

Exhibit No.: _____

Issues: Revenue Adjustments
Weather Normal
Weather Normalization
Customer Annualization
Revenue Reconciliation

Witness: Larry W. Loos

Sponsoring Party: Missouri Gas Energy

Case No.: GR-2009-0355

Date Testimony Prepared: June 19, 2009

MISSOURI PUBLIC SERVICE COMMISSION

FILED²

MISSOURI GAS ENERGY

NOV 09 2009

CASE NO. GR-2009-0355

**Missouri Public
Service Commission**

UPDATED TEST YEAR DIRECT TESTIMONY OF

LARRY W. LOOS

Jefferson City, Missouri

June 19, 2009

MGE Exhibit No. 25
Case No(s) GR-2009-0355
Date 10-26-09 Rptr XF

UPDATED TEST YEAR DIRECT TESTIMONY OF

LARRY W. LOOS

CASE NO. GR-2009-0355

June 19, 2009

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

2 A. My name is Larry W. Loos and my business address is 11401 Lamar, Overland Park, KS 66211.

3 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

4 A. I am a Director in the Enterprise Management Solutions Division of Black & Veatch Corporation.

5 **Q. ARE YOU THE SAME LARRY W. LOOS WHO FILED DIRECT TESTIMONY IN THIS**
6 **PROCEEDING?**

7 A. Yes, I am.

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

9 A. Missouri Gas Energy ("MGE" or the "Company") asked me to update the Schedules I am responsible
10 for to reflect the test year updated for changes through April 30, 2009.

11 **Q. DO YOU SPONSOR ANY SCHEDULES IN CONNECTION WITH THE COMPANY'S**
12 **UPDATE FILING?**

13 A. Yes, I do. I sponsor the following Schedules:

- 14 • Update Schedule LWL-1 – Per-Books Bills, Deliveries, and Margin Revenues
- 15 • Update Schedule LWL-2, Sheets 4A & 4B – Hinge-fit Analysis
- 16 • Update Schedule LWL-2, Sheet 7 – Monthly Normal HDDs
- 17 • Update Schedule LWL-3 – HDD Regression Analysis
- 18 • Update Schedule LWL-4 – Calculation of Weather Normalization Adjustment
- 19 • Update Schedule LWL-5 – Customer Annualization Adjustment
- 20 • Update Schedule LWL-6 – Calculation of Reconciliation Adjustment
- 21 • Update Schedule LWL-7 – Calculation of Proforma Margin Revenue

22 Each of these Update Schedules was prepared under my supervision and shows the same information
23 as I show in the corresponding schedules filed with my direct testimony.

1 **Q. PLEASE EXPLAIN THE NEED FOR AN UPDATE TO THE COMPANY'S WEATHER**
2 **NORMALIZATION ADJUSTMENT PRESENTED IN SCHEDULE H-2 OF MR. NOACK'S**
3 **UPDATE SCHEDULE MRN_1.**

4 A. An update to the Company's weather normalization adjustment to reflect the updated time period is
5 required because for the 12-month period ended April 30, 2009, HDDs were considerably less than
6 during the 12 month period ended December 31, 2008. Even though HDDs for the update period are
7 less, they still exceed the normal level I developed in my direct testimony. Comparison of my Update
8 Schedule LWL-1 with Schedule LWL-1 show that deliveries and margin revenues for the 12-month
9 period ended April 30, 2009 are substantially less (54.1 million Ccf and \$2.9 million) than for the
10 period ended December 31, 2008.

11 **Q. DID YOU UPDATE NORMAL HEATING DEGREE DAYS BASED ON DATA FOR THE 12-**
12 **MONTHS ENDED APRIL 30, 2009?**

13 A. Yes, I did. I show this development in Update Schedule LWL-2. Dr. Livezey and I recommend
14 developing normal HDDs based on use of the Hinge-Fit technique to the most recently available data.
15 Though the Hinge-Fit produces relatively stable results, because HDDs for the 12-months ended April
16 30, 2009 exceed the normal HDD we developed based on data through December 31, 2008, my
17 update represents a slight increase in the normal HDD levels I use to normalize the Company's sales
18 and revenues for weather.

19 **Q. DID YOU UPDATE THE CUSTOMER USE CHARACTERISTICS YOU USE IN YOUR**
20 **WEATHER ADJUSTMENT?**

21 A. Yes, I did. Based on the updated information, customer use (Ccf per HDD) for most classes does not
22 significantly change.

23 **Q. HOW DOES YOUR UPDATED WEATHER NORMALIZATION ADJUSTMENT**
24 **COMPARE WITH THAT YOU DEVELOPED BASED ON THE YEAR ENDED DECEMBER**
25 **31, 2008?**

26 A. For the update, my weather adjustment amounts to a reduction of 22.3 million Ccf. This adjustment is
27 33.9 million Ccf less than the adjustment I calculated for the 12 months ended December 31, 2008.
28 Therefore, of the 54.1 million Ccf difference from book deliveries, 33.9 million Ccf represents
29 differences due to the colder conditions in 2008 versus the 12 months ended April 30, 2009.

- 1 **Q. PLEASE EXPLAIN THE UPDATE TO THE COMPANY'S CUSTOMER ANNUALIZATION**
2 **ADJUSTMENT.**
- 3 A. The update to this adjustment decreases test year margins recognizing the fact that the number of bills
4 in April 2009 are 2,616 less than in April 2008. This reduction in the year-to- year numbers of
5 customers results in an annualization adjustment reducing revenues by about \$480,000.
- 6 **Q. WHAT IS THE RESULTING UPDATED TEST PERIOD REVENUES?**
- 7 A. As I show in Update Schedule LWL-7, I find normalized and annualized margin to amount to \$182.1
8 million.
- 9 **Q. MR. LOOS, DOES THIS CONCLUDE YOUR UPDATE TESTIMONY?**
- 10 A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy's
Tariff Sheets Designed to Increase Rates
for Gas Service in the Company's Missouri
Service Area.

)
)
)
)

Case No. GR-2009-0355

AFFIDAVIT OF LARRY W. LOOS

STATE OF ARIZONA)

)

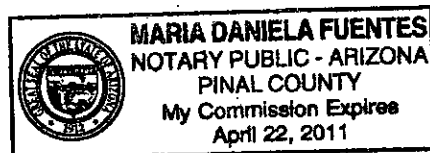
ss.

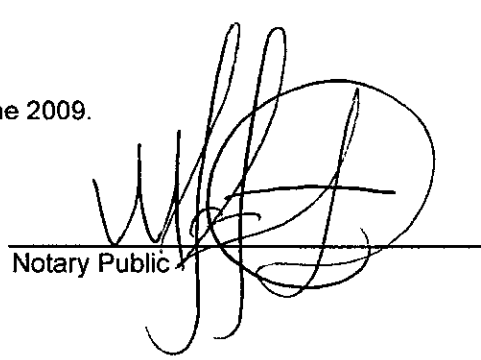
COUNTY OF PINAL)

Larry W. Loos, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Updated Direct Testimony in question and answer form, to be presented in the above case; that the answers in the foregoing 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.


LARRY W. LOOS

Subscribed and sworn to before me this 18th day of June 2009.




Notary Public

My Commission Expires: April 22, 2011

Missouri Gas Energy
Per Books Bills, Deliveries, and Margin Revenues - 12 Months Ended 4/30/09

[A]		[B]	[C]	[D]
Line No.	Description	Number of Bills	Deliveries Ccf	Margin Revenues \$
1	Residential	5,240,686	365,545,351	\$130,014,950
2	Small General Service			
3	Sales	731,638	141,949,565	\$36,763,939
4	Transportation	8,596	9,182,159	\$1,687,843
5	Total SGS	740,234	151,131,724	\$38,451,782
6	Large General Service			
7	Sales	3,223	12,654,199	\$1,978,619
8	Transportation	383	1,354,983	\$228,076
9	Total LGS	3,606	14,009,182	\$2,206,695
10	Large Volume			
11	Sales	132	2,776,830	\$254,240
12	Transportation	5,821	246,089,830	\$12,685,081
13	Total LVS	5,953	248,866,660	\$12,939,321
14	Total 2009 Test Year Per Books	5,990,479	779,552,917	\$183,612,748
15	Recap:			
16	Sales	5,975,679	522,925,945	\$169,011,748
17	Transportation	14,800	256,626,972	\$14,601,000
18	Total	5,990,479	779,552,917	\$183,612,748

