

*Exhibit No.:*

*Issues: Rate of Return and Capital  
Structure*

*Witness: Zephania Marevangepo*

*Sponsoring Party: MoPSC Staff*

*Type of Exhibit: Rebuttal Testimony*

*Case No.: GR-2014-0007*

*Date Testimony Prepared: March 4, 2014*

**MISSOURI PUBLIC SERVICE COMMISSION**

**UTILITY SERVICES DEPARTMENT**

**REBUTTAL TESTIMONY**

**OF**

**ZEPHANIA MAREVANGEPO**

**MISSOURI GAS ENERGY DIVISION  
OF LACLEDE GAS COMPANY**

**CASE NO. GR-2014-0007**

Jefferson City, Missouri  
*March 2014*

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

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**ZEPHANIA MAREVANGEPO**  
**MISSOURI GAS ENERGY**  
**CASE NO. GR-2014-0007**

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1 **REBUTTAL TESTIMONY**

2 **OF**

3 **ZEPHANIA MAREVANGEPO**

4 **MISSOURI GAS ENERGY**

5 **CASE NO. GR-2014-0007**

6 Q. Please state your name.

7 A. My name is Zephania Marevangepo.

8 Q. Are you the same Zephania Marevangepo who prepared the Rate of Return  
9 Section of the Staff's Revenue Requirement Cost of Service Report that was filed in  
10 this case?

11 A. Yes, I presented direct testimony in the Missouri Public Service Commission  
12 Staff's (Staff) Cost of Service Report filed on January 29, 2014.

13 Q. What is the purpose of your rebuttal testimony?

14 A. The purpose of my rebuttal testimony is to respond to parts of the direct  
15 testimony of Missouri Gas Energy's (MGE) cost of equity expert witness (Pauline M. Ahern/  
16 Ms. Ahern) and Office of the Public Counsel's (Public Counsel or OPC) cost of equity expert  
17 witness (Michael Gorman/ Mr. Gorman).

18 **EXECUTIVE SUMMARY**

19 Q. Would you please summarize the specific rate of return positions sponsored  
20 by Ms. Ahern, Mr. Gorman and Staff in this case?

21 A. Ms. Ahern recommended an overall rate of return of 8.80 percent based on a  
22 recommended 10.25 percent return on equity (ROE), 4.35 percent embedded cost of  
23 debt, and consolidated capital structure comprising 53.60 percent equity and 46.40 percent

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1 long-term debt. Ms. Ahern's consolidated capital structure was based on Laclede Group's  
2 (parent company of Laclede Gas Company (Laclede Gas), which includes both the  
3 Laclede Gas Division and the MGE Division) *pro forma* consolidated capital structure as at  
4 July 31, 2013.

5 Mr. Gorman, filing on behalf of Public Counsel, recommended an overall rate of  
6 return of 6.60 percent based on a recommended 9.35 percent return on equity, embedded cost  
7 of debt of 4.35 percent and Laclede Gas Company's (regulated subsidiary of Laclede Group,  
8 which includes the Laclede Gas Division and MGE Division) capital structure comprising  
9 45.02 percent equity and 54.98 percent long-term debt as at September 30, 2013.

10 Staff recommended an overall cost of capital range of 5.65 percent to 6.18 percent  
11 based on an estimated cost of equity range of 7.90 percent to 8.90 percent, embedded debt  
12 cost of 3.12 percent (cost of debt to acquire the MGE assets) and Laclede Group's  
13 consolidated capital structure comprising 53.08 percent equity and 46.92 percent long-term  
14 debt as of September 30, 2013.

15 Q. What major issues will you address in your rebuttal testimony?

16 A. Staff's major difference with both the Company's and OPC's position on rate  
17 of return pertains to the appropriate cost of debt to use for purposes of the appropriate  
18 allowed rate of return to apply to MGE's rate base. Mr. Gorman simply adopted the  
19 Company's embedded cost of debt recommendation, which as Staff will address in its  
20 rebuttal testimony, includes debt that was included in Laclede Gas' last rate case. Until  
21 MGE's and Laclede Gas' revenue requirements can be determined simultaneously, MGE's  
22 debt costs should be based on only the incremental amount of debt used to fund the  
23 MGE acquisition.

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1 Staff will also discuss the difference in the capital structure recommendations. Staff's  
2 direct position is somewhat aligned with MGE in that Staff recommends the use of Laclede  
3 Group's consolidated capital structure without an adjustment for goodwill relating to the  
4 MGE acquisition. Mr. Gorman proposes using Laclede Gas' capital structure after the equity  
5 amount is reduced by the amount of goodwill relating to the MGE acquisition.

