

Exhibit No.:
Issues: *Rate of Return, Capital Structure*
Witness: *David Murray*
Sponsoring Party: *MoPSC Staff*
Type of Exhibit: *True-Up Direct Testimony*
Case No.: *GR-2009-0355*
Date Testimony Prepared: *November 24, 2009*

MISSOURI PUBLIC SERVICE COMMISSION
UTILITY SERVICES DIVISION

TRUE-UP DIRECT TESTIMONY
OF
DAVID MURRAY

MISSOURI GAS ENERGY,
a Division of Southern Union Company

CASE NO. GR-2009-0355

Jefferson City, Missouri
November 2009

TRUE-UP DIRECT TESTIMONY

OF

DAVID MURRAY

MISSOURI GAS ENERGY,
a Division of Southern Union Company

CASE NO. GR-2009-0355

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1 **TRUE-UP DIRECT TESTIMONY**
2 **OF**
3 **DAVID MURRAY**
4 **MISSOURI GAS ENERGY,**
5 **a Division of Southern Union Company**
6 **CASE NO. GR-2009-0355**

7 Q. Please state your name.

8 A. My name is David Murray.

9 Q. Are you the same David Murray who earlier filed rebuttal and surrebuttal
10 testimony in this proceeding on behalf of the Staff of the Missouri Public Service
11 Commission (Staff) and, in addition, was responsible for the section of the Staff's Cost of
12 Service Report (COS Report) filed August 21, 2009 concerning cost of capital issues?

13 A. Yes, I am.

14 Q. In the COS Report, did you recommend a fair and reasonable rate of return
15 (ROR) for the Missouri jurisdictional natural gas utility rate base for Missouri Gas Energy, a
16 Division of Southern Union Company (MGE)?

17 A. Yes, I did.

18 Q. What is the purpose of your true-up direct testimony?

19 A. The purpose of my true-up testimony is to update my recommended capital
20 structure and embedded costs of long-term debt and short-term debt for MGE based on the
21 most recent financial information available for Staff's proxy group through Securities and
22 Exchange Commission ("SEC") Form 10-Q and 10-K filings. I will provide an updated
23 overall ROR recommendation based on this recent financial information.

1 Q. Considering that your recommended capital structure and resulting ROR in this
2 case is based on that of an average of your proxy group, why is it necessary to true-up your
3 ROR recommendation?

4 A. Because capital costs and capital structures continually change due to changes
5 in the capital markets. It is especially important to true-up ROR in this case due to the impact
6 that the low cost of short-term debt is having on the appropriate ROR in this case. It is
7 important to determine if the proxy companies are still incurring low costs of short-term debt.

8 Q. Did all of your comparable companies have financial data available through
9 the true-up period of September 30, 2009?

10 A. No. Four of the seven comparable companies had financial data available
11 through the true-up date; one of the seven companies had financial data through July 31,
12 2009, due to its use of a unique fiscal quarter; and the remaining two companies had not
13 reported data through September 30, 2009 because this period coincides with their fiscal
14 years, which is not reported as quickly as quarterly filings.

15 Q. In any event, to your knowledge did you use the most recent financial
16 information available for your proxy group in estimating an appropriate ROR
17 recommendation for true-up?

18 A. Yes. For purposes of my true-up ROR recommendation in this case, I used
19 more recent data if it was available for my proxy group. For the two companies in my proxy
20 group that did not have more recent information available, I still included the data that was
21 available for purposes of my original ROR recommendation. Therefore, my true-up
22 recommendation is based on a simple average of financial information for the entire proxy
23 group.

1 Q. What is your true-up ROR recommendation?

2 A. I recommend a ROR of 7.34 percent, which is the mid-point of my
3 recommended ROR range of 7.22 percent to 7.47 percent. This compares to the revised
4 recommended ROR I provided in rebuttal testimony of 7.33 percent, which was based on the
5 mid-point of my recommended ROR range of 7.20 percent to 7.46 percent.

6 **CAPITAL STRUCTURE**

7 Q. What is your updated recommended ratemaking capital structure for MGE?

8 A. My updated recommended capital structure is as follows: 50.49 percent
9 common stock equity, 42.07 percent long-term debt and 7.44 percent short-term debt
10 (see Schedule 1).

