected, and the Commission ordered that the original cost rule should be applied in order to determine the company's rate base for ratemaking purposes.<sup>164</sup>

#### Multiple policy issues support the net original cost rule

The basic purpose of the net original cost rule is that utility customers should pay for the value of the assets they use for utility service—no more, no less. The value of those assets do not change simply because the ownership of the assets change, which is why the Commission historically determines rate base by calculating the *value* of the assets, rather than the cost that a purchaser paid for the assets.

<sup>&</sup>lt;sup>161</sup> *Id.* 

<sup>&</sup>lt;sup>162</sup> *Id.* 

<sup>&</sup>lt;sup>163</sup> In the Matter of U.S. Water/Lexington, Missouri Inc. 1989 WL 513605.

<sup>&</sup>lt;sup>164</sup> *Id.* 

The Commission examined the issue carefully in the 2000 merger between Utilicorp United and St. Joseph Light & Power Company.<sup>165</sup> In that case, Utilicorp sought—and the Commission ultimately rejected—rates that included recovery of the acquisition premium that Utilicorp paid for the St. Joseph assets. In rejecting the company's proposal to recover the acquisition premium from ratepayers, the Commission relied on extensive testimony from Staff regarding the policy rationale supporting consistent application of the "net original cost" or "net book value" rule, regardless of whether the issue is a positive or negative acquisition adjustment.<sup>166</sup> The following reasons support Staff's recommendation in this case that the Commission continue to follow the net original cost rule:

**Original cost promotes sale of troubled utilities:** From the ratepayers point of view, there is a surface appeal to including negative acquisition adjustments in rates—if a utility acquires another utility's assets at less than net book value and the Commission required the utility to book the assets at the lower purchase price, ratepayers would realize the benefit of a lower rate base than would otherwise be incurred.

However, such a policy would discourage the acquisition of troubled utilities. A financially troubled utility presents the risk that the utility will not be able to provide ratepayers with safe and adequate service, and in such situations it may be in the public interest for a troubled utility to be acquired and improved by another company. The net book value rule provides an incentive to purchase troubled assets at less than book value by allowing the purchasing utility to establish rates based on the actual value of the assets.

 <sup>&</sup>lt;sup>165</sup> In re Utilicorp United, EM-2000-292, Second Report and Order p. 4-5.
 <sup>166</sup> Id

**Consistent, fair treatment:** If the Commission adopted a policy of recognizing negative acquisition adjustments, utilities would have a reasonable argument that the Commission should also recognize positive acquisition adjustments. This would mean that utility rates across Missouri would be uncertain and inconsistent, and ultimately such treatment would harm ratepayers, as discussed below.

Consistent application of the net original cost rule means that utilities can negotiate mergers and acquisitions with a clear understanding of the ratemaking treatment they will receive in Missouri.

**Original cost protects ratepayers:** In the UtiliCorp case, the Commission recognized that one of the most important functions of the "net book value" rule is to protect ratepayers from paying an artificially inflated rate base.<sup>167</sup>

In the 1920s and 1930s, utilities acquired other utilities for amounts in excess of net book value. This resulted in inflated rate base, which meant that the utilities' customers paid higher rates for the exact same utility property, since the value of the assets did not change simply because the ownership of the assets changed. The original cost rule prevents utilities from artificially inflating rate base, and thereby increasing profits.<sup>168</sup>

**Regulatory Efficiency**: If the Commission abandons the net book value rule, the Commission would be required to either perform an assessment of the purchase price and insert itself into the negotiation process, or else simply accept the utility's subjective valuation and judgment regarding the value of plant acquired through a

<sup>&</sup>lt;sup>167</sup> In re Utilicorp United, EM-2000-292, Second Report and Order p. 4-5.

merger or acquisition. Thus, the burden of determining the appropriate purchase price of acquired utilities would fall upon the Staff and the Commission.

Encourage efficient transactions: If the Commission began allowing acquisition adjustments, there would be no incentive for the utility to negotiate the best possible price for an acquired firm.

For these reasons, the Commission should continue its consistent application of the net original cost rule and reject OPC's invitation to depart from this well-founded regulatory principle.

## C. What is "rate shock"? If it exists, should the Commission address rate shock in this case and, if so, how?

Finally, the Commission has been asked to consider the issue of rate shock in this case.

"Rate shock" can be the result of rate changes, not rate levels.<sup>169</sup> The term "rate shock" is used to describe the effect of an extremely large increase in revenue requirement.<sup>170</sup> The Commission can minimize the revenue requirement increase in this case by adopting Staff's rate of return recommendation, described above.

During the evidentiary hearing, the Missouri School Boards' Association urged the Commission to consider the issue of "rate shock" as to the school districts in SNG's service area.<sup>171</sup> However, the MSBA's position on this issue is misleading for several reasons.