6 Staff also believes Ms. Ahern's cost of equity estimates are beyond the zone of  
7 reasonableness when compared to Laclede's own financial advisors that it hired to evaluate a  
8 fair price to pay for MGE's assets. Staff's cost of equity estimate actually falls in between  
9 the two financial advisors' cost of equity estimates. Although Staff continues to believe  
10 there is sufficient expert evidence to support the reasonableness of its cost of equity  
11 estimates, Staff also recognizes the Commission's preference to consider allowed ROEs in  
12 other states when deliberating on a fair and reasonable ROE for Missouri's utilities. As a  
13 result, Staff's Cost of Service Report provided this information to the Commission to assist it  
14 in assessing a fair and reasonable ROE for MGE as it compares to the Commission's recently  
15 awarded ROEs for Ameren Missouri (Ameren) and Kansas City Power & Light Company  
16 (KCPL) and KCP&L Greater Missouri Operations (GMO).

17 **MS. AHERN'S TESTIMONY**

18 Q. Please highlight and explain the major areas of Staff's recommendation that  
19 differ from Ms. Ahern's recommendation?

20 A. Capital structure, embedded cost of debt and cost of equity are the differences  
21 between MGE's witness and Staff.

22 **CAPITOL STRUCTURE**

23 Q. Would you please explain the capital structure issue?

1           A.     Both Staff and Ms. Ahern recommended Laclede Group’s consolidated capital  
2 structure. However, due to the timing of her testimony, Ms. Ahern’s capital structure of  
3 53.60 percent equity and 46.40 percent long-term debt was based on data as of July 31, 2013.  
4 Staff’s capital structure recommendation of 53.08 percent equity and 46.92 percent long-term  
5 debt is more updated due to the fact that Staff had access to updated information – as of  
6 September 30, 2013.

7 **EMBEDDED COST OF DEBT**

8           Q.     Would you please explain the embedded cost of debt issue?

9           A.     Ms. Ahern’s 4.35 percent consolidated embedded cost debt recommendation  
10 is a weighted average cost that includes debt costs that were considered for purposes of  
11 determining customer rates in Laclede Gas’s most recent rate case (Case GR-2013-0171).

12           The revenue requirements developed by Staff and Laclede Gas for Laclede Gas’s last  
13 rate case were based on Laclede Gas’ embedded cost of debt of 5.60 percent, not the current  
14 4.35 percent cost of debt simply because the completion and approval of the Laclede Gas rate  
15 case preceded the completion of the MGE acquisition transaction. Consequently, the  
16 recently approved rates contemplated the debt that was already on Laclede Gas’ books prior  
17 to the issuance of the debt to acquire MGE. Since Laclede Gas’ revenue requirement was  
18 determined based on pre-acquisition of MGE, both Laclede Gas and MGE rates have yet to  
19 be determined based on a weighted cost of debt that captures the post-MGE acquisition debt.

20           If the Commission allows MGE’s rates to be set based on debt that was already  
21 considered in Laclede Gas’ last rate case, this would result in MGE collecting more than is  
22 needed to service the debt issued for both systems. It would only be appropriate to apply the

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1 consolidated cost of debt to both systems at a time when rates for both divisions can be set  
2 simultaneously, i.e., in the next rate case.

3 Q. Would you please explain how the timing of these two events would affect the  
4 Laclede Gas Division and MGE Division customers if a 4.35 percent embedded cost of debt  
5 is approved in this case?

6 A. Unfortunately, Laclede Gas Division's customer rates were already set based  
7 on an approach that did not capture the lower MGE acquisition debt cost. While the parties  
8 to Laclede Gas' last rate case agreed to base the rate of return charged for the Infrastructure  
9 System Replacement Surcharge ("ISRS") on an embedded debt cost that included the  
10 post-MGE acquisition low debt-cost, Laclede Gas Division's general base rates were not set  
11 to consider the resulting lower debt-cost savings. Such savings cannot be directly considered  
12 for the Laclede Gas Division until the next rate case. The agreed upon post-MGE acquisition  
13 rate of return for Laclede Gas' ISRS is 7.1855 percent (see Laclede Gas Company's response  
14 to comments of Staff and OPC to late-filed exhibit 1 and request for approval of late-filed  
15 exhibit filed on January 10, 2014 in Case No. GR-2013-0171).