11 Q. Is this capital structure reasonable for purposes of estimating MGE's ROR in
12 this proceeding?

13 A. Yes. This capital structure contains slightly less equity than the capital
14 structure Staff recommended in its direct filing (the COS Report). While the overall amount
15 of debt has only changed slightly, there has been a more significant change in the components
16 of debt. The long-term debt balance increased by over 150 basis points compared to the
17 Staff's capital structure recommendation in its direct filing; whereas the amount of short-term
18 debt decreased by slightly more than 100 basis points.

19 **EMBEDDED COST OF LONG-TERM DEBT**

20 Q. What is the true-up embedded cost of long-term debt for the proxy group?

21 A. The embedded cost of long-term debt for the proxy group was 5.89 percent
22 compared to the embedded cost of long-term debt of 5.92 percent for the proxy group in
23 Staff's original recommended ROR.

1 **COST OF SHORT-TERM DEBT**

2 Q. What was the average cost of short-term debt for the two comparable
3 companies (New Jersey Resources Corporation and Piedmont Natural Gas Company, Inc.)
4 you used in your direct case and you are using in the true-up to estimate a reasonable proxy
5 cost of short-term debt for the proxy group?

6 A. The true-up weighted average cost of short-term debt is now 0.94 percent,
7 compared to the weighted average cost of short-term debt of 1.00 percent Staff provided in its
8 rebuttal testimony.

9 Q. Is this based on an updated cost of short-term debt for both companies?

10 A. No. Updated information (through July 31, 2009) was only available for
11 Piedmont Natural Gas Company, Inc. ("Piedmont"). New Jersey Resources Corporation
12 ("New Jersey") had yet to file its SEC Form 10-K Filing for the period ending September 30,
13 2009, when Staff prepared this true-up direct testimony.

14 Q. How much did Piedmont's weighted average cost of short-term debt decrease
15 from its previous SEC Form 10-Q Filing?

16 A. It declined by 10 basis points from 1.05 percent to 0.95 percent.

17 Q. Although you based your cost of short-term debt recommendation based on the
18 two "A" rated companies in the Staff's proxy group, did you discover any updated
19 information from your other comparable companies that supports the reasonableness of a low
20 cost of short-term debt estimate?

21 A. Yes. I discovered that AGL Resources, Inc. (AGL) had a weighted average
22 cost of short-term debt of 0.8 percent for the nine months ended September 30, 2009. Staff
23 has not included this short-term debt cost in its recommended true-up cost of short-term debt
24 because Staff's methodology in its direct case for estimating a proxy cost of short-term debt

1 was predicated on choosing the companies in its proxy group that had the same credit rating
2 as the average for the proxy group. If Staff had included AGL's cost of short-term debt in its
3 true-up ROR computation, this would have resulted in a lower cost of short-term debt
4 recommendation.

5 Q. Have short-term interest rates in general continued to remain fairly low?

6 A. Yes. Commercial paper rates have continued to decline since the time of the
7 Staff's earlier testimony filings. In its rebuttal testimony, Staff reported that 90-day "AA"
8 commercial paper rates had averaged 0.31 percent for the first 8 months of 2009. This
9 average has since declined to 0.28 for the first 10 months of 2009.¹ Three-month LIBOR
10 (London interbank offered rate) rates have also continued to remain low. Staff reported in its
11 rebuttal testimony that 3-month LIBOR rates averaged 0.98 percent for the first eight months
12 of 2009. This average has also since declined to 0.84 percent for the first 10 months of 2009.²

13 Q. If your proxy group had an average S&P long-term credit rating of "A", why
14 did you provide historical interest rates for "AA" rated commercial paper?

15 A. Because this is the only data Staff could locate on the Federal Reserve's
16 website.

17 Q. Does this mean that commercial paper is only available to "AA" rated
18 companies?

19 A. No. Atmos Energy Corporation has a long-term credit rating of "BBB+" and
20 according to its most recent SEC Form 10-K filing for the 12-months ended September 30,
21 2009, it had approximately \$72.6 million outstanding under its commercial paper program.
22 Because commercial paper typically has maturities of less than 9 months, this demonstrates

¹ <http://research.stlouisfed.org/fred2/series/CPN3M?cid=120>

² Copyright 2009 MoneyCafe.com

1 current access to commercial paper markets for companies with at least “BBB+” credit
2 ratings.

