

MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT
COST OF SERVICE
REVENUE REQUIREMENT

APPENDIX 2

Support for Staff
Cost of
Capital Recommendations

SUMMIT NATURAL GAS OF MISSOURI, INC.

CASE NO. GR-2014-0086

Jefferson City, Missouri
May 2014

NP

AN ANALYSIS OF THE COST OF CAPITAL

FOR

SUMMIT NATURAL GAS OF MISSOURI, INC

CASE NO. GR-2014-0086

SCHEDULES

BY

DAVID MURRAY

UTILITY SERVICES DEPARTMENT

REGULATORY REVIEW DIVISION

MISSOURI PUBLIC SERVICE COMMISSION

MAY 2014

SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086

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**SUMMIT NATURAL GAS OF MISSOURI
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Federal Reserve Discount Rates Changes and Federal Reserve Funds Rates Changes

Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate
01/01/83	8.50%	
12/31/83	8.50%	
04/09/84	9.00%	
11/21/84	8.50%	
12/24/84	8.00%	
05/20/85	7.50%	
03/07/86	7.00%	
04/21/86	6.50%	
07/11/86	6.00%	
08/21/86	5.50%	
09/04/87	6.00%	
08/09/88	6.50%	
02/24/89	7.00%	
07/13/90		8.00% *
10/29/90		7.75%
11/13/90		7.50%
12/07/90		7.25%
12/18/90		7.00%
12/19/90	6.50%	
01/09/91		6.75%
02/01/91	6.00%	6.25%
03/08/91		6.00%
04/30/91	5.50%	5.75%
08/06/91		5.50%
09/13/91	5.00%	5.25%
10/31/91		5.00%
11/06/91	4.50%	4.75%
12/06/91		4.50%
12/20/91	3.50%	4.00%
04/09/92		3.75%
07/02/92	3.00%	3.25%
09/04/92		3.00%
01/01/93		
12/31/93	No Changes	No Changes
02/04/94		3.25%
03/22/94		3.50%
04/18/94		3.75%
05/17/94	3.50%	4.25%
08/16/94	4.00%	4.75%
11/15/94	4.75%	5.50%
02/01/95	5.25%	6.00%
07/06/95		5.75%
12/19/95		5.50%
01/31/96	5.00%	5.25%
03/25/97		5.50%
12/12/97	5.00%	
01/09/98	5.00%	
03/06/98	5.00%	
09/29/98		5.25%
10/15/98	4.75%	5.00%
11/17/98	4.50%	4.75%

Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate
06/30/99	4.50%	5.00%
08/24/99	4.75%	5.25%
11/16/99	5.00%	5.50%
02/02/00	5.25%	5.75%
03/21/00	5.50%	6.00%
05/19/00	6.00%	6.50%
01/03/01	5.75%	6.00%
01/04/01	5.50%	6.00%
01/31/01	5.00%	5.50%
03/20/01	4.50%	5.00%
04/18/01	4.00%	4.50%
05/15/01	3.50%	4.00%
06/27/01	3.25%	3.75%
08/21/01	3.00%	3.50%
09/17/01	2.50%	3.00%
10/02/01	2.00%	2.50%
11/06/01	1.50%	2.00%
12/11/01	1.25%	1.75%
11/06/02	0.75%	1.25%
01/09/03	2.25%**	1.25%
06/25/03	2.00%	1.00%
06/30/04	2.25%	1.25%
08/10/04	2.50%	1.50%
09/21/04	2.75%	1.75%
11/10/04	3.00%	2.00%
12/14/04	3.25%	2.25%
02/02/05	3.50%	2.50%
03/22/05	3.75%	2.75%
05/03/05	4.00%	3.00%
06/30/05	4.25%	3.25%
08/09/05	4.50%	3.50%
09/20/05	4.75%	3.75%
11/01/05	5.00%	4.00%
12/13/05	5.25%	4.25%
01/31/06	5.50%	4.50%
03/28/06	5.75%	4.75%
05/10/06	6.00%	5.00%
06/29/06	6.25%	5.25%
08/17/07	5.75%	5.25%
09/18/07	5.25%	4.75%
10/31/07	5.00%	4.50%
12/11/07	4.75%	4.25%
01/22/08	4.00%	3.50%
01/30/08	3.50%	3.00%
03/16/08	3.25%	
03/18/08	2.50%	2.25%
04/30/08	2.25%	2.00%
10/08/08	1.75%	1.50%
10/28/08	1.25%	1.00%
11/29/08	1.50%	1.25%
12/30/08	0.50%	0% - .25%
02/19/10	0.75%	0% - .25%

* Staff began tracking the Federal Funds Rate.

**Revised discount window program begins. Reflects rate on primary credit. This revised discount window policy results in incomparability of the discount rates after January 9, 2003 to discount rates before January 9, 2003.