16 Consequently, if a 4.35 percent embedded cost of debt is approved in this case, MGE  
17 customer rates will be set based on a combination of Laclede Gas Division's debt costs  
18 (already captured in Laclede Gas Division's last rate case) and the low-cost acquisition debt  
19 (not captured in Laclede Gas Division's last rate case). Because Laclede Gas' rates already  
20 contemplate the debt that was on Laclede's books before the acquisition, the only debt costs  
21 that need to be serviced by the MGE Division are those issued to complete the MGE  
22 acquisition. When both divisions file a rate case simultaneously, it will then be appropriate

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1 and fair to apply the consolidated embedded cost of debt to both divisions because this will  
2 allow for recovery of aggregate revenues sufficient to service the consolidated debt.

3 Q. When did Laclede Gas issue long-term debt?

4 A. Laclede Gas issued long-term debt on August 13, 2013 to finance the  
5 MGE acquisition by Laclede Gas from Southern Union Company (Southern Union) on  
6 September 1, 2013. The embedded cost of this long-term debt is 3.12 percent (see Schedule  
7 ZM-8 attached to Staff's Cost of Service Report appendices).

8 Q. When will both Laclede Gas and MGE rates be considered at the same time?

9 A. The Stipulation in the MGE acquisition case, Case No. GM-2013-0254, stated  
10 that for the first general rate case filing made by Laclede Gas subsequent to October 1, 2015,  
11 Laclede Gas shall include both its Laclede and MGE Division service territories.

12 Q. What approach does Staff believe would be fair and reasonable to customers  
13 of both divisions and the Company?

14 A. An approach that will seek to accomplish the following:

15 (1) acknowledge the fact that the Laclede Gas Division rates were not based on an  
16 approach that allowed specific consideration for the sharing of the benefits of the low-cost  
17 acquisition debt cost;

18 (2) allow Laclede Gas to recover the actual cost of the MGE acquisition debt until  
19 the rates for the Laclede Gas Division and MGE Division are considered simultaneously; and

20 (3) ensure that the benefits of the low-cost acquisition debt are fully  
21 shared - *through both Laclede Gas Division and MGE Division customer rates* - by applying  
22 a consolidated embedded cost of debt at the time when the two divisions file their next rate  
23 case(s). At that point, applying the embedded cost of debt for the two divisions to the



1 consolidated rate bases would not cause an over recovery of rates needed to service the  
2 debt, but at the same time allow both divisions to share the benefit of the lower-cost  
3 acquisition debt.

4 **COST OF EQUITY**

5 Q. Would you please explain the cost of equity issue?

6 A. Ms. Ahern's 10.25 percent cost of equity is an average of four (4) principal  
7 methods: (1) - Discounted Cash Flow Model (DCF), (2)- Risk Premium Model (RPM),  
8 (3)- Capital Asset Pricing Model (CAPM) and (4)- Market Models Applied to Comparable  
9 Risk, Non-Price Regulated Companies.

10 Ms. Ahern seems to imply that her use of several methods to estimate the cost of  
11 equity makes her results more accurate and reliable. Staff has evidence from Laclede  
12 Group's own financial advisors' that not only refute the reliability of Ms. Ahern's cost of  
13 equity estimate of 10.25 percent for a regulated local gas distribution company, but even  
14 indicate that Mr. Gorman's cost of equity estimates is at the high end of the financial  
15 advisors' estimates. Such estimates do not reflect the reality of the capital markets, in which  
16 regulated utility stocks are considered to be a close alternative to a bond investment.  
17 Considering the continued low cost of debt, it is simply irrational to conclude the cost of  
18 equity for a regulated natural gas distribution company that has very little volatility in its  
19 earnings is anywhere near 10.25 percent.

20 Q. \*\* \_\_\_\_\_  
21 \_\_\_\_\_ \*\*

22 A. \*\* \_\_\_\_\_  
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1 Q. \*\* \_\_\_\_\_

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3 A. \*\* \_\_\_\_\_ \*\*

4 Q. \*\* \_\_\_\_\_

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6 A. \*\* \_\_\_ \*\*

7 Q. Should the Commission allow a 9.7 percent ROE used by the company  
8 witness (Glenn W. Buck/ Mr. Buck) to compute a rate of return consistent with the  
9 conditions of the MGE acquisition case (GM-2013-0254)?

10 A. No. Mr. Buck indicates on page 5 of his direct testimony that he used a  
11 9.7 percent for simplicity's sake and because it was recently used for Laclede Gas Division's  
12 ISRS rates.