3 Q. Does Staff have any reason to believe that the cost of short-term debt will
4 increase any time soon?

5 A. No. As Staff stated in its rebuttal testimony in this case, the last period of low
6 short-term interest rates in the United States continued for a 3-year period
7 (2002 through 2004).

8 **SUMMARY AND CONCLUSIONS**

9 Q. Do you have any closing remarks about your true-up testimony?

10 A. Yes. While I have proposed the use of a hypothetical capital structure and
11 capital costs in this case, ROR should still be included as a true-up item in any ordered true-
12 up audit in this proceeding. ROR is as much of a cost to a utility as any other more tangible
13 costs, such as payroll or maintenance expenses. It is especially important to use the true-up
14 process in this case to further observe any changes that may have occurred in the short-term
15 capital markets. As Staff discovered in reviewing more recent financial information in its
16 true-up analysis, short-term capital costs have actually declined further since Staff last
17 provided testimony on this matter. Because this results in a lower cost of service for utility
18 companies, it should be reflected in the rates charged to ratepayers. However, it is important
19 to note that the lower amount of short-term debt in the true-up capital structure has resulted in
20 Staff recommending a slightly higher ROR for purposes of the true-up in this case than in its
21 earlier filings.

22 Q. Does this conclude your prepared true-up direct testimony?

23 A. Yes, it does.

OF THE STATE OF MISSOURI

Case No. GR-2009-0355

AFFIDAVIT OF DAVID MURRAY

STATE OF MISSOURI)

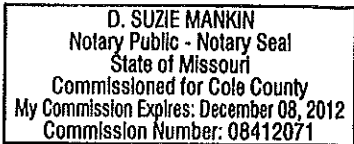
SS.

COUNTY OF COLE)

David Murray, of lawful age, on his oath states: that he has participated in the preparation of the foregoing True-Up Direct Testimony in question and answer form, consisting of 6 pages to be presented in the above case; that the answers in the foregoing True-Up Direct 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.

David Murray

Subscribed and sworn to before me this 23rd day of November, 2009.



Notary Public

**MISSOURI GAS ENERGY
CASE NO. GR-2009-0355**

Proxy Group Capital Structures for Most Recently Available 2009 Fiscal Quarter Balance Sheets

(In Thousands of Dollars)

Capital Components	AGL ³	Atmos ³	New Jersey Resources ⁴	NW Natural Gas ³	Piedmont ⁵	South Jersey ³	WGL ⁴
Common Equity	\$1,747,000	\$2,176,761	\$721,239	\$640,874	\$947,906	\$528,528	\$1,131,378
Long-Term Debt ¹	\$1,975,000	\$2,169,531	\$463,666	\$637,000	\$822,815	\$357,796	\$706,681
Short-Term Debt ²	\$176,250	\$3,148	\$96,311	\$92,085	\$247,492	\$151,377	\$125,637
Total	<u>\$3,898,250</u>	<u>\$4,349,440</u>	<u>\$1,281,216</u>	<u>\$1,369,959</u>	<u>\$2,018,213</u>	<u>\$1,037,701</u>	<u>\$1,963,696</u>

(In Percentages)

Capital Structure	AGL	Atmos	New Jersey Resources	NW Natural Gas	Piedmont	South Jersey	WGL	Simple Average
Common Equity	44.81%	50.05%	56.29%	46.78%	46.97%	50.93%	57.61%	50.49%
Long-Term Debt ¹	50.66%	49.88%	36.19%	46.50%	40.77%	34.48%	35.99%	42.07%
Short-Term Debt ²	4.52%	0.07%	7.52%	6.72%	12.26%	14.59%	6.40%	7.44%
Total	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>

Notes:

1. The amount of long-term debt includes current maturities.
2. The amount of short-term debt is based on a 4-quarter average and was reduced for each comparable company's CWIP balance.
3. Based on September 30, 2009 financial statements.
4. Based on June 30, 2009 financial statements.
5. Based on July 31, 2009 financial statements.