Updated through April 30, 2009												
		[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]
Line No.	Description/Year	Actual HDD	Predicted by Hinge			Actual less Predicted - Complete Data Set			Actual less Predicted - Data Set to Date			Hinge Factor
			Complete Data Set	Data Set to Date		No Offset	One Year Offset	Two Year Offset	No Offset	One Year Data Lag	Two Year Data Lag	
				Predicted	Hinge Slope							
						[B] - [C]	[B (Prior Year)] - [C]	[B (2nd Prior Year)] - [C]	[B] - [D]	[B] - [D (Prior Year)]	[B] - [D (2nd Prior Year)]	
1	Data Set	1952 - 2009	1952 - 2009	1952 - To Date	1952 - To Date	1952 - 2009	1952 - To Date	1952 - To Date	1952 - To Date	1952 - To Date(-1)	1952 - To Date(-2)	
2	2008-09 Hinge Slope - HDD/yr		(8.14)	12.88								
3	Correlation of Residuals (g)					10.95%						
4	Correlation Coefficient		20.93%	54.50%								
5	OCN (years)		20									
6	Entire Data Set											
7	Years	58	58	58	58	57	56	58	57	56		
8	Mean	5,143.43	5,143.43	5,228.13	(0.00)	1.07	(0.75)	(84.69)	(106.69)	(123.45)		
9	Standard Deviation	448.43	93.88	288.24	438.49	442.40	444.29	378.53	524.91	620.30		
10	Actual Exceeds Predicted											
11	Number of Years %					50%	49%	48%	38%	39%	45%	
12	Average					(0.00)	1.07	(0.75)	(84.69)	(106.69)	(123.45)	
13	Standard Deviation					438.49	442.40	444.29	378.53	524.91	620.30	
14	Most Recent 10 Years											
15	Actual Exceeds Predicted											
16	Number of Years %					40%	30%	20%	40%	40%	40%	
17	Average	4,867.80	4,986.80	5,022.04	(118.00)	(185.00)	(223.90)	(154.24)	(173.85)	(206.98)		
18	Standard Deviation	468.72	24.65	85.44	473.01	472.80	432.00	458.69	514.75	513.95		
19	Most Recent 25 Years											
20	Actual Exceeds Predicted											
21	Number of Years %					48%	48%	48%	32%	32%	32%	
22	Average	5,029.88	5,047.85	5,226.57	(17.97)	18.35	12.55	(196.69)	(239.30)	(280.73)		
23	Standard Deviation	436.64	59.91	219.06	425.56	463.33	457.21	406.82	476.60	494.90		
24	50 - Years											
25	Actual Exceeds Predicted					52%	50%	50%	40%	40%	44%	
26	Number of Years %					33.25	29.37	30.57	(95.65)	(112.86)	(130.81)	
27	Average	5,163.32	5,130.07	5,258.87	33.25	29.37	30.57	(95.65)	(112.86)	(130.81)		
28	Standard Deviation	465.01	94.50	294.58	448.03	449.79	447.96	393.71	542.70	638.34		
29	Forecast Test YE April 30, 2011		4,934	4,934								37.0
30	Forecast Test YE April 30, 2010		4,942	4,942								36.0
31	Historical Test YE April 30, 2009	5,166	4,950	4,950	(8.14)	216	380	(170)	216	238	280	35.0
32	2008	5,330	4,958	4,937	(8.88)	372	(178)	(752)	393	433	419	34.0
33	2007	4,780	4,966	4,907	(10.32)	(186)	(760)	(358)	(127)	(140)	(223)	33.0
34	2006	4,206	4,975	4,930	(9.83)	(769)	(367)	(28)	(724)	(804)	(853)	32.0
35	2005	4,608	4,983	5,017	(6.85)	(375)	(36)	266	(409)	(456)	(471)	31.0
36	2004	4,947	4,991	5,069	(5.06)	(44)	258	(522)	(122)	(136)	(116)	30.0
37	2003	5,249	4,999	5,088	(4.49)	(250)	(530)	808	161	181	101	29.0
38	2002	4,469	5,007	5,073	(5.30)	(538)	800	(691)	(604)	(681)	(618)	28.0
39	2001	5,607	5,015	5,152	(2.07)	(592)	(699)	(508)	455	515	403	27.0
40	2000	4,316	5,023	5,097	(4.68)	(707)	(517)	(82)	(781)	(888)	(992)	26.0
41	1999	4,506	5,032	5,204	0.16	(526)	(91)	594	(698)	(797)	(853)	25.0
42	1998	4,941	5,040	5,298	4.83	(98)	588	720	(357)	(411)	(365)	24.0
43	1997	5,626	5,048	5,344	7.44	578	712	(278)	282	326	406	23.0
44	1996	5,760	5,056	5,295	5.20	704	(284)	376	465	541	460	22.0
45	1995	4,772	5,064	5,218	1.16	(292)	368	617	(446)	(523)	(495)	21.0
46	1994	5,432	5,072	5,289	5.42	360	609	(365)	143	169	255	20.0
47	1993	5,681	5,080	5,259	3.92	601	(373)	(208)	422	503	400	19.0
48	1992	4,707	5,089	5,179	(1.04)	(382)	(217)	129	(472)	(569)	(651)	18.0
49	1991	4,872	5,097	5,271	5.18	(225)	121	(160)	(399)	(485)	(517)	17.0
50	1990	5,218	5,105	5,346	11.09	113	(168)	43	(128)	(158)	(273)	16.0
51	1989	4,937	5,113	5,363	13.26	(176)	35	(377)	(426)	(533)	(621)	15.0
52	1988	5,148	5,121	5,448	21.51	27	(385)	166	(300)	(382)	(629)	14.0
53	1987	4,738	5,129	5,501	28.27	(393)	158	317	(765)	(992)	(1,133)	13.0
54	1986	5,287	5,137	5,680	48.56	150	309	937	(393)	(521)	(643)	12.0
55	1985	5,446	5,146	5,747	61.02	300	928	39	(301)	(411)	(278)	11.0
56	1984	6,074	5,154	5,784	72.65	920	31	638	290	409	184	10.0
57	1983	5,165	5,162	5,607	58.70	23	630	(306)	(422)	(620)	(575)	9.0
58	1982	5,792	5,170	5,721	84.78	622	(314)	282	71	111	(476)	8.0
59	1981	4,856	5,178	5,602	78.88	(322)	274	920	(746)	(1,247)	(1,745)	7.0
60	1980	5,452	5,186	5,937	165.47	266	912	809	(485)	(898)	(900)	6.0
61	1979	6,098	5,194	6,099	250.68	904	801	549	(1)	(3)	352	5.0
62	1978	5,995	5,203	5,850	251.10	792	540	(579)	145	410	2,352	4.0
63	1977	5,743	5,211	5,424	161.16	532	(587)	301	319	1,610	628	3.0
64	1976	4,624	5,219	4,624	(490.71)	(595)	293	(287)	-	(491)	(473)	2.0
65	1975	5,512	5,227	5,115		285	(295)	105	397	415	407	1.0
66	1974	4,932	5,227	5,097		(295)	105	(363)	(165)	(173)	(162)	1.0
67	1973	5,332	5,227	5,105		105	(363)	(191)	227	238	226	1.0
68	1972	4,864	5,227	5,094		(383)	(191)	76	(230)	(242)	(245)	1.0
69	1971	5,036	5,227	5,106		(191)	76	386	(70)	(73)	(63)	1.0
70	1970	5,303	5,227	5,109		76	386	(24)	194	204	235	1.0
71	1969	5,813	5,227	5,099		386	(24)	(513)	514	545	553	1.0
72	1968	5,203	5,227	5,068		(24)	(513)	(679)	135	143	120	1.0
73	1967	4,714	5,227	5,060		(513)	(679)	31	(346)	(369)	(407)	1.0
74	1966	4,548	5,227	5,083		(679)	31	(520)	(535)	(573)	(563)	1.0
75	1965	5,258	5,227	5,121		31	(520)	(121)	137	147	114	1.0
76	1964	4,707	5,227	5,111		(520)	(121)	543	(404)	(437)	(441)	1.0
77	1963	5,106	5,227	5,144		(121)	543	(198)	(38)	(42)	21	1.0
78	1962	5,770	5,227	5,148		543	(198)	446	622	685	678	1.0
79	1961	5,029	5,227	5,086		(198)	446	(255)	(57)	(63)	10	1.0
80	1960	5,673	5,227	5,092		446	(255)	163	581	654	647	1.0
81	1959	4,972	5,227	5,019		(255)	163	(351)	(47)	(54)	7	1.0
82	1958	5,390	5,227	5,026		163	(351)	149	364	425	407	1.0
83	1957	4,876	5,227	4,965		(351)	149	(486)	(89)	(107)	(9)	1.0
84	1956	5,376	5,227	4,983		149	(486)	(717)	393	491	443	1.0
85	1955	4,741	5,227	4,885		(486)	(717)	(267)	(144)	(192)	(403)	1.0
86	1954	4,510	5,227	4,933		(717)	(267)	101	(423)	(634)	(618)	1.0
87	1953	4,960	5,227	5,144		(267)	101	(184)	(368)			1.0
88	1952	5,328	5,227	5,328		101						1.0