13 Because the 9.7 percent ROE applied to Laclede Group's equity ratio still resulted in  
14 a pre-tax return for MGE that was higher than it was authorized in its last rate case under  
15 Southern Union's ownership, Mr. Buck actually had to adjust the actual capital structure until  
16 its pre-tax return on rate base request was equivalent to that authorized in MGE's most recent  
17 rate case (GR-2009-0355). Such an approach is consistent with the language in the  
18 Stipulation in the MGE acquisition case, agreed to by all parties and approved by the  
19 Commission in Case No. GM-2013-0254.

20 Most importantly, the language to cap the return on rate base was only included in the  
21 acquisition stipulation agreement to ensure there was a ceiling on the potential allowed ROR  
22 in this rate case. Although Staff believes there is sufficient evidence to conclude the cost of  
23 equity is at least in the range of approximately 8 to 9 percent, the Commission has sufficient

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1 information from both the New England Gas allowed ROE and the recent spread between the  
2 allowed ROEs for gas and electric rate cases to at least authorize an ROE **no higher than**  
3 **9.50 percent.**

4 Q. If Mr. Buck had adjusted the ROE rather than the common equity ratio in  
5 order to comply with the stipulation and agreement in Case No. GM-2013-0254, what ROE  
6 would he have had to recommend?

7 A. 9.43 percent.

8 Q. Why do all of Ms. Ahern's costs of equity estimates, other than the DCF  
9 estimates, cause what you believe to be an unreasonably high overall cost of equity  
10 recommendation?

11 A. The other three cost of equity estimates, furnished on Ms. Ahern's Schedule  
12 PMA-4, produce cost of equity estimates that are unreasonably high and inconsistent with  
13 those that were suggested by the Company's financial advisors for purposes of acquiring the  
14 MGE assets. Ms. Ahern's estimates are also inconsistent with the average of the allowed  
15 ROEs as reported by the Regulatory Research Associates (RRA).

16 Q. Would you please state the specific input or driver that inflates Ms. Ahern's  
17 other three cost of equity estimates?

18 A. The market equity risk premium.

19 Q. Would you please explain Staff's specific issues with Ms. Ahern's equity risk  
20 premium calculation methodology?

21 A. Ms. Ahern relied on the Predictive Risk Premium Model (PRPM) to compute  
22 the equity risk premium input for the other three (3) cost of equity estimates. First, Staff  
23 would like to note that this is the first Missouri rate case in which the PRPM has been

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1 introduced. To Staff's knowledge, it is not commonly used in the practice of cost of equity  
2 estimation in utility ratemaking in other jurisdictions. Staff also is not aware of any equity  
3 analysts that use the PRPM in the analysis of utility stocks for purposes of advising investors.  
4 Therefore, considering the fact that the PRPM, as used by Ms. Ahern, produces market risk  
5 premium estimates are much higher than those used by the investment experts Laclede hired  
6 to estimate a fair price to pay for the MGE assets. Simply put, Staff is not aware of any  
7 examples in which the PRPM, as used by Ms. Ahern, is used in practice. From a regulatory  
8 perspective, most commissions, if not all, use cost of equity models more commonly used in  
9 the investment practice, such as the DCF and CAPM, because they are widely accepted and  
10 actually used in the practice of equity valuation.

11 Q. What other concerns does Staff have with Ms. Ahern's PRPM?

12 A. Staff does not believe it is acceptable to recommend to the Commission cost  
13 of equity estimates based on a model that can't be verified. Ms. Ahern's direct testimony,  
14 page 25, 15-47, clearly states the following:

15 Using a generalized form of ARCH, known as GARCH, each gas  
16 distribution company's projected equity risk premium was  
17 determined using Eviews® statistical software.  
18

19 Given the limited ability to review and verify the soundness of the equity risk  
20 premiums based on the GARCH coefficient displayed on Ms. Ahern's Direct Testimony  
21 Schedule PMA-6 p2, Staff send the following data request to the Company:

22 Please provide Staff with the means to have remote access to  
23 the statistical software used to develop the GARCH coefficient  
24 and the market's projected equity risk premium. **(Data  
25 Request 0168)**

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1 The Company provided the following response:

2 We have no way to allow Staff remote access to the Eviews.  
3 However, Staff should be able to do the PRPM analysis using  
4 any statistical software such as Eviews or SASS.