**MISSOURI GAS ENERGY
CASE NO. GR-2009-0355**

**Cost of Long-Term Debt
for the Seven Comparable Gas Utilities
as of Most Recent Fiscal Quarter**

<u>Company Name</u>	<u>Amount Outstanding</u>	<u>Interest Expense</u>	<u>Stated Cost of Long-term Debt</u>
AGL Resources, Inc.	\$ 1,971,000	\$ 108,932	5.53%
Atmos Energy Corp.	\$ 2,172,303	\$ 141,051	6.49%
New Jersey Resources Corp.	\$ 399,845	\$ 17,127	4.28%
Northwest Natural Gas Co.	\$ 637,000	\$ 39,421	6.19%
Piedmont Natural Gas Co.	\$ 823,471	\$ 55,510	6.74%
South Jersey Industries, Inc.	\$ 332,896	\$ 17,318	5.20%
WGL Holdings, Inc.	\$ 689,000	\$ 41,838	6.07%
Total	\$ 7,025,515	\$ 421,197	5.79%

Stated Cost of Long-Term Debt 5.79%

Plus Issuance Costs 0.10%¹

Total Embedded Cost of Debt **5.89%**

Notes: ¹Based on issuance costs from last Laclede rate case, Case No. GR-2007-0208

**MISSOURI GAS ENERGY
CASE NO. GR-2009-0355**

**Calculation of the Composite Cost Rate of Long-Term Debt Outstanding
for AGL Resources Inc. as of September 30, 2009**

	<u>Amount Outstanding</u> (\$ 000s)	<u>Effective Cost Rate</u>	<u>Annualized Cost</u> (\$ 000s)	<u>Composite Interest Rate</u>
Medium-term Notes				
Issue June 1992 Maturity at June 2012	\$ 5,000	8.40%	\$ 420	
Issue June 1992 Maturity at June 2012	5,000	8.30%	415	
Issue June 1992 Maturity at July 2012	5,000	8.30%	415	
Issue July 1997 Maturity July 2017	22,000	7.20%	1,584	
Issue February 1991 Maturity Feb. 2021	30,000	9.10%	2,730	
Issue April 1992 Maturity April 2022	5,000	8.55%	428	
Issue April 1992 Maturity April 2022	25,000	8.70%	2,175	
Issue April 1992 Maturity April 2022	6,000	8.55%	513	
Issue May 1992 Maturity May 2022	10,000	8.55%	855	
Issue Nov. 1996 Maturity Nov. 2026	30,000	6.55%	1,965	
Issue July 1997 Maturity July 2027	53,000	7.30%	3,869	
Senior Notes				
Issue Feb. 2001 Maturity Jan. 2011	300,000	7.13%	21,375	
Issue July 2003 Maturity April 2013	225,000	4.45%	10,013	
Issue Dec. 2004 Maturity Jan 2015	200,000	4.95%	9,900	
Issue June 2006 Maturity July 2016	175,000	6.38%	11,156	
Issue Dec 2007 Maturity July 2016	125,000	6.38%	7,969	
Issue Sep 2004 Maturity Oct 2034	250,000	6.00%	15,000	
Issue Aug 2009 Maturity Sep 2019	300,000	5.25%	15,750	
Gas facility revenue bonds ¹	<u>200,000</u>	1.2%	<u>2,400</u>	
Total Long-Term Debt	<u><u>\$ 1,971,000</u></u>		<u><u>\$ 108,932</u></u>	<u><u>5.53%</u></u>

Notes: ¹Based on weighted average interest rate provided in Note 6. to AGL's Financial Statements in its September 30, 2009 SEC Form 10-Q Filing.

Sources of Information: 2008 Annual Form 10-K and 2009 Form 10-Q for Quarterly Period Ended September 30, 2009

SCHEDULE 2-2

**MISSOURI GAS ENERGY
CASE NO. GR-2009-0355**

**Calculation of the Composite Cost Rate of Long-Term Debt Outstanding
for Atmos Energy Corporation
as of September 30, 2009**