[A]													[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]
Line No.	Description/Year	Actual HDD	Complete Data Set	Predicted by Hinge		Actual less Predicted - Complete Data Set			Actual less Predicted - Data Set to Date			Hinge Factor											
				Data Set to Date	Predicted	Hinge Slope	No Offset	One Year Offset	Two Year Offset	No Offset	One Year Data Lag		Two Year Data Lag										
													[B] - [C]	[B (Prior Year)] - [C]	[B (2nd Prior Year)] - [C]	[B] - [D]	[B] - [D (Prior Year)]	[B] - [D (2nd Prior Year)]					
1	Data Set	1852 - 2009	1952 - 2009	1952 - To Date	1952 - To Date	1952 - 2009	1952 - To Date	1952 - To Date	1952 - To Date	1952 - To Date	1952 - To Date(-1)	1952 - To Date(-2)											
2	2008-09 Hinge Slope - HDD/yr		(12.24)	9.38																			
3	Correlation of Residuals (g)					-5.77%																	
4	Correlation Coefficient		37.81%	56.74%																			
5	OCN (years)		11																				
6	Entire Data Set																						
7	Years (Observations)	58	58	58		58	57	56	58	57	56												
8	Mean	4,180.53	4,180.53	4,216.79		0.00	3.40	8.31	(36.25)	(59.19)	(77.72)												
9	Standard Deviation	373.20	141.11	241.87		345.49	348.51	352.17	302.89	407.39	462.11												
10	Actual Exceeds Predicted																						
11	Number of Years %					53%	54%	55%	40%	40%	45%												
12	Average					0.00	3.40	8.31	(36.25)	(59.19)	(77.72)												
13	Standard Deviation					345.49	348.51	352.17	302.89	407.39	462.11												
14	Most Recent 10 Years																						
15	Actual Exceeds Predicted																						
16	Number of Years %					50%	40%	40%	50%	50%	50%												
17	Average	3,910.70	3,945.10	3,946.11		(34.40)	(81.90)	(74.60)	(35.41)	(40.26)	(53.94)												
18	Standard Deviation	401.38	37.05	60.12		404.57	406.61	403.84	382.93	431.58	415.33												
19	Most Recent 25 Years																						
20	Actual Exceeds Predicted																						
21	Number of Years %					56%	56%	56%	36%	36%	40%												
22	Average	4,022.68	4,036.87	4,102.45		(14.19)	6.97	7.65	(79.77)	(98.36)	(116.60)												
23	Standard Deviation	335.22	90.05	156.46		321.33	331.11	331.13	305.22	355.42	351.67												
24	50 - Years																						
25	Actual Exceeds Predicted																						
26	Number of Years %					56%	56%	58%	40%	40%	44%												
27	Average	4,187.48	4,160.45	4,231.76		27.03	27.81	38.35	(44.28)	(65.38)	(87.15)												
28	Standard Deviation	387.24	142.05	254.20		348.91	349.51	351.06	312.16	416.46	469.95												
27	Forecast Test YE April 30,																						
28	2011		3,866	3,866								37.0											
29	2010		3,878	3,878								36.0											
30	Historical Test YE April 30,																						
31	2009	4,112	3,890	3,890	(12.24)	222	145	33	222	244	261	35.0											
32	2008	4,035	3,902	3,881	(13.00)	133	21	(366)	154	170	175	34.0											
33	2007	3,923	3,915	3,878	(13.56)	8	(379)	(219)	45	50	9	33.0											
34	2006	3,536	3,927	3,887	(13.74)	(391)	(231)	(136)	(351)	(390)	(419)	32.0											
35	2005	3,696	3,939	3,938	(12.29)	(243)	(148)	(242)	(270)	(293)	(293)	31.0											
36	2004	3,791	3,951	3,977	(11.24)	(160)	(349)	(360)	(186)	(208)	(171)	30.0											
37	2003	4,300	3,963	4,009	(10.37)	337	(372)	767	291	326	274	29.0											
38	2002	3,591	3,976	3,986	(11.82)	(385)	754	(583)	(395)	(445)	(351)	28.0											
39	2001	4,730	3,988	4,046	(9.71)	742	(595)	(351)	684	775	692	27.0											
40	2000	3,393	4,000	3,969	(13.64)	(607)	(363)	108	(576)	(655)	(718)	26.0											
41	1999	3,637	4,012	4,058	(10.07)	(375)	96	102	(421)	(481)	(484)	25.0											
42	1998	4,108	4,025	4,125	(7.25)	83	89	353	(17)	(20)	(23)	24.0											
43	1997	4,114	4,037	4,135	(7.12)	77	341	(340)	(21)	(24)	16	23.0											
44	1996	4,378	4,049	4,145	(6.95)	329	(352)	351	233	271	195	22.0											
45	1995	3,697	4,061	4,116	(6.98)	(364)	339	433	(419)	(491)	(452)	21.0											
46	1994	4,400	4,074	4,193	(4.97)	326	420	(273)	207	244	312	20.0											
47	1993	4,494	4,086	4,163	(7.15)	408	(285)	(252)	331	395	327	19.0											
48	1992	3,801	4,098	4,110	(11.04)	(297)	(264)	80	(309)	(373)	(453)	18.0											
49	1991	3,834	4,110	4,181	(6.97)	(276)	68	60	(347)	(422)	(442)	17.0											
50	1990	4,178	4,123	4,258	(1.83)	55	47	274	(80)	(98)	(127)	16.0											
51	1989	4,170	4,135	4,277	(0.48)	35	262	2	(107)	(134)	(106)	15.0											
52	1988	4,387	4,147	4,302	1.59	250	(10)	(282)	95	121	76	14.0											
53	1987	4,137	4,159	4,277	(0.55)	(22)	(294)	91	(140)	(181)	(342)	13.0											
54	1986	3,865	4,171	4,315	3.15	(306)	79	470	(450)	(597)	(675)	12.0											
55	1985	4,250	4,184	4,445	17.41	66	457	(132)	(195)	(265)	(196)	11.0											
56	1984	4,641	4,186	4,490	24.93	445	(144)	308	151	212	21	10.0											
57	1983	4,052	4,208	4,411	17.68	(156)	296	(233)	(359)	(529)	(551)	9.0											
58	1982	4,504	4,220	4,540	39.89	284	(245)	16	(36)	(56)	(483)	8.0											
59	1981	3,975	4,233	4,518	42.88	(258)	3	646	(543)	(906)	(1,461)	7.0											
60	1980	4,236	4,245	4,776	105.85	(9)	634	654	(540)	(999)	(1,228)	6.0											
61	1979	4,879	4,257	5,034	200.64	622	642	817	(155)	(336)	(505)	5.0											
62	1978	4,899	4,269	4,968	246.97	630	805	(293)	(69)	(195)	823	4.0											
63	1977	5,074	4,282	4,805	269.83	792	(306)	307	269	1,099	636	3.0											
64	1976	3,976	4,294	3,976		(318)	295	(415)	-	(260)	(245)	2.0											
65	1975	4,589	4,306	4,236		283	(427)	223	353	368	353	1.0											
66	1974	3,879	4,306	4,221		(427)	223	(659)	(342)	(357)	(343)	1.0											
67	1973	4,529	4,306	4,236		223	(659)	(96)	293	367	278	1.0											
68	1972	3,647	4,306	4,222		(659)	(96)	400	(575)	(604)	(606)	1.0											
69	1971	4,210	4,306	4,251		(96)	400	(41)	(41)	(43)	(18)	1.0											
70	1970	4,706	4,306	4,253		400	304	176	453	478	500	1.0											
71	1969	4,610	4,306	4,228		304	176	(346)	382	404	422	1.0											
72	1968	4,482	4,306	4,208		176	(346)	(466)	276	294	278	1.0											
73	1967	3,963	4,306	4,189		(346)	(466)	2	(229)	(244)	(270)	1.0											
74	1966	3,840	4,306	4,204		(466)	2	50	(364)	(390)	(384)	1.0											
75	1965	4,308	4,306	4,230		2	50	(180)	78	84	95	1.0											
76	1964	4,356	4,306	4,224		50	(180)	285	132	143	135	1.0											
77	1963	4,126	4,306	4,213		(180)	285	(199)	(87)	(95)	(58)	1.0											
78	1962	4,591	4,306	4,221		285	(199)	325	370	408	399	1.0											
79	1961	4,107	4,306	4,184		(199)	325	(155)	(77)	(85)	(30)	1.0											
80	1960	4,631	4,306	4,192		325	(155)	258	439	494	496	1.0											
81	1959	4,151	4,306	4,137		(155)	258	(335)	14	16	87	1.0											
82	1958	4,562	4,306	4,135		258	(335)	92	427	498	478	1.0											
83	1957	3,971	4,306	4,064		(335)	92	(355)	(93)	(112)	(33)	1.0											
84	1956	4,398	4,306	4,083		92	(355)	(620)	315	394	377	1.0											
85	1955	3,951	4,306	4,004		(355)	(620)	(281)	(53)	(70)	(238)	1.0											
86	1954	3,686	4,306	4,021		(620)	(281)	47	(335)	(503)	(667)	1.0											
87	1953	4,025	4,306	4,189		(281)	47	-	(164)	(328)	-	1.0											
88	1952	4,353	4,306	4,353		47	-	-	-	-	-	1.0											