Source:

Federal Reserve Discount rate

<http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html>

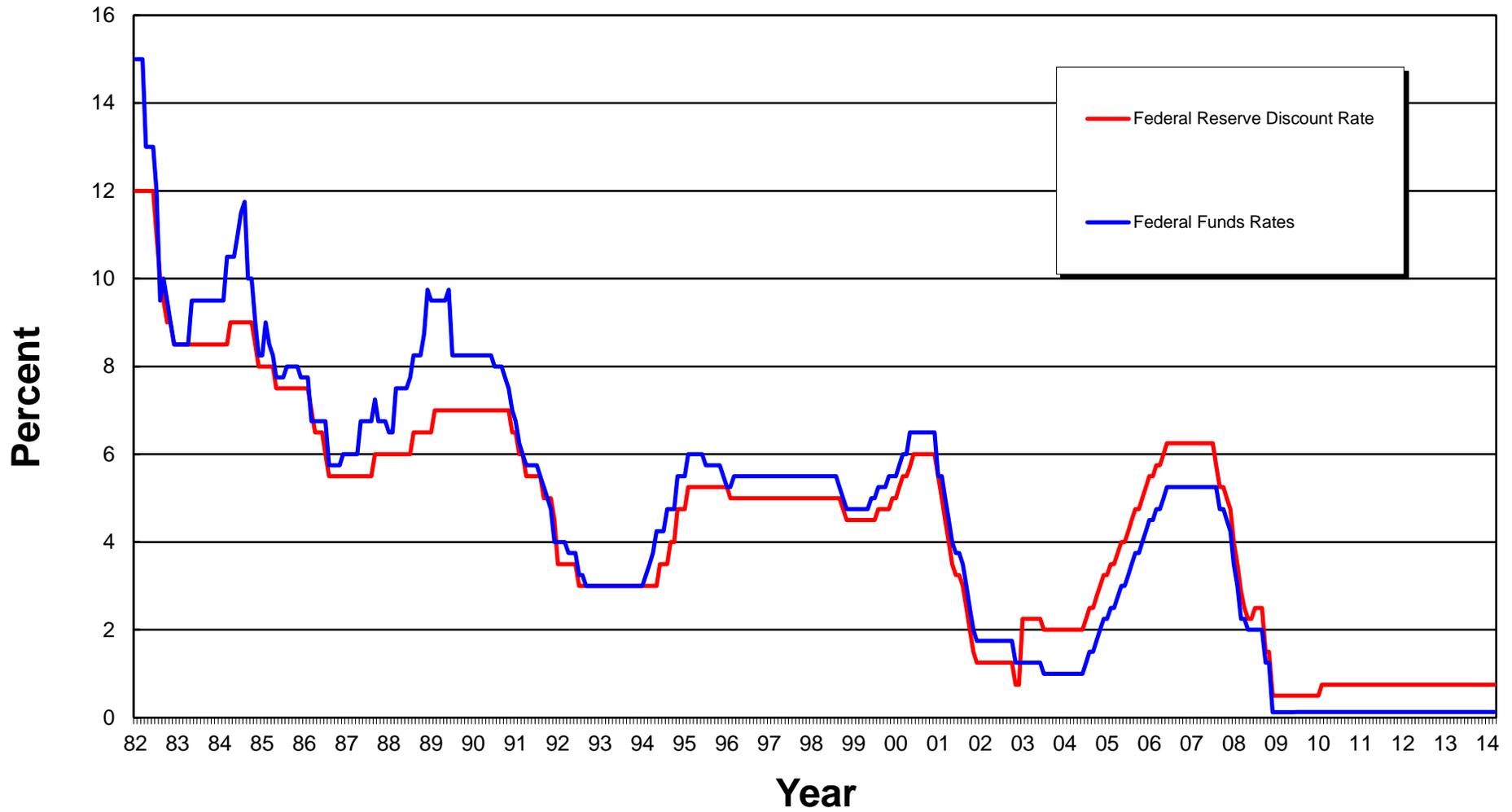
Federal Reserve Funds rate

<http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html>

Note: Interest rates as of December 31 for each year are underlined.

SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086

Federal Reserve Discount Rates and Federal Funds Rates
1982 - 2014



**SUMMIT NATURAL GAS OF MISSOURI
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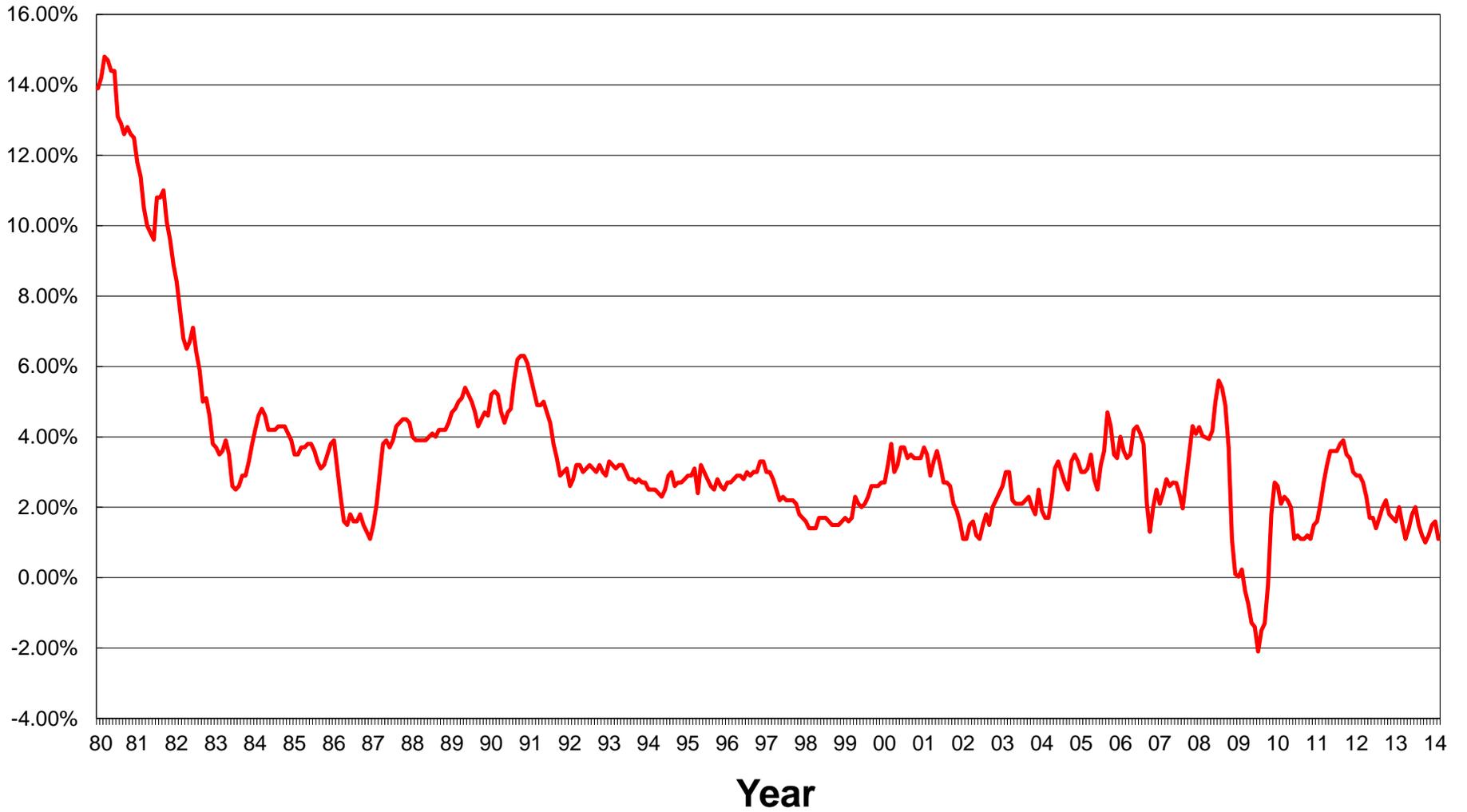
Rate of Inflation