Series	Amount Outstanding (\$ 000s)	Effective Cost Rate	Annualized Cost (\$ 000s)	Composite Interest Rate
Long-Term Debt				
Unsecured 7.375% Senior Notes, due 2011	350,000	7.375%	25,814	
Unsecured 10% Unsecured Notes, due 2011	2,303	10.000%	230	
Unsecured 5.125% Senior Notes, due 2013	250,000	5.125%	12,813	
Unsecured 4.95% Senior Notes, due 2014	500,000	4.950%	24,750	
Unsecured 6.35% Senior Notes, due 2017	250,000	6.350%	15,875	
Unsecured 8.50% Senior Notes, due 2019	450,000	8.500%	38,250	
Unsecured 5.95% Senior Notes, due 2034	200,000	5.950%	11,900	
Medium Term Notes				
Series A, 1995-2, 6.27%, due 2010	10,000	6.270%	627	
Series A, 1995-1, 6.67%, due 2025	10,000	6.670%	667	
Unsecured 6.75% Debentures, due 2028	150,000	6.750%	10,125	
Total Long-Term Debt	\$ 2,172,303		\$ 141,051	6.49%

Source of Information: 2009 Annual Form 10-K.

**MISSOURI GAS ENERGY
CASE NO. GR-2009-0355**

**Calculation of the Composite Cost Rate of Long-Term Debt Outstanding
for New Jersey Resources Corp.
as of June 30, 2009**

<u>Series</u>	<u>Amount Outstanding</u> (\$ 000s)	<u>Effective Cost Rate (1)</u>	<u>Annualized Cost</u> (\$ 000s)	<u>Composite Interest Rate</u>
New Jersey Natural Gas				
First Mortgage Bonds				
Variable Series AA, due 2030	25,000	0.600% ¹	150	
Variable Series BB, due 2030	16,000	0.600% ¹	96	
6.88% Series CC, due 2010	20,000	6.880%	1,376	
Variable Series DD, due 2027	13,500	0.600% ¹	81	
Variable Series EE, due 2028	9,545	0.600% ¹	57	
Variable Series FF, due 2028	15,000	0.600% ¹	90	
Variable Series GG, due 2033	18,000	0.600% ¹	108	
5% Series HH, due 2038	12,000	5.000%	600	
4.5% Series II, due 2023	10,300	4.500%	464	
4.6% Series JJ, due 2024	10,500	4.600%	483	
4.9% Series KK, due 2040	15,000	4.900%	735	
5.6% Series LL, due 2018	125,000	5.600%	7,000	
4.77% Unsecured senior notes, due 2014	60,000	4.770%	2,862	
New Jersey Resources				
6.05% Unsecured senior notes, due 2017	50,000	6.050%	3,025	
Total Long-Term Debt	<u>\$ 399,845</u>		<u>\$ 17,127</u>	<u>4.28%</u>

Notes: ¹Based on weighted average interest rate provided in Note 7. to the Financial Statements in New Jersey Resources June 30, 2009 SEC Form 10-Q Filing.

Sources of Information: 2008 Annual Form 10-K and 2009 Form 10-Q for Quarterly Period Ended June 30, 2009

**MISSOURI GAS ENERGY
CASE NO. GR-2009-0355**

**Calculation of the Composite Cost Rate of Long-Term Debt Outstanding
for Northwest Natural Gas Company as of September 30, 2009**

<u>Series</u>	<u>Amount Outstanding</u> (\$ 000s)	<u>Effective Cost Rate</u>	<u>Annualized Cost</u> (\$ 000s)	<u>Composite Interest Rate</u>
<u>First Mortgage Bonds</u>				
4.110% Series B due 2010	10,000	4.110%	411	
7.450% Series B due 2010	25,000	7.450%	1,863	
6.665% Series B due 2011	10,000	6.665%	667	
7.130% Series B due 2012	40,000	7.130%	2,852	
8.260% Series B due 2014	10,000	8.260%	826	
3.95% Series B due 2014	50,000	3.950%	1,975	
4.700% Series B due 2015	40,000	4.700%	1,880	
5.150% Series B due 2016	25,000	5.150%	1,288	
7.000% Series B due 2017	40,000	7.000%	2,800	
6.600% Series B due 2018	22,000	6.600%	1,452	
8.310% Series B due 2019	10,000	8.310%	831	
7.630% Series B due 2019	20,000	7.630%	1,526	
5.370% Series B due 2020	75,000	5.370%	4,028	
9.050% Series A due 2021	10,000	9.050%	905	
5.620% Series B due 2023	40,000	5.620%	2,248	
7.720% Series B due 2025	20,000	7.720%	1,544	
6.520% Series B due 2025	10,000	6.520%	652	
7.050% Series B due 2026	20,000	7.050%	1,410	
7.000% Series B due 2027	20,000	7.000%	1,400	
6.650% Series B due 2027	20,000	6.650%	1,330	
6.650% Series B due 2028	10,000	6.650%	665	
7.740% Series B due 2030	20,000	7.740%	1,548	
7.850% Series B due 2030	10,000	7.850%	785	
5.820% Series B due 2032	30,000	5.820%	1,746	
5.660% Series B due 2033	40,000	5.660%	2,264	
5.250% Series B due 2035	10,000	5.250%	525	
Total Long-Term Debt	<u>\$ 637,000</u>		<u>\$ 39,421</u>	<u>6.19%</u>