Missouri Gas Energy
Monthly Normal Degree Days
Hinge-Fit for TY End April 30, 2010

Update Schedule LWL 2
Sheet 7

[A]		[B]	[C]
Line No.	Month	MCI	Joplin
1	May	100	59
2	June	7	3
3	July	0	0
4	August	1	1
5	September	56	36
6	October	285	205
7	November	628	479
8	December	1,006	831
9	January	1,056	873
10	February	855	678
11	March	607	469
12	April	341	244
13	Total	4,942	3,878

Missouri Gas Energy
Summary of Statistical Results from
Heating Degree Day Regression Analysis

Update Schedule LWL 3
Sheet 1

	(A)	(B)	(C)	(D)	(E)	(F)
Line No.	Description	Normal	2006-2009	Test Year Ended April 30, 2007-2009	2008-2009	2009
1	Residential Class					
2	Sales District - Kansas City					
3	Weather Station - MCI					
4	Constant		9.379	8.758	7.896	7.665
5	Current Month's HDD		0.062	0.059	0.061	0.062
6	Previous Month's HDD		0.082	0.085	0.083	0.083
7	Trend		-	-	-	-
8	Adjusted R Squared		0.980	0.981	0.981	0.977
9	Standard Error of Estimate		7.898	8.109	8.495	9.034
10	F		1,167.865	906.098	584.573	237.431
11	Predicted Normal Use/Customer		821.54	815.68	806.68	808.14
12	Average HDD	4,942	4,871	5,092	5,248	5,166
13	Time Period Used		XXXXX			
14	Sales District - Joplin					
15	Weather Station - Joplin					
16	Constant		9.059	9.055	8.539	9.186
17	Current Month's HDD		0.070	0.066	0.070	0.074
18	Previous Month's HDD		0.080	0.085	0.083	0.076
19	Trend		-	-	-	-
20	Adjusted R Squared		0.982	0.986	0.986	0.985
21	Standard Error of Estimate		6.328	5.925	6.142	6.283
22	F		1,318.105	1,234.267	803.204	363.660
23	Predicted Normal Use/Customer		688.55	695.43	696.68	691.24
24	Average HDD	3,878	3,902	4,023	4,074	4,112
25	Time Period Used			XXXXX		
26	Sales District - St Joseph					
27	Weather Station - MCI					
28	Constant		9.929	9.149	7.673	7.797
29	Current Month's HDD		0.059	0.057	0.061	0.063
30	Previous Month's HDD		0.091	0.094	0.091	0.088
31	Trend		-	-	-	-
32	Adjusted R Squared		0.981	0.982	0.980	0.978
33	Standard Error of Estimate		8.107	8.393	9.178	9.244
34	F		1,219.364	932.261	557.136	247.715
35	Predicted Normal Use/Customer		861.80	854.65	842.34	841.86
36	Average HDD	4,942	4,871	5,092	5,248	5,166
37	Time Period Used		XXXXX			
38	Small General Service Class					
39	Sales District - Kansas City					
40	Weather Station - MCI					
41	Constant		40.883	40.057	39.382	40.169
42	Current Month's HDD		0.146	0.139	0.145	0.158
43	Previous Month's HDD		0.226	0.234	0.229	0.223
44	Trend		-	-	-	-
45	Adjusted R Squared		0.979	0.979	0.977	0.974
46	Standard Error of Estimate		21.263	22.362	24.426	25.136
47	F		1,086.730	807.275	479.768	210.693
48	Predicted Normal Use/Customer		2,329.21	2,326.96	2,324.92	2,358.17
49	Average HDD	4,942	4,871	5,092	5,248	5,166
50	Time Period Used		XXXXX			
51	Sales District - Joplin					
52	Weather Station - Joplin					
53	Constant		45.425	45.313	44.094	45.899
54	Current Month's HDD		0.163	0.154	0.166	0.175
55	Previous Month's HDD		0.220	0.234	0.229	0.208
56	Trend		-	-	-	-
57	Adjusted R Squared		0.973	0.976	0.975	0.979
58	Standard Error of Estimate		20.032	19.928	21.281	19.070
59	F		861.398	720.164	444.051	258.774
60	Predicted Normal Use/Customer		2,027.29	2,048.70	2,058.60	2,037.94
61	Average HDD	3,878	3,902	4,023	4,074	4,112
62	Time Period Used					XXXXX
63	Sales District - St Joseph					
64	Weather Station - MCI					
65	Constant		36.514	35.867	33.401	32.344
66	Current Month's HDD		0.201	0.193	0.209	0.220
67	Previous Month's HDD		0.258	0.271	0.262	0.258
68	Trend		-	-	-	-
69	Adjusted R Squared		0.973	0.973	0.970	0.971
70	Standard Error of Estimate		29.885	31.553	34.866	33.809
71	F		833.198	621.956	370.489	183.682
72	Predicted Normal Use/Customer		2,704.82	2,721.61	2,728.36	2,747.19
73	Average HDD	4,942	4,871	5,092	5,248	5,166
74	Time Period Used		XXXXX			

Missouri Gas Energy
Summary of Statistical Results from
Heating Degree Day Regression Analysis