Mo/Year	Rate (%)	Mo/Year	Rate (%)																
Jan 1980	13.90	Jan 1984	4.20	Jan 1988	4.00	Jan 1992	2.60	Jan 1996	2.70	Jan 2000	2.70	Jan 2004	1.90	Jan 2008	4.30	Jan 2012	2.90		
Feb	14.20	Feb	4.60	Feb	3.90	Feb	2.80	Feb	2.70	Feb	3.20	Feb	1.70	Feb	4.00	Feb	2.90		
Mar	14.80	Mar	4.80	Mar	3.90	Mar	3.20	Mar	2.80	Mar	3.70	Mar	1.70	Mar	4.00	Mar	2.70		
Apr	14.70	Apr	4.60	Apr	3.90	Apr	3.20	Apr	2.90	Apr	3.00	Apr	2.30	Apr	3.90	Apr	2.30		
May	14.40	May	4.20	May	3.90	May	3.00	May	2.90	May	3.20	May	3.10	May	4.20	May	1.70		
Jun	14.40	Jun	4.20	Jun	4.00	Jun	3.10	Jun	2.80	Jun	3.70	Jun	3.30	Jun	5.00	Jun	1.70		
Jul	13.10	Jul	4.20	Jul	4.10	Jul	3.20	Jul	3.00	Jul	3.70	Jul	3.00	Jul	5.60	Jul	1.40		
Aug	12.90	Aug	4.30	Aug	4.00	Aug	3.10	Aug	2.90	Aug	3.40	Aug	2.70	Aug	5.40	Aug	1.70		
Sep	12.60	Sep	4.30	Sep	4.20	Sep	3.00	Sep	3.00	Sep	3.50	Sep	2.50	Sep	4.90	Sep	2.00		
Oct	12.80	Oct	4.30	Oct	4.20	Oct	3.20	Oct	3.00	Oct	3.40	Oct	3.30	Oct	3.70	Oct	2.20		
Nov	12.60	Nov	4.10	Nov	4.20	Nov	3.00	Nov	3.30	Nov	3.40	Nov	3.50	Nov	1.10	Nov	1.80		
Dec	12.50	Dec	3.90	Dec	4.40	Dec	2.90	Dec	3.30	Dec	3.40	Dec	3.30	Dec	0.10	Dec	1.70		
Jan 1981	11.80	Jan 1985	3.50	Jan 1989	4.70	Jan 1993	3.30	Jan 1997	3.00	Jan 2001	3.70	Jan 2005	3.00	Jan 2009	0.00	Jan 2013	1.60		
Feb	11.40	Feb	3.50	Feb	4.80	Feb	3.20	Feb	3.00	Feb	3.50	Feb	3.00	Feb	0.20	Feb	2.00		
Mar	10.50	Mar	3.70	Mar	5.00	Mar	3.10	Mar	2.80	Mar	2.90	Mar	3.10	Mar	-0.40	Mar	1.50		
Apr	10.00	Apr	3.70	Apr	5.10	Apr	3.20	Apr	2.50	Apr	3.30	Apr	3.50	Apr	-0.70	Apr	1.10		
May	9.80	May	3.80	May	5.40	May	3.20	May	2.20	May	3.60	May	2.80	May	-1.28	May	1.40		
Jun	9.60	Jun	3.80	Jun	5.20	Jun	3.00	Jun	2.30	Jun	3.20	Jun	2.50	Jun	-1.40	Jun	1.80		
Jul	10.80	Jul	3.60	Jul	5.00	Jul	2.80	Jul	2.20	Jul	2.70	Jul	2.20	Jul	-2.10	Jul	2.00		
Aug	10.80	Aug	3.30	Aug	4.70	Aug	2.80	Aug	2.20	Aug	2.70	Aug	3.60	Aug	-1.50	Aug	1.50		
Sep	11.00	Sep	3.10	Sep	4.30	Sep	2.70	Sep	2.20	Sep	2.60	Sep	4.70	Sep	-1.30	Sep	1.20		
Oct	10.10	Oct	3.20	Oct	4.50	Oct	2.80	Oct	2.10	Oct	2.10	Oct	4.30	Oct	-0.20	Oct	1.00		
Nov	9.60	Nov	3.50	Nov	4.70	Nov	2.70	Nov	1.80	Nov	1.90	Nov	3.50	Nov	1.80	Nov	1.20		
Dec	8.90	Dec	3.80	Dec	4.60	Dec	2.70	Dec	1.70	Dec	1.60	Dec	3.40	Dec	2.70	Dec	1.50		
Jan 1982	8.40	Jan 1986	3.90	Jan 1990	5.20	Jan 1994	2.50	Jan 1998	1.60	Jan 2002	1.10	Jan 2006	4.00	Jan 2010	2.60	Jan 2014	1.60		
Feb	7.60	Feb	3.10	Feb	5.30	Feb	2.50	Feb	1.40	Feb	1.10	Feb	3.60	Feb	2.10	Feb	1.10		
Mar	6.80	Mar	2.30	Mar	5.20	Mar	2.50	Mar	1.40	Mar	1.50	Mar	3.40	Mar	2.30				
Apr	6.50	Apr	1.60	Apr	4.70	Apr	2.40	Apr	1.40	Apr	1.60	Apr	3.50	April	2.20				
May	6.70	May	1.50	May	4.40	May	2.30	May	1.70	May	1.20	May	4.20	May	2.00				
Jun	7.10	Jun	1.80	Jun	4.70	Jun	2.50	Jun	1.70	Jun	1.10	June	4.30	Jun	1.10				
Jul	6.40	Jul	1.60	Jul	4.80	Jul	2.90	Jul	1.70	Jul	1.50	July	4.10	Jul	1.20				
Aug	5.90	Aug	1.60	Aug	5.60	Aug	3.00	Aug	1.60	Aug	1.80	Aug	3.80	Aug	1.10				
Sep	5.00	Sep	1.80	Sep	6.20	Sep	2.60	Sep	1.50	Sep	1.50	Sep	2.10	Sep	1.10				
Oct	5.10	Oct	1.50	Oct	6.30	Oct	2.70	Oct	1.50	Oct	2.00	Oct	1.30	Oct	1.20				
Nov	4.60	Nov	1.30	Nov	6.30	Nov	2.70	Nov	1.50	Nov	2.20	Nov	2.00	Nov	1.10				
Dec	3.80	Dec	1.10	Dec	6.10	Dec	2.80	Dec	1.60	Dec	2.40	Dec	2.50	Dec	1.50				
Jan 1983	3.70	Jan 1987	1.50	Jan 1991	5.70	Jan 1995	2.90	Jan 1999	1.70	Jan 2003	2.60	Jan 2007	2.10	Jan 2011	1.60				
Feb	3.50	Feb	2.10	Feb	5.30	Feb	2.90	Feb	1.60	Feb	3.00	Feb	2.40	Feb	2.10				
Mar	3.60	Mar	3.00	Mar	4.90	Mar	3.10	Mar	1.70	Mar	3.00	Mar	2.80	Mar	2.70				
Apr	3.90	Apr	3.80	Apr	4.90	Apr	2.40	Apr	2.30	Apr	2.20	Apr	2.60	Apr	3.20				
May	3.50	May	3.90	May	5.00	May	3.20	May	2.10	May	2.10	May	2.70	May	3.60				
Jun	2.60	Jun	3.70	Jun	4.70	Jun	3.00	Jun	2.00	Jun	2.10	Jun	2.70	Jun	3.60				
Jul	2.50	Jul	3.90	Jul	4.40	Jul	2.80	Jul	2.10	Jul	2.10	Jul	2.40	Jul	3.60				
Aug	2.60	Aug	4.30	Aug	3.80	Aug	2.60	Aug	2.30	Aug	2.20	Aug	2.00	Aug	3.80				
Sep	2.90	Sep	4.40	Sep	3.40	Sep	2.50	Sep	2.60	Sep	2.30	Sep	2.80	Sep	3.90				
Oct	2.90	Oct	4.50	Oct	2.90	Oct	2.80	Oct	2.60	Oct	2.00	Oct	3.50	Oct	3.50				
Nov	3.30	Nov	4.50	Nov	3.00	Nov	2.60	Nov	2.60	Nov	1.80	Nov	4.30	Nov	3.40				
Dec	3.80	Dec	4.40	Dec	3.10	Dec	2.50	Dec	2.70	Dec	1.90	Dec	4.10	Dec	3.00				