5 Due to the fact that Ms. Ahern cannot produce work papers to support the  
6 accurateness and reliability of the PRPM, any cost of equity estimates produced using this  
7 method should be summarily dismissed.

8 Q. Regardless of the lack of work papers, are the equity risk premiums produced  
9 by Ms. Ahern's application of the GARCH coefficient consistent with those used in practice  
10 for purposes of determining the value of local gas distribution companies?

11 A. No.

12 Q. What does Staff believe is the primary responsibility of a cost of equity  
13 expert witness?

14 A. Staff believes the primary responsibility of any cost of equity expert witness is  
15 to try to emulate the decision-making process of investors and incorporate the information  
16 gathered (cost of equity inputs) into methods that are widely used in practice when  
17 determining a fair price to pay for utility stocks. The methods and the application of such  
18 methods should be consistent with those used in practice by investors, investment analysts  
19 and valuation experts.

20 Q. What was the major implication of using an equity risk premium input based  
21 on the PRPM?

22 A. It resulted in inflated cost of equity estimates.

23 Q. In reference to the cost of equity estimates on schedule PMA-1, page 2 of 2,  
24 of Ms. Ahern's direct testimony, what would be Ms. Ahern's ultimate cost of equity estimate

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1 if you exclude the following: (1) a variation of the risk premium model that exclusively  
2 relied on the PRPM and (2) a market equity risk premium input that was computed based  
3 on the PRPM and applied to several costs of equity computations that resulted in the  
4 10.25 percent cost of equity recommendation?

5 A. The results would be as follows:

6 1. Discounted Cash Flow (DCF) result will remain 8.66 percent,

7 2. Risk Premium Model (RPM) result (excluding the PRPM results) would  
8 be 10.15 percent,

9 3. Capital Asset Pricing Model (CAPM) result (excluding the PRPM equity risk  
10 premium) would be 9.28 percent,

11 4. Market Models Applied to Comparable Risk, non-regulated companies (excluding  
12 the PRPM equity risk premium) would be 10.04 percent.

13 After taking an average of all of the above results, **Ms. Ahern's cost of equity**  
14 **estimate would be 9.53 percent.**

15 Q. Is a 9.53 percent return on common equity reasonable?

16 A. While a 9.53 percent return on common equity recommendation is  
17 approximately 63 basis points over the higher end (8.90 percent) of Staff's recommendation,  
18 Staff notes that such a return on equity is in line with the approximately 9.68 percent equally  
19 weighted average of the gas utilities' allowed ROE for the 2013 calendar year. This data is  
20 reported by the Regulatory Research Associates (RRA) and was presented in Staff's Cost of  
21 Service Report on page 32, lines 14-18.

1 **MR. GORMAN'S TESTIMONY**

2 Q. Would you please explain the differences that Staff has with Mr. Gorman that  
3 are separate from what has already been discussed above?

4 A. Yes. Staff understands that Mr. Gorman did not recommend a consolidated  
5 capital structure as Staff did. Instead, he recommended Laclede Gas' capital structure and  
6 adjusted the equity component for goodwill. The goodwill adjustment resulted in a  
7 recommended capital structure comprising 45.02 percent equity and 54.98 percent  
8 long-term debt.

9 Q. What is Staff's response to Mr. Gorman's logic for his adjustment?

10 A. Staff understands and acknowledges the reasoning behind Mr. Gorman's  
11 capital structure recommendation. Staff believes Mr. Gorman's approach is acceptable based  
12 on its own merits.

13 Q. Does this conclude your rebuttal testimony?

14 A. Yes.



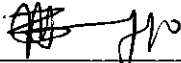
**BEFORE THE PUBLIC SERVICE COMMISSION**  
**OF THE STATE OF MISSOURI**

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

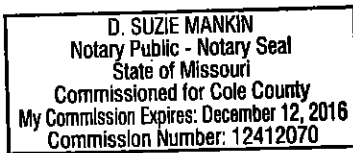
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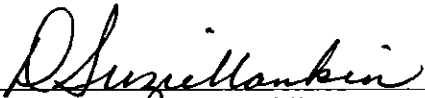
STATE OF MISSOURI     )  
                                  )     ss.  
COUNTY OF COLE     )

Zephania Marevangepo, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, consisting of 14 pages to be presented in the above case; that the answers in the foregoing Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

  
\_\_\_\_\_  
Zephania Marevangepo

Subscribed and sworn to before me this 4<sup>th</sup> day of March, 2014.



  
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Notary Public