Update Schedule LWL 3
Sheet 2

Line No.	[A] Description	[B] Normal	[C] 2005-2008	[D] 2006-2008	[E] 2007-2008	[F] 2008
75	Large General Service Class					
76	Sales District - Kansas City					
77	Weather Station - MCI					
78	Constant		1,395,770	1,253,547	928,296	910,155
79	Current Month's HDD		3,177	3,377	3,395	3,503
80	Previous Month's HDD		3,684	3,090	2,982	2,842
81	Trend		(18,543)	(14,492)	-	-
82	Adjusted R Squared		0.955	0.988	0.989	0.985
83	Standard Error of Estimate		565,691	287,363	288,675	324,042
84	F		331,772	938,935	989,972	353,469
85	Predicted Normal Use/Customer		41,202.16	41,698.31	42,652.54	42,278.46
86	Average HDD	4,942	4,871	5,092	5,248	5,166
87	Time Period Used				XXXXX	
88	Sales District - Joplin					
89	Weather Station - Joplin					
90	Constant		5,302,556	5,905,523	6,045,439	2,571,979
91	Current Month's HDD		5,139	5,053	6,305	3,875
92	Previous Month's HDD		4,793	4,997	4,428	4,686
93	Trend		(53,843)	(111,012)	(227,570)	-
94	Adjusted R Squared		0.852	0.883	0.921	0.965
95	Standard Error of Estimate		1,267,883	1,152,290	974,099	552,503
96	F		91,223	89,038	90,318	153,660
97	Predicted Normal Use/Customer		74,686.36	69,206.25	63,646.66	64,062.53
98	Average HDD	3,878	3,902	4,023	4,074	4,112
99	Time Period Used					XXXXX
100	Sales District - St Joseph					
101	Weather Station - MCI					
102	Constant		1,040,822	995,142	897,447	847,772
103	Current Month's HDD		1,693	1,369	1,616	1,594
104	Previous Month's HDD		5,639	6,070	5,919	6,274
105	Trend		-	-	-	-
106	Adjusted R Squared		0.974	0.975	0.971	0.977
107	Standard Error of Estimate		472,438	489,289	553,515	496,789
108	F		878,314	691,690	387,263	238,929
109	Predicted Normal Use/Customer		48,726.76	48,704.21	48,008.26	49,055.40
110	Average HDD	4,942	4,871	5,092	5,248	5,166
111	Time Period Used		XXXXX			
112	Large Volume Class					
113	Sales District - Kansas City					
114	Weather Station - MCI					
115	Constant		28,338,706	27,831,078	25,261,205	24,896,468
116	Current Month's HDD		27,142	28,560	25,304	29,527
117	Previous Month's HDD		-	-	-	(2,917)
118	Trend		(143,464)	(223,348)	(125,574)	(368,403)
119	Adjusted R Squared		0.866	0.862	0.980	0.997
120	Standard Error of Estimate		4,226,835	4,658,316	1,538,017	606,907
121	F		152,345	110,002	571,721	1,165,815
122	Predicted Normal Use/Customer		401,032.74	393,373.85	400,311.58	401,530.54
123	Average HDD	4,942	4,871	5,092	5,248	5,166
124	Time Period Used					XXXXX
125	Sales District - Joplin					
126	Weather Station - Joplin					
127	Constant		58,907,042	59,160,423	62,348,817	58,522,399
128	Current Month's HDD		15,487	14,420	15,737	11,050
129	Previous Month's HDD		-	-	-	-
130	Trend		-	-	(288,448)	-
131	Adjusted R Squared		0.778	0.761	0.796	0.754
132	Standard Error of Estimate		2,769,191	2,772,279	2,588,647	2,234,654
133	F		165,386	112,618	45,949	34,645
134	Predicted Normal Use/Customer		766,941.28	765,843.78	745,173.79	745,119.21
135	Average HDD	3,878	3,902	4,023	4,074	4,112
136	Time Period Used					XXXXX
137	Sales District - St Joseph					
138	Weather Station - MCI					
139	Constant		38,748,220	50,073,821	63,259,381	52,927,768
140	Current Month's HDD		29,758	34,536	41,468	-
141	Previous Month's HDD		-	-	-	12,726
142	Trend		373,183	-	(1,142,052)	-
143	Adjusted R Squared		0.542	0.554	0.635	0.668
144	Standard Error of Estimate		12,953,949	12,951,567	12,755,711	3,761,570
145	F		28,865	44,502	20,968	23,139
146	Predicted Normal Use/Customer		802,367.80	771,564.35	710,511.62	698,023.07
147	Average HDD	4,942	4,871	5,092	5,248	5,166
148	Time Period Used					XXXXX

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Line No.	Rate Class	Sales District - Weather Station	2008 Month	HDD		HDD		Adjustment	2009 TY # of bills	Throughput Adjustment
				Current Month		Previous Month				
				Actual	Normal	Actual	Normal			
				HDD	HDD	HDD	HDD	Ccf/cust.		Ccf [HxI]
1	RES	Kansas City - MCI			0.062		0.082			
2			May	109	100	400	341	(5.39)	346,989	(1,869,035)
3			June	0	7	109	100	(0.33)	343,184	(112,226)
4			July	0	0	0	7	0.58	340,294	197,099
5			August	0	1	0	0	0.06	338,850	20,928
6			September	55	56	0	1	0.15	339,034	50,418
7			October	306	285	55	56	(1.21)	341,593	(412,566)
8			November	651	628	306	285	(3.18)	346,442	(1,102,409)
9			December	1,120	1,006	651	628	(8.94)	351,094	(3,138,725)
10			January	1,154	1,056	1,120	1,006	(15.36)	353,112	(5,425,122)
11			February	785	855	1,154	1,056	(3.64)	352,868	(1,285,230)
12			March	609	607	785	855	5.63	352,159	1,982,795
13			April	377	341	609	607	(2.38)	350,918	(836,450)
14			Total	5,166	4,942	5,189	4,942		4,156,537	(11,930,523)
15	RES	Joplin - Joplin			0.066		0.085			
16			May	68	59	309	244	(6.08)	65,574	(398,533)
17			June	0	3	68	59	(0.51)	64,709	(33,323)
18			July	0	0	0	3	0.27	64,306	17,499
19			August	0	1	0	0	0.05	64,159	3,433
20			September	21	36	0	1	1.05	64,301	67,547
21			October	211	205	21	36	0.84	64,814	54,443
22			November	547	479	211	205	(5.08)	66,195	(335,989)
23			December	878	831	547	479	(8.95)	67,248	(601,545)
24			January	1,014	873	878	831	(13.36)	67,461	(901,475)
25			February	613	678	1,014	873	(7.62)	67,497	(514,414)
26			March	462	469	613	678	5.99	67,187	402,377
27			April	298	244	462	469	(2.98)	66,627	(198,481)
28			Total	4,112	3,878	4,123	3,878		790,078	(2,438,461)
29	RES	St Joseph - MCI			0.059		0.091			
30			May	109	100	400	341	(5.90)	24,560	(144,856)
31			June	0	7	109	100	(0.43)	24,246	(10,327)
32			July	0	0	0	7	0.64	24,090	15,456
33			August	0	1	0	0	0.06	23,963	1,477
34			September	55	56	0	1	0.15	24,055	3,670
35			October	306	285	55	56	(1.15)	24,204	(27,773)
36			November	651	628	306	285	(3.32)	24,544	(81,591)
37			December	1,120	1,006	651	628	(8.89)	24,945	(221,877)
38			January	1,154	1,056	1,120	1,006	(16.18)	25,103	(406,154)
39			February	785	855	1,154	1,056	(4.68)	24,969	(116,873)
40			March	609	607	785	855	6.27	24,739	155,148
41			April	377	341	609	607	(2.32)	24,653	(57,262)
42			Total	5,166	4,942	5,189	4,942		294,071	(890,962)
43	SGS	Kansas City - MCI			0.146		0.226			
44			May	109	100	400	341	(14.64)	47,004	(687,908)
45			June	0	7	109	100	(1.07)	45,994	(48,995)
46			July	0	0	0	7	1.59	45,276	72,123
47			August	0	1	0	0	0.15	44,703	6,801
48			September	55	56	0	1	0.38	44,613	16,834
49			October	306	285	55	56	(2.83)	44,829	(126,668)
50			November	651	628	306	285	(8.23)	45,909	(377,779)
51			December	1,120	1,006	651	628	(21.96)	47,494	(1,042,971)
52			January	1,154	1,056	1,120	1,006	(40.07)	48,279	(1,934,405)
53			February	785	855	1,154	1,056	(11.70)	48,100	(562,778)
54			March	609	607	785	855	15.57	47,637	741,928
55			April	377	341	609	607	(5.73)	47,168	(270,174)
56			Total	5,166	4,942	5,189	4,942		557,006	(4,213,990)
57	SGS	Joplin - Joplin			0.175		0.208			
58			May	68	59	309	244	(15.01)	11,858	(178,022)
59			June	0	3	68	59	(1.22)	11,665	(14,277)
60			July	0	0	0	3	0.67	11,502	7,683
61			August	0	1	0	0	0.14	11,403	1,603
62			September	21	36	0	1	2.76	11,374	31,394
63			October	211	205	21	36	1.98	11,442	22,679
64			November	547	479	211	205	(13.29)	11,827	(157,224)
65			December	878	831	547	479	(22.53)	12,223	(275,335)
66			January	1,014	873	878	831	(34.51)	12,348	(426,179)
67			February	613	678	1,014	873	(17.89)	12,218	(218,588)
68			March	462	469	613	678	14.78	12,069	178,347
69			April	298	244	462	469	(7.97)	11,856	(94,525)
70			Total	4,112	3,878	4,123	3,878		141,785	(1,122,447)