Source: U.S. Dept of Labor, Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers, Change for 12-Month Period, Bureau of Labor Statistics, http://www.bls.gov/schedule/archives/cpi_nr.htm

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

Rate of Inflation
1980 - 2014



**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

Average Yields on AA, A and BBB Public Utility Bonds

Mo/Year	Rate (%)																
Jan 1980	12.12	Jan 1984	13.40	Jan 1988	10.75	Jan 1992	8.67	Jan 1996	7.20	Jan 2000	8.22	Jan 2004	6.23	Jan 2008	6.08	Jan 2012	4.97
Feb	13.48	Feb	13.50	Feb	10.11	Feb	8.77	Feb	7.37	Feb	8.10	Feb	6.17	Feb	6.28	Feb	4.99
Mar	14.33	Mar	14.03	Mar	10.11	Mar	8.84	Mar	7.72	Mar	8.14	Mar	6.01	Mar	6.29	Mar	5.13
Apr	13.50	Apr	14.30	Apr	10.53	Apr	8.79	Apr	7.88	Apr	8.14	Apr	6.38	Apr	6.36	Apr	5.05
May	12.17	May	14.95	May	10.75	May	8.72	May	7.99	May	8.55	May	6.68	May	6.38	May	4.84
Jun	11.87	Jun	15.16	Jun	10.71	Jun	8.64	Jun	8.07	Jun	8.22	Jun	6.53	Jun	6.50	Jun	4.67
Jul	12.12	Jul	14.92	Jul	10.96	Jul	8.46	Jul	8.02	Jul	8.17	Jul	6.34	Jul	6.50	Jul	4.56
Aug	12.82	Aug	14.29	Aug	11.09	Aug	8.34	Aug	7.84	Aug	8.05	Aug	6.18	Aug	6.48	Aug	4.71
Sep	13.29	Sep	14.04	Sep	10.56	Sep	8.32	Sep	8.01	Sep	8.16	Sep	6.01	Sep	6.59	Sep	4.75
Oct	13.53	Oct	13.68	Oct	9.92	Oct	8.44	Oct	7.76	Oct	8.08	Oct	5.95	Oct	7.70	Oct	4.69
Nov	14.07	Nov	13.15	Nov	9.89	Nov	8.53	Nov	7.48	Nov	8.03	Nov	5.97	Nov	7.80	Nov	4.53
Dec	14.48	Dec	12.96	Dec	10.02	Dec	8.36	Dec	7.58	Dec	7.79	Dec	5.93	Dec	6.87	Dec	4.28
Jan 1981	14.22	Jan 1985	12.88	Jan 1989	10.02	Jan 1993	8.23	Jan 1997	7.79	Jan 2001	7.76	Jan 2005	5.80	Jan 2009	6.77	Jan 2013	4.45
Feb	14.84	Feb	13.00	Feb	10.02	Feb	8.00	Feb	7.68	Feb	7.69	Feb	5.64	Feb	6.72	Feb	4.49
Mar	14.86	Mar	13.66	Mar	10.16	Mar	7.85	Mar	7.92	Mar	7.59	Mar	5.86	Mar	6.85	Mar	4.45
Apr	15.32	Apr	13.42	Apr	10.14	Apr	7.76	Apr	8.08	Apr	7.81	Apr	5.72	Apr	6.90	Apr	4.19
May	15.84	May	12.89	May	9.92	May	7.78	May	7.94	May	7.88	May	5.60	May	6.83	May	4.36
Jun	15.27	Jun	11.91	Jun	9.49	Jun	7.68	Jun	7.77	Jun	7.75	Jun	5.39	June	6.54	Jun	4.70
Jul	15.87	Jul	11.88	Jul	9.34	Jul	7.53	Jul	7.52	Jul	7.71	Jul	5.50	July	6.15	Jul	4.90
Aug	16.33	Aug	11.93	Aug	9.37	Aug	7.21	Aug	7.57	Aug	7.57	Aug	5.51	Aug	5.80	Aug	5.00