Sources of Information: 2008 Annual Form 10-K and 2009 Form 10-Q for Quarterly Period Ended September 30, 2009

MISSOURI GAS ENERGY
CASE NO. GR-2009-0355

Calculation of the Composite Cost Rate of Long-Term Debt Outstanding
for Piedmont Natural Gas Co.
as of July 31, 2009

<u>Series</u>	<u>Amount Outstanding</u> (\$ 000s)	<u>Effective Cost Rate</u>	<u>Annualized Cost</u> (\$ 000s)	<u>Composite Interest Rate</u>
<u>Senior Notes</u>				
8.51%, due 2017	\$ 35,000	8.51%	\$ 2,979	
<u>Insured Quarterly Notes:</u>				
6.25%, due 2036	198,471	6.25%	12,404	
<u>Medium-Term Notes</u>				
7.35%, due 2009	30,000	7.35%	2,205	
7.80%, due 2010	60,000	7.80%	4,680	
6.55%, due 2011	60,000	6.55%	3,930	
5.00%, due 2013	100,000	5.00%	5,000	
6.87%, due 2023	45,000	6.87%	3,092	
8.45%, due 2024	40,000	8.45%	3,380	
7.40%, due 2025	55,000	7.40%	4,070	
7.50%, due 2026	40,000	7.50%	3,000	
7.95% due, 2029	60,000	7.95%	4,770	
6.00%, due 2033	100,000	6.00%	6,000	
Total Long-Term Debt	<u>\$ 823,471</u>		<u>\$ 55,510</u>	<u>6.74%</u>

Sources of Information: 2008 Annual Form 10-K and 2009 Form 10-Q for Quarterly Period Ended April 30, 2009

**MISSOURI GAS ENERGY
CASE NO. GR-2009-0355**

**Calculation of the Composite Cost Rate of Long-Term Debt Outstanding
for South Jersey Industries, Inc. as of September 30, 2009**

<u>Series</u>	<u>Amount Outstanding</u> (\$ 000s)	<u>Effective Cost Rate</u>	<u>Annualized Cost</u> (\$ 000s)	<u>Composite Interest Rate</u>
<u>First Mortgage Bonds</u>				
6.12% Series due 2010	10,000	6.12%	612	
6.74% Series due 2011	10,000	6.74%	674	
6.57% Series due 2011	15,000	6.57%	986	
4.46% Series due 2013	10,500	4.46%	468	
5.027% Series due 2013	14,500	5.027%	729	
4.52% Series due 2014	11,000	4.52%	497	
5.115% Series due 2014	10,000	5.115%	512	
5.387% Series due 2015	10,000	5.387%	539	
5.437% Series due 2016	10,000	5.437%	544	
6.50% Series due 2016	9,873	6.50%	642	
4.60% Series due 2016	17,000	4.60%	782	
4.657% Series due 2017	15,000	4.657%	699	
7.97% Series due 2018	10,000	7.97%	797	
7.125% Series due 2018	20,000	7.125%	1,425	
5.587% Series due 2019	10,000	5.587%	559	
7.7% Series due 2027	35,000	7.70%	2,695	
5.55% Series due 2033	32,000	5.55%	1,776	
6.213% Series due 2034	10,000	6.213%	621	
5.45% Series due 2035	10,000	5.45%	545	
<u>Marina Energy LLC</u>				
Series A 2001 Bonds at variables rates due 2031	20,000	1.68% ¹	336	
Series B 2001 Bonds at variables rates due 2021	25,000	2.57% ¹	643	
Series A 2006 Bonds at variables rates due 2036	16,400	0.98% ¹	161	
<u>AC Landfill Energy, LLC</u>				
Bank Term Loan, 6% due 2014	442	6.00%	27	
Mortgage Bond, 4.19% due 2019	1,181	4.19%	49	
Total Long-Term Debt	<u>\$ 332,896</u>		<u>\$ 17,318</u>	<u>5.20%</u>