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
Line No.	Rate Class	Sales District - Weather Station	2008 Month	HDD		HDD		Adjustment	2009 TY # of bills	Throughput Adjustment
				Current Month	Previous Month	Current Month	Previous Month			
				Actual	Normal	Actual	Normal	Ccf/cust.		Ccf (H)x(I)
71	SGS	St Joseph - MCI	May	109	100	400	341	(17.02)	3,389	(57,674)
72			June	0	7	109	100	(0.98)	3,390	(3,321)
73			July	0	0	0	7	1.82	3,356	6,122
74			August	0	1	0	0	0.20	3,327	665
75			September	55	56	0	1	0.48	3,302	1,578
76			October	306	285	55	56	(3.95)	3,310	(13,089)
77			November	651	628	306	285	(10.18)	3,372	(34,328)
78			December	1,120	1,006	651	628	(28.95)	3,449	(99,856)
79			January	1,154	1,056	1,120	1,006	(49.05)	3,448	(169,124)
80			February	785	855	1,154	1,056	(10.96)	3,407	(37,339)
81			March	609	607	785	855	17.70	3,384	59,913
82			April	377	341	609	607	(7.76)	3,363	(26,091)
83			Total	5,166	4,942	5,189	4,942		40,497	(372,543)
84										
85	LGS	Kansas City - MCI	May	109	100	400	341	(206.89)	242	(50,066)
86			June	0	7	109	100	(3.94)	244	(960)
87			July	0	0	0	7	21.31	244	5,199
88			August	0	1	0	0	3.14	245	768
89			September	55	56	0	1	7.02	245	1,719
90			October	306	285	55	56	(68.64)	243	(16,680)
91			November	651	628	306	285	(142.57)	244	(34,786)
92			December	1,120	1,006	651	628	(457.06)	245	(111,979)
93			January	1,154	1,056	1,120	1,006	(671.91)	241	(161,931)
94			February	785	855	1,154	1,056	(51.85)	244	(12,653)
95			March	609	607	785	855	202.76	242	49,067
96			April	377	341	609	607	(128.07)	242	(30,994)
97			Total	5,166	4,942	5,189	4,942		2,921	(363,296)
98										
99	LGS	Joplin - Joplin	May	68	59	309	244	(337.26)	32	(10,792)
100			June	0	3	68	59	(27.76)	32	(888)
101			July	0	0	0	3	15.03	31	466
102			August	0	1	0	0	3.11	31	96
103			September	21	36	0	1	61.09	31	1,894
104			October	211	205	21	36	45.04	31	1,396
105			November	547	479	211	205	(294.43)	30	(8,833)
106			December	878	831	547	479	(503.65)	31	(15,613)
107			January	1,014	873	878	831	(766.97)	31	(23,776)
108			February	613	678	1,014	873	(407.12)	31	(12,621)
109			March	462	469	613	678	332.06	31	10,294
110			April	298	244	462	469	(175.69)	29	(5,095)
111			Total	4,112	3,878	4,123	3,878		371	(63,472)
112										
113	LGS	St Joseph - MCI	May	109	100	400	341	(347.63)	27	(9,386)
114			June	0	7	109	100	(40.28)	27	(1,088)
115			July	0	0	0	7	39.47	26	1,026
116			August	0	1	0	0	2.29	26	59
117			September	55	56	0	1	6.70	26	174
118			October	306	285	55	56	(28.47)	26	(740)
119			November	651	628	306	285	(160.12)	26	(4,163)
120			December	1,120	1,006	651	628	(324.16)	26	(8,428)
121			January	1,154	1,056	1,120	1,006	(809.64)	26	(21,051)
122			February	785	855	1,154	1,056	(430.83)	26	(11,202)
123			March	609	607	785	855	393.40	26	10,228
124			April	377	341	609	607	(72.62)	26	(1,888)
125			Total	5,166	4,942	5,189	4,942		314	(46,458)
126										
127	LV	Kansas City - MCI	May	109	100	400	341	(206.89)	354	(73,238)
128			June	0	7	109	100	(3.94)	355	(1,397)
129			July	0	0	0	7	21.31	352	7,500
130			August	0	1	0	0	3.14	356	1,116
131			September	55	56	0	1	7.02	356	2,498
132			October	306	285	55	56	(68.64)	356	(24,436)
133			November	651	628	306	285	(142.57)	355	(50,611)
134			December	1,120	1,006	651	628	(457.06)	354	(161,798)
135			January	1,154	1,056	1,120	1,006	(671.91)	354	(237,857)
136			February	785	855	1,154	1,056	(51.85)	354	(18,357)
137			March	609	607	785	855	202.76	354	71,775
138			April	377	341	609	607	(128.07)	353	(45,210)
139			Total	5,166	4,942	5,189	4,942		4,253	(530,014)
140										

Line No.	Rate Class	Sales District - Weather Station	2008 Month	HDD Current Month		HDD Previous Month		Adjustment Ccf/cust.	2009 TY # of bills	Throughput Adjustment Ccf [H]x[I]
				Actual	Normal	Actual	Normal			
				HDD	HDD	HDD	HDD			
141	LV	Joplin - Joplin			11,050		0.000			
142			May	68	59	309	244	(337.26)	100	(33,726)
143			June	0	3	68	59	(27.76)	100	(2,776)
144			July	0	0	0	3	15.03	100	1,503
145			August	0	1	0	0	3.11	100	311
146			September	21	36	0	1	61.09	101	6,170
147			October	211	205	21	38	45.04	101	4,549
148			November	547	479	211	205	(294.43)	101	(29,738)
149			December	878	831	547	479	(503.65)	101	(50,868)
150			January	1,014	873	878	831	(766.97)	101	(77,464)
151			February	613	678	1,014	873	(407.12)	101	(41,119)
152			March	462	469	613	678	332.06	101	33,538
153			April	298	244	462	469	(175.69)	101	(17,744)
154			Total	4,112	3,878	4,123	3,878		1,208	(207,365)
155	LV	St Joseph - MCI			0.000		12.726			
156			May	109	100	400	341	(347.63)	41	(14,253)
157			June	0	7	109	100	(40.28)	41	(1,652)
158			July	0	0	0	7	39.47	41	1,618
159			August	0	1	0	0	2.29	41	94
160			September	55	56	0	1	6.70	41	275
161			October	306	285	55	56	(28.47)	41	(1,167)
162			November	651	628	306	285	(160.12)	41	(6,565)
163			December	1,120	1,006	651	628	(324.16)	41	(13,291)
164			January	1,154	1,056	1,120	1,006	(809.64)	41	(33,195)
165			February	785	855	1,154	1,056	(430.83)	41	(17,664)
166			March	609	607	785	855	393.40	41	16,129
167			April	377	341	609	607	(72.62)	41	(2,978)
168			Total	5,166	4,942	5,189	4,942		492	(72,648)
169						RES	Summer		432,160	(3,668,862)
170							Winter		443,113	(11,591,084)
171						SGS	Summer		60,589	(1,353,261)
172							Winter		63,033	(4,355,719)
173						LGS	Summer		301	(115,780)
174							Winter		300	(357,446)
175						LVS	Summer		496	(192,943)
176							Winter		496	(617,084)
177						Total Adjustment				(22,252,179)