Sep	16.89	Sep	11.95	Sep	9.43	Sep	7.01	Sep	7.50	Sep	7.73	Sep	5.54	Sep	5.60	Sep	5.05
Oct	16.76	Oct	11.84	Oct	9.37	Oct	6.99	Oct	7.37	Oct	7.64	Oct	5.79	Oct	5.64	Oct	4.94
Nov	15.50	Nov	11.33	Nov	9.33	Nov	7.30	Nov	7.24	Nov	7.61	Nov	5.88	Nov	5.71	Nov	5.04
Dec	15.77	Dec	10.82	Dec	9.31	Dec	7.33	Dec	7.16	Dec	7.86	Dec	5.83	Dec	5.86	Dec	5.09
Jan 1982	16.73	Jan 1986	10.66	Jan 1990	9.44	Jan 1994	7.31	Jan 1998	7.03	Jan 2002	7.69	Jan 2006	5.77	Jan 2010	5.83	Jan 2014	4.91
Feb	16.72	Feb	10.16	Feb	9.66	Feb	7.44	Feb	7.09	Feb	7.62	Feb	5.83	Feb	5.94	Feb	4.79
Mar	16.07	Mar	9.33	Mar	9.75	Mar	7.83	Mar	7.13	Mar	7.83	Mar	5.98	Mar	5.90	Mar	4.74
Apr	15.82	Apr	9.02	Apr	9.87	Apr	8.20	Apr	7.12	Apr	7.74	Apr	6.28	Apr	5.87		
May	15.60	May	9.52	May	9.89	May	8.32	May	7.11	May	7.76	May	6.39	May	5.59		
Jun	16.18	Jun	9.51	Jun	9.69	Jun	8.31	Jun	6.99	Jun	7.67	June	6.39	June	5.62		
Jul	16.04	Jul	9.19	Jul	9.66	Jul	8.47	Jul	6.99	Jul	7.54	July	6.37	July	5.41		
Aug	15.22	Aug	9.15	Aug	9.84	Aug	8.41	Aug	6.96	Aug	7.34	Aug	6.20	Aug	5.10		
Sep	14.56	Sep	9.42	Sep	10.01	Sep	8.65	Sep	6.88	Sep	7.23	Sep	6.03	Sep	5.10		
Oct	13.88	Oct	9.39	Oct	9.94	Oct	8.88	Oct	6.88	Oct	7.43	Oct	6.01	Oct	5.20		
Nov	13.58	Nov	9.15	Nov	9.76	Nov	9.00	Nov	6.96	Nov	7.31	Nov	5.82	Nov	5.45		
Dec	13.55	Dec	8.96	Dec	9.57	Dec	8.79	Dec	6.84	Dec	7.20	Dec	5.83	Dec	5.61		
Jan 1983	13.46	Jan 1987	8.77	Jan 1991	9.56	Jan 1995	8.77	Jan 1999	6.87	Jan 2003	7.13	Jan 2007	5.96	Jan 2011	5.69		
Feb	13.60	Feb	8.81	Feb	9.31	Feb	8.56	Feb	7.00	Feb	6.92	Feb	5.91	Feb	5.82		
Mar	13.28	Mar	8.75	Mar	9.39	Mar	8.41	Mar	7.18	Mar	6.80	Mar	5.87	Mar	5.74		
Apr	13.03	Apr	9.30	Apr	9.30	Apr	8.30	Apr	7.16	Apr	6.68	Apr	6.01	Apr	5.76		
May	13.00	May	9.82	May	9.29	May	7.93	May	7.42	May	6.35	May	6.03	May	5.57		
Jun	13.17	Jun	9.87	Jun	9.44	Jun	7.62	Jun	7.70	Jun	6.21	June	6.34	June	5.52		
Jul	13.28	Jul	10.01	Jul	9.40	Jul	7.73	Jul	7.66	Jul	6.54	July	6.28	July	5.61		
Aug	13.50	Aug	10.33	Aug	9.16	Aug	7.86	Aug	7.86	Aug	6.78	Aug	6.28	Aug	5.26		
Sep	13.35	Sep	11.00	Sep	9.03	Sep	7.62	Sep	7.87	Sep	6.58	Sep	6.24	Sep	5.01		
Oct	13.19	Oct	11.32	Oct	8.99	Oct	7.46	Oct	8.02	Oct	6.50	Oct	6.17	Oct	5.11		
Nov	13.33	Nov	10.82	Nov	8.93	Nov	7.40	Nov	7.86	Nov	6.44	Nov	6.04	Nov	5.00		
Dec	13.48	Dec	10.99	Dec	8.76	Dec	7.21	Dec	8.04	Dec	6.36	Dec	6.23	Dec	4.96		