Notes: ¹ As of December 31, 2008 due to lack of information available in September 30, 2009 SEC Form 10-Q Filing.

Sources of Information: 2008 Annual Form 10-K and 2009 Form 10-Q for Quarterly Period Ended September 30, 2009

**MISSOURI GAS ENERGY
CASE NO. GR-2009-0355**

**Calculation of the Composite Cost Rate of Long-Term Debt Outstanding
for WGL Holdings, Inc. as of June 30, 2009**

Series	Amount Outstanding (\$ 000s)	Effective Cost Rate	Annualized Cost (\$ 000s)	Composite Interest Rate
Washington Gas Light Company Unsecured Medium-Term Notes				
Due fiscal year 2009, 6.92%	50,000	6.92%	3,460	
Due fiscal year 2010, 3.61%	50,000	3.61%	1,805	
Due fiscal year 2010, 7.50% to 7.70%	24,000	7.60% ¹	1,824	
Due fiscal year 2011, 6.64%	30,000	6.64%	1,992	
Due fiscal year 2012, 5.90% to 6.05%	77,000	5.98% ²	4,605	
Due fiscal year 2014, 4.88% to 5.17%	67,000	5.03% ³	3,370	
Due fiscal year 2015, 4.83%	20,000	4.83%	966	
Due fiscal year 2016, 5.17%	25,000	5.17%	1,293	
Due fiscal year 2018, 7.46%	50,000	7.46%	3,730	
Due fiscal year 2023, 6.65%	20,000	6.65%	1,330	
Due fiscal year 2025, 5.44%	40,500	5.44%	2,203	
Due fiscal year 2027, 6.40% to 6.82%	125,000	6.61% ⁴	8,263	
Due fiscal year 2028, 6.57% to 6.85%	52,000	6.71% ⁵	3,489	
Due fiscal year 2030, 7.50%	8,500	7.50%	638	
Due fiscal year 2036, 5.70% to 5.78%	50,000	5.74% ⁶	2,870	
Total Long-Term Debt	\$ 689,000		\$ 41,838	6.07%

Notes: ¹ Midpoint of 7.50% and 7.70%, (7.60% = (7.50% + 7.70%) / 2).

² Midpoint of 5.90% and 6.05%, (5.98% = (5.90% + 6.05%) / 2).

³ Midpoint of 4.88% and 5.17%, (5.03% = (4.88% + 5.17%) / 2).

⁴ Midpoint of 6.40% and 6.82%, (6.61% = (6.40% + 6.82%) / 2).

⁵ Midpoint of 6.57% and 6.85%, (6.71% = (6.57% + 6.85%) / 2).

⁶ Midpoint of 5.70% and 5.78%, (5.74% = (5.70% + 5.78%) / 2).

Sources of Information: 2008 Annual Form 10-K and 2009 Form 10-Q for Quarterly Period Ended June 30, 2009.

**MISSOURI GAS ENERGY
CASE NO. GR-2009-0355**

**Weighted Cost of Capital
for Missouri Gas Energy**

Capital Component	Percentage of Capital	Embedded Cost	Weighted Cost of Capital Using Common Equity Return of:		
			9.25%	9.50%	9.75%
Common Stock Equity	50.49%	-----	4.67%	4.80%	4.92%
Long-Term Debt	42.07%	5.89%	2.48%	2.48%	2.48%
Short-Term Debt	7.44%	0.94%	0.07%	0.07%	0.07%
	<u>100.00%</u>		<u>7.22%</u>	<u>7.34%</u>	<u>7.47%</u>