Missouri Gas Energy
Calculation of Weather Normalization Adjustment

Update Schedule LWL 4
Sheet 4

Line No.	Description	Per Books Deliveries			Adjustment to Deliveries			Margin Existing Rates		Adjustment to Margin Revenues
		Total	First Step	Balance	Total	First Step	Balance	First Step	Balance	
		Ccf	Ccf	Ccf	Ccf	Ccf	Ccf	\$/Ccf	\$/Ccf	
1	Residential									
2	Summer	88,891,510	88,891,510		(3,668,862)	(3,668,862)		-		-
3	Winter	276,653,841	276,653,841		(11,591,084)	(11,591,084)		-		-
4	Total Residential	365,545,351	365,545,351	-	(15,259,946)	(15,259,946)	-			-
5	Small General Service									
6	Sales									
7	Summer	39,420,013	26,785,190	12,634,823	(1,298,130)	(882,056)	(416,074)	0.12297	0.11103	(154,663)
8	Winter	102,529,552	59,227,018	43,302,534	(4,226,324)	(2,441,370)	(1,784,954)	0.17950	0.16752	(737,241)
9	Total Sales	141,949,565	86,012,208	55,937,357	(5,524,454)	(3,323,426)	(2,201,028)			(891,905)
10	Transportation									
11	Summer	1,963,933	1,137,554	826,379	(55,131)	(31,933)	(23,198)	0.12697	0.11503	(6,723)
12	Winter	7,218,226	1,813,315	5,404,911	(129,395)	(32,506)	(96,889)	0.18350	0.17152	(22,583)
13	Total Transportation	9,182,159	2,950,869	6,231,290	(184,526)	(64,439)	(120,087)			(29,306)
14	Total Small General Service	151,131,724	88,963,077	62,168,647	(5,708,980)	(3,387,865)	(2,321,115)			(921,211)
15	Large General Service									
16	Sales									
17	Summer	3,990,779	3,990,779		(107,731)	(107,731)		0.08892		(9,579)
18	Winter	8,663,420	8,663,420		(318,584)	(318,584)		0.14498		(46,188)
19	Total Sales	12,654,199	12,654,199	-	(426,314)	(426,314)	-			(55,768)
20	Transportation									
21	Summer	298,168	298,168		(8,049)	(8,049)		0.09292		(748)
22	Winter	1,056,815	1,056,815		(38,863)	(38,863)		0.14898		(5,790)
23	Total Transportation	1,354,983	1,354,983	-	(46,912)	(46,912)	-			(6,538)
24	Total Large General Service	14,009,182	14,009,182	-	(473,226)	(473,226)	-			(62,305)
25	Large Volume									
26	Sales									
27	Summer	968,490	763,050	205,440	(1,509)	(1,189)	(320)	0.03294	0.02174	(46)
28	Winter	1,808,340	1,056,840	751,500	(8,926)	(5,217)	(3,709)	0.05209	0.04088	(423)
29	Total Sales	2,776,830	1,819,890	956,940	(10,435)	(6,405)	(4,029)			(469)
30	Transportation									
31	Summer	122,882,240	38,836,160	84,046,080	(191,434)	(60,502)	(130,933)	0.03231	0.02093	(4,695)
32	Winter	123,207,590	39,527,090	83,680,500	(608,158)	(195,108)	(413,051)	0.05118	0.03801	(25,686)
33	Total Transportation	246,089,830	78,363,250	167,726,580	(799,593)	(255,609)	(543,983)			(30,381)
34	Total Large Volume	248,866,660	80,183,140	168,683,520	(810,027)	(262,014)	(548,013)			(30,850)
35	Grand Total	779,552,917	548,700,750	230,852,167	(22,252,179)	(19,383,051)	(2,869,128)			(1,014,366)

Update Schedule LVL 5
Street 1

Line No	Description	RES	SSS	LGS	LV	RES	SSS	LGS	LV	RES	SSS	LGS	LV	RES	SSS	LGS	LV
1	NORMALIZED																
2	Dec-07	441,504	64,560	306	483	74,909,448	30,393,472	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
3	Jan-08	442,438	65,438	304	483	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
4	Feb-08	442,085	65,299	304	483	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
5	Mar-08	442,085	65,299	304	483	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
6	Apr-08	442,085	65,299	302	484	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
7	May-08	442,085	65,299	302	484	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
8	Jun-08	442,085	65,299	302	484	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
9	Jul-08	442,085	65,299	302	484	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
10	Aug-08	442,085	65,299	302	484	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
11	Sep-08	442,085	65,299	302	484	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
12	Oct-08	442,085	65,299	302	484	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
13	Nov-08	442,085	65,299	302	484	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
14	Dec-08	442,085	65,299	302	484	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
15	Jan-09	442,085	65,299	301	486	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
16	Feb-09	442,085	65,299	301	486	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
17	Mar-09	442,085	65,299	299	486	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
18	Apr-09	442,085	65,299	297	485	74,479,620	30,301,822	2,710,452	34,539,729	(5,185,331)	(1,922,210)	(178,024)	(288,280)	69,724,157	28,391,282	2,534,828	31,070,448
Total 2008																	
19	Change Dec-07 to Dec-08	1,783	(1,384)	(7)	3												
20	Change Apr-08 to Apr-09	(1,060)	(1,549)	(9)	1												
21	YE Dec-09	5,246,661	746,876	3,627	5,645	381,144,438	162,429,375	15,321,340	264,349,301	(15,259,946)	(5,708,880)	(473,228)	(810,027)	350,285,405	146,422,744	13,535,956	247,592,258
22	YE Apr-09	5,240,686	739,286	3,606	5,593	395,545,351	151,131,724	14,008,182	249,402,285								
USE PER CUSTOMER - CCF/CUSTOMER																	
23	Jan-08																
24	Feb-08																
25	Mar-08																
26	Apr-08																
27	May-08																
28	Jun-08																
29	Jul-08																
30	Aug-08																
31	Sep-08																
32	Oct-08																
33	Nov-08																
34	Dec-08																
35	Jan-09																
36	Feb-09																
37	Mar-09																
38	Apr-09																
ANNUALIZATION ADJUSTMENT																	
40	May-09	(886)	(1,437)	(5)	1												
41	Jun-09	(886)	(1,308)	(4)	1												
42	Jul-09	(886)	(1,041)	(3)	1												
43	Aug-09	(886)	(715)	(2)	1												
44	Sep-09	(886)	(487)	(1)	1												
45	Oct-09	(886)	(259)	(0)	1												
46	Nov-09	(886)	(130)	(0)	1												
47	Dec-09	(886)	(0)	(0)	1												
48	Jan-10	(886)	(0)	(0)	1												
49	Feb-10	(886)	(0)	(0)	1												
50	Mar-10	(886)	(0)	(0)	1												
51	Apr-10	(886)	(0)	(0)	1												
52	May-10	(886)	(0)	(0)	1												
53	Jun-10	(886)	(0)	(0)	1												
54	Jul-10	(886)	(0)	(0)	1												
55	Aug-10	(886)	(0)	(0)	1												
56	Sep-10	(886)	(0)	(0)	1												
57	Oct-10	(886)	(0)	(0)	1												
58	Nov-10	(886)	(0)	(0)	1												
59	Dec-10	(886)	(0)	(0)	1												
60	Jan-11	(886)	(0)	(0)	1												
61	Feb-11	(886)	(0)	(0)	1												
62	Mar-11	(886)	(0)	(0)	1												
63	Apr-11	(886)	(0)	(0)	1												
64	May-11	(886)	(0)	(0)	1												
65	Jun-11	(886)	(0)	(0)	1												
66	Jul-11	(886)	(0)	(0)	1												
67	Aug-11	(886)	(0)	(0)	1												
Total 2010																	
ANNUALIZED/NORMALIZED																	
54	May-08	426,137	60,814	296	496												
55	Jun-08	427,241	59,741	296	497												
56	Jul-08	431,241	58,939	297	498												
57	Aug-08	426,784	58,377	298	499												
58	Sep-08	426,784	58,377	298	499												
59	Oct-08	426,784	58,377	298	499												
60	Nov-08	426,784	58,377	298	499												
61	Dec-08	426,784	58,377	298	499												
62	Jan-09	426,784	58,377	298	499												
63	Feb-09	426,784	58,377	298	499												
64	Mar-09	426,784	58,377	298	499												
65	Apr-09	426,784	58,377	298	499												
66	May-09	426,784	58,377	298	499												
67	Jun-09	426,784	58,377	298	499												
68	Jul-09	426,784	58,377	298	499												
69	Aug-09	426,784	58,377	298	499												
70	Sep-09	426,784	58,377	298	499												
71	Oct-09	426,784	58,377	298	499												
72	Nov-09	426,784	58,377	298	499												
73	Dec-09	426,784	58,377	298	499												
74	Jan-10	426,784	58,377	298	499												
75	Feb-10	426,784	58,377	298	499												
76	Mar-10	426,784	58,377	298	499												
77	Apr-10	426,784	58,377	298	499												
78	May-10	426,784	58,377	298	499												
79	Jun-10	426,784	58,377	298	499												
80	Jul-10	426,784	58,377	298	499												
81	Aug-10	426,784	58,377	298	499												
82	Sep-10	426,784	58,377	298	499												
83	Oct-10	426,784	58,377	298	499												
84	Nov-10	426,784	58,377	298	499												
85	Dec-10	426,784	58,377	298	499												
86	Jan-11	426,784	58,377	298	499												
87	Feb-11	426,784	58,377	298	4												