Source: Mergent Bond Record (through November 2010); BondsOnline (December 2010 to present)

SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086

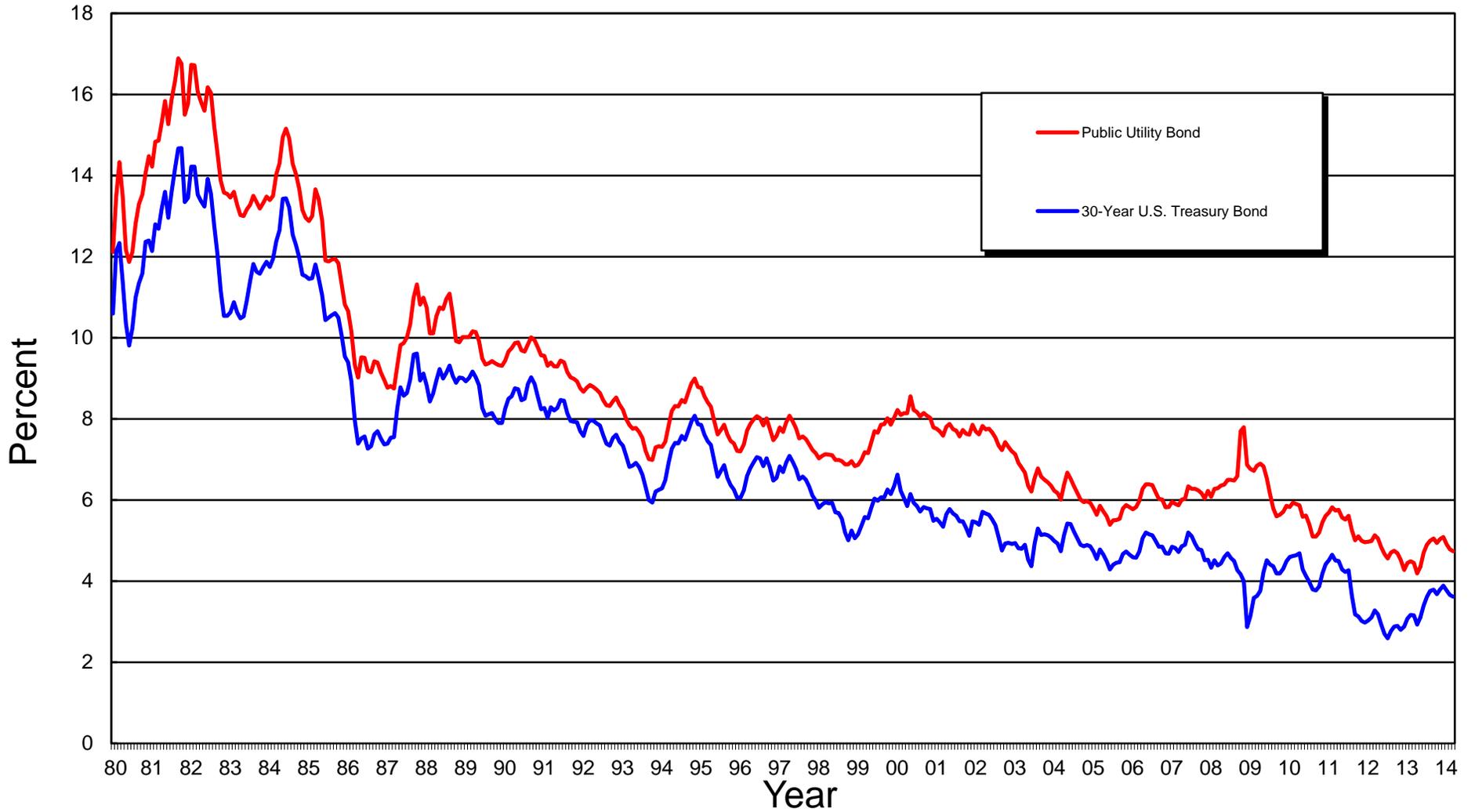
Average Yields on Thirty-Year U.S. Treasury Bonds