<sup>&</sup>lt;sup>169</sup> In the Matter of Missouri Cities Water Co., WR-90-236, Report and Order, October 12, 1990, 1990 WL 605117 (Mo.P.S.C.), 2

<sup>&</sup>lt;sup>170</sup> In re Missouri American Water Co., WR-2000-0281, Report and Order on Second Remand, December 4, 2007, pg 6, 2007 WL 4302535. <sup>171</sup> Transcript Vol. 12, p. 317, Ins 10-23.

First, the schools have not been paying their full cost of service. As MSBA witness Louie R. Ervin testified, SNG's school transportation customers have been paying a fixed monthly charge of \$50 *per district.*<sup>172</sup> As explained by Staff witness Phil Lock in Staff's Cost of Service Report, in order for the schools to pay their cost of service, they should be assessed a customer charge per meter consistent with the companion sales rate.<sup>173</sup> At the hearing, Mr. Erwin agreed that schools should pay their cost of service,<sup>174</sup> so it should not be shocking that they will now be billed accordingly.

In addition, the estimated percentage increases quoted by MSBA do not represent actual increases to the gas bills that the schools will receive. A majority of a gas customers' bill is the cost of the natural gas. Staff provided an example of estimated percentage increases to the schools that includes the cost of gas.<sup>175</sup> Of course, the schools, like other transportation customers, negotiate their own price for natural gas and do not pay the PGA rate, but this exhibit simply shows that the increases to the schools' bills will not be as shocking as the MSBA would have the Commission believe.

Finally, the MSBA attempted to argue that the Commission should consider the revised "cashout" provision when considering the schools' rate increase.<sup>176</sup> As explained by Staff witness Lesa Jenkins, the cashout provision is not a "rate." Rather, the cashout is simply a formula used to address imbalances that occur when a transportation customer causes more or less gas to be delivered onto the utility's

<sup>&</sup>lt;sup>172</sup> Ex. 402, Surrebuttal Testimony of Louie R. Ervin, Sr., p. 8 ln. 6.

<sup>&</sup>lt;sup>173</sup> Ex. 103, p. 55. All MSBA issues other than rate shock have been resolved in this case by stipulation and agreement. Staff raises these points here to ensure the Commission is fully informed on the issue of rate shock to the schools.

<sup>&</sup>lt;sup>174</sup> Transcript Vol. 12, p. 352 ln 25-p. 353 ln 6.

<sup>&</sup>lt;sup>175</sup> Ex. 139.

<sup>&</sup>lt;sup>176</sup> Transcript Vol. 12, pg. 354 lns 18-21.

system than the customer actually uses.<sup>177</sup> The difference is referred to as an "imbalance." The cashout provision in SNG's tariff provides a formula to determine the price at which the transportation customer must either compensate SNG for purchase of additional gas (in the case of a negative imbalance) or the price at which the transportation customer receives a credit for excess gas (in the case of a positive imbalance).<sup>178</sup> The cashout provisions include "tiers" that change with the level of imbalance. Thus, the cashout provisions provide an incentive for the transportation customer to make the most accurate gas nominations possible and reduce imbalances (which may cause SNG to change its gas purchasing practices, which could increase costs to SNG's sales customers).<sup>179</sup> Therefore, whether or not the MSBA pays a cashout depends entirely on the accuracy of the MSBA's monthly capacity nominations. It is entirely within MSBA's control. It is not part of the schools' "rate," and therefore it is misleading for the MSBA to assert that the cashout provision should be considered as contributing to "rate shock."

Regardless of whether any individual or entity will find any rate increase in this case to be shocking. Staff is the only party that has provided the Commission with a lawful and reasonable alternative to the Company's requested rate increase.

<sup>&</sup>lt;sup>177</sup> Ex. 108, Staff Class Cost of Service Report, pgs 18-19; Ex. 114, Rebuttal Testimony of Lesa Jenkins, o. 3-15. <sup>178</sup> Ex. 114 p. 4-5.

<sup>&</sup>lt;sup>179</sup> *Id.* at 3.

#### CONCLUSION

In any rate case, parties representing specific interests may ask the Commission to reach a decision that serves those interests. In accommodating those interests, however, the Commission cannot disregard Missouri regulatory law. The Commission's legal obligation is to reach a result that is just and reasonable for customers and the utility, and that provides the utility with sufficient resources to provide safe and adequate natural gas service to citizens and businesses. The Staff has provided the Commission with recommendations that are fair to both SNG and its customers, and it respectfully requests the Commission adopt those recommendations.

WHEREFORE, Staff hereby submits its Initial Brief in this matter for the Commission's consideration.

Respectfully Submitted,

#### STAFF OF THE MISSOURI PUBLIC SERVICE COMMISSION

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# **CERTIFICATE OF SERVICE**

I hereby certify that true and correct copies of the foregoing were served electronically to all counsel of record this 16<sup>th</sup> day of September, 2014.

Isl John D. Borgmeyer