Line No.	Description	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]
		Number of Meters	Annualization Adjustment	Weather Normalized Deliveries			Annualization Adjustment to Deliveries			Margin Existing Rates			Adjustment to Margin Revenues	
				Per Books	Total	First Step	Balance	Total	First Step	Balance	Cust Charge	First Step		Balance
1	Residential													
2	Summer		3,025,123	(4,565)	85,222,648	85,222,648	-	(168,312)	(168,312)		24.62	-		(112,390)
3	Winter		2,215,563	(1,332)	265,062,757	265,062,757	-	(75,585)	(75,585)		24.62	-		(32,794)
4	Total Residential		5,240,686	(5,897)	350,285,405	350,285,405	-	(243,897)	(243,897)	-				(145,184)
5	Small General Service													
6	Sales													
7	Summer		419,186	(6,575)	38,121,883	25,903,134	12,218,749	(207,214)	(140,798)	(66,416)	18.39	0.12297	0.11103	(145,594)
8	Winter		311,506	(1,917)	98,303,228	56,785,648	41,517,580	(534,334)	(308,662)	(225,672)	18.39	0.17950	0.16752	(128,472)
9	Total Sales		730,692	(8,492)	136,425,111	82,688,782	53,736,329	(741,548)	(449,461)	(292,087)				(274,066)
10	Transportation													
11	Summer		4,938	(77)	1,908,802	1,105,621	803,181	(77,656)	(44,980)	(32,676)	18.39	0.12697	0.11503	(10,894)
12	Winter		3,658	(23)	7,088,831	1,780,809	5,308,022	(288,398)	(72,449)	(215,948)	18.39	0.18350	0.17152	(50,748)
13	Total Transportation		8,596	(100)	8,997,633	2,886,430	6,111,203	(366,054)	(117,430)	(248,624)				(61,642)
14	Total Small General Service		739,288	(8,592)	145,422,744	85,575,212	59,847,532	(1,107,602)	(566,890)	(540,712)				(335,708)
15	Large General Service													
16	Sales													
17	Summer		1,882	(20)	3,883,048	3,883,048	-	(15,646)	(15,646)	-	108.91	0.08892		(3,532)
18	Winter		1,341	(5)	8,344,836	8,344,836	-	(33,625)	(33,625)	-	108.91	0.14498		(5,459)
19	Total Sales		3,223	(25)	12,227,885	12,227,885	-	(49,271)	(49,271)	-				(8,992)
20	Transportation													
21	Summer		224	(2)	290,119	290,119	-	(5,321)	(5,321)	-	108.91	0.09292		(749)
22	Winter		159	(1)	1,017,952	1,017,952	-	(18,671)	(18,671)	-	108.91	0.14898		(2,851)
23	Total Transportation		383	(3)	1,308,071	1,308,071	-	(23,992)	(23,992)	-				(3,600)
24	Total Large General Service		3,606	(28)	13,535,956	13,535,956	-	(73,263)	(73,263)	-				(12,592)
25	Large Volume													
26	Sales													
27	Summer		77	-	966,981	761,861	205,120	37,219	29,324	7,895	860.95	0.03294	0.02174	1,138
28	Winter		55	-	1,799,414	1,051,623	747,791	69,260	40,477	28,783	860.95	0.05209	0.04088	3,285
29	Total Sales		132	-	2,766,395	1,813,485	952,911	106,479	69,801	36,678				4,423
30	Transportation													
31	Summer		3,395	6	122,690,806	38,775,658	83,915,147	51,493	16,274	35,219	761.54	0.03233	0.02091	5,832
32	Winter		2,426	-	122,599,432	39,331,982	83,267,449	51,454	16,507	34,947	764.19	0.05128	0.03859	2,195
33	Total Transportation		5,821	6	245,290,237	78,107,641	167,182,597	102,947	32,781	70,166				8,027
34	Total Large Volume		5,953	6	248,056,633	79,921,126	168,135,507	209,426	102,583	106,843				12,450
35	Grand Total		5,989,533	(14,511)	757,300,738	529,317,699	227,983,039	(1,215,336)	(781,468)	(433,868)				(481,034)

Missouri Gas Energy
Calculation of Reconciliation Adjustment

Line No.	[A] Description	[B] Per Books Margin Revenue \$	[C] Margin Adjustment		[E] Normalized & Annualized Margin \$	[F] Calculated Margin \$
			Weather Adjustment \$	Customer Annualization \$		
1	Residential	130,014,950	-	(145,184)	129,869,766	128,880,708
2	Small General Service					
3	Sales	36,763,939	(891,905)	(274,066)	35,597,969	34,847,892
4	Transportation	1,687,843	(29,306)	(61,642)	1,596,895	1,587,879
5	Total SGS	38,451,782	(921,211)	(335,708)	37,194,863	36,435,771
6	Large General Service					
7	Sales	1,978,619	(55,768)	(8,992)	1,913,859	1,895,681
8	Transportation	228,076	(6,538)	(3,600)	217,938	219,179
9	Total LGS	2,206,695	(62,305)	(12,592)	2,131,798	2,114,860
10	Large Volume					
11	Sales	254,240	(469)	4,423	258,193	229,019
12	Transportation	12,685,081	(30,381)	8,027	12,662,727	12,665,236
13	Total Large Volume	12,939,321	(30,850)	12,450	12,920,920	12,894,255
14	Total 2008 Per Books	183,612,748	(1,014,366)	(481,034)	182,117,347	180,325,593
15	Final Bill Margin					2,377,858
16	Calculated Margin Adjusted for Final Bills					182,703,452
17	Variance with Per Books Margin					(586,104)
18	Reconciliation Adjustment					
19	Variance with Per Books Margin					(586,104)
20	Final Bill Margin					2,377,858
21	Net Reconciliation Adjustment					1,791,754
22	Percentage Adjustment					0.99%

Missouri Gas Energy
Calculation of Proforma Margin Revenues Under Existing Rates
12 Months Ended April 30, 2009

Update Schedule LWL 7

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
Line No.	Rate Class	Rate Code	Season	Annualized/Normalized Billing Units			Present Rates			Pro Forma Margin Revenue Under Present Rates				
				Number of Meters Billed	Throughput		Customer Charge	Volumetric Delivery Charge		Customer Charge	Volumetric Delivery Charge	Total Margin	Reconciliation Adjustment	Adjusted Total
					First Step	Balance Step		First Step	Balance Step					
					Ccf	Ccf	\$/Meter Billed	\$/Ccf	\$/Ccf	\$	\$	\$	\$	\$
1	Residential												0.99%	
2	608,618	All		5,234,789	350,041,508		24.62	-		128,880,505	-	128,880,505		
3	623 - UGL	All		55			3.68			202	-	202		
4	Total RES			5,234,844	350,041,508	-				128,880,708	-	128,880,708	1,280,586	130,161,294
5	Small General Service													
6	All Sales	Summer		412,611	25,580,109	12,066,375	18.39	0.12297	0.11103	7,587,925	4,485,316	12,073,240		
7		Winter		309,589	58,553,143	41,347,589	18.39	0.17950	0.16752	5,693,333	17,077,837	22,771,170		
8	623 - UGL			946			3.68			3,481	-	3,481		
9	674	Summer		4,861	1,086,375	789,200	18.39	0.12697	0.11503	89,388	228,719	318,104		
10		Winter		3,635	1,731,451	5,180,900	18.39	0.18350	0.17152	66,857	1,202,919	1,269,775		
11	Total SGS			731,642	84,951,078	59,364,064				13,440,981	22,994,790	36,435,771	362,034	36,797,805
12	Large General Service													
13	All Sales	Summer		1,862	3,848,196		108.91	0.08892		202,827	342,182	545,009		
14		Winter		1,336	8,312,923		108.91	0.14498		145,464	1,205,208	1,350,672		
15	694	Summer		222	287,515		108.91	0.09292		24,141	26,716	50,857		
16		Winter		158	1,014,059		108.91	0.14898		17,247	151,075	168,322		
17	Total LGS			3,578	13,462,693					389,680	1,725,180	2,114,860	21,014	2,135,873
18	Large Volume													
19	680	Summer		77	763,050	205,440	860.95	0.03294	0.02174	66,293	29,601	95,894		
20		Winter		55	1,056,840	751,500	860.95	0.05209	0.04088	47,352	85,772	133,124		
21	Trans	Summer		3,404	38,512,551	83,858,994	761.54	0.03233	0.02091	2,592,282	2,998,602	5,590,884		
22		Winter		2,423	38,575,920	84,077,388	764.19	0.05128	0.03859	1,851,632	5,222,720	7,074,352		
23	Total LV			5,959	78,908,362	168,893,322				4,557,560	8,336,695	12,894,255	128,120	13,022,375
24	Grand Total			5,975,968	527,363,841	228,257,388				147,268,928	33,056,665	180,325,593	1,791,754	182,117,347