Mo/Year	Rate (%)																
Jan 1980	10.60	Jan 1984	11.75	Jan 1988	8.83	Jan 1992	7.58	Jan 1996	6.05	Jan 2000	6.63	Jan 2004	4.99	Jan 2008	4.33	Jan 2012	3.03
Feb	12.13	Feb	11.95	Feb	8.43	Feb	7.85	Feb	6.24	Feb	6.23	Feb	4.93	Feb	4.52	Feb	3.11
Mar	12.34	Mar	12.38	Mar	8.63	Mar	7.97	Mar	6.60	Mar	6.05	Mar	4.74	Mar	4.39	Mar	3.28
Apr	11.40	Apr	12.65	Apr	8.95	Apr	7.96	Apr	6.79	Apr	5.85	Apr	5.14	Apr	4.44	Apr	3.18
May	10.36	May	13.43	May	9.23	May	7.89	May	6.93	May	6.15	May	5.42	May	4.60	May	2.93
Jun	9.81	Jun	13.44	Jun	9.00	Jun	7.84	Jun	7.06	Jun	5.93	Jun	5.41	Jun	4.69	Jun	2.70
Jul	10.24	Jul	13.21	Jul	9.14	Jul	7.60	Jul	7.03	Jul	5.85	Jul	5.22	Jul	4.57	Jul	2.59
Aug	11.00	Aug	12.54	Aug	9.32	Aug	7.39	Aug	6.84	Aug	5.72	Aug	5.06	Aug	4.50	Aug	2.77
Sep	11.34	Sep	12.29	Sep	9.06	Sep	7.34	Sep	7.03	Sep	5.83	Sep	4.90	Sep	4.27	Sep	2.88
Oct	11.59	Oct	11.98	Oct	8.89	Oct	7.53	Oct	6.81	Oct	5.80	Oct	4.86	Oct	4.17	Oct	2.90
Nov	12.37	Nov	11.56	Nov	9.02	Nov	7.61	Nov	6.48	Nov	5.78	Nov	4.89	Nov	4.00	Nov	2.80
Dec	12.40	Dec	11.52	Dec	9.01	Dec	7.44	Dec	6.55	Dec	5.49	Dec	4.86	Dec	2.87	Dec	2.88
Jan 1981	12.14	Jan 1985	11.45	Jan 1989	8.93	Jan 1993	7.34	Jan 1997	6.83	Jan 2001	5.54	Jan 2005	4.73	Jan 2009	3.13	Jan 2013	3.08
Feb	12.80	Feb	11.47	Feb	9.01	Feb	7.09	Feb	6.69	Feb	5.45	Feb	4.55	Feb	3.59	Feb	3.17
Mar	12.69	Mar	11.81	Mar	9.17	Mar	6.82	Mar	6.93	Mar	5.34	Mar	4.78	Mar	3.64	Mar	3.16
Apr	13.20	Apr	11.47	Apr	9.03	Apr	6.85	Apr	7.09	Apr	5.65	Apr	4.65	Apr	3.76	Apr	2.93
May	13.60	May	11.05	May	8.83	May	6.92	May	6.94	May	5.78	May	4.49	May	4.23	May	3.11
Jun	12.96	Jun	10.44	Jun	8.27	Jun	6.81	Jun	6.77	Jun	5.67	Jun	4.29	Jun	4.52	Jun	3.40
Jul	13.59	Jul	10.50	Jul	8.08	Jul	6.63	Jul	6.51	Jul	5.61	Jul	4.41	July	4.41	Jul	3.61
Aug	14.17	Aug	10.56	Aug	8.12	Aug	6.32	Aug	6.58	Aug	5.48	Aug	4.46	Aug	4.37	Aug	3.76
Sep	14.67	Sep	10.61	Sep	8.15	Sep	6.00	Sep	6.50	Sep	5.48	Sep	4.47	Sep	4.19	Sep	3.79
Oct	14.68	Oct	10.50	Oct	8.00	Oct	5.94	Oct	6.33	Oct	5.32	Oct	4.67	Oct	4.19	Oct	3.68
Nov	13.35	Nov	10.06	Nov	7.90	Nov	6.21	Nov	6.11	Nov	5.12	Nov	4.73	Nov	4.31	Nov	3.80
Dec	13.45	Dec	9.54	Dec	7.90	Dec	6.25	Dec	5.99	Dec	5.48	Dec	4.66	Dec	4.49	Dec	3.89
Jan 1982	14.22	Jan 1986	9.40	Jan 1990	8.26	Jan 1994	6.29	Jan 1998	5.81	Jan 2002	5.44	Jan 2006	4.59	Jan 2010	4.60	Jan 2014	3.77
Feb	14.22	Feb	8.93	Feb	8.50	Feb	6.49	Feb	5.89	Feb	5.39	Feb	4.58	Feb	4.62	Feb	3.66
Mar	13.53	Mar	7.96	Mar	8.56	Mar	6.91	Mar	5.95	Mar	5.71	Mar	4.73	Mar	4.64	Mar	3.62
Apr	13.37	Apr	7.39	Apr	8.76	Apr	7.27	Apr	5.92	Apr	5.67	Apr	5.06	Apr	4.69		
May	13.24	May	7.52	May	8.73	May	7.41	May	5.93	May	5.64	May	5.20	May	4.29		
Jun	13.92	Jun	7.57	Jun	8.46	Jun	7.40	Jun	5.70	Jun	5.52	Jun	5.16	Jun	4.13		
Jul	13.55	Jul	7.27	Jul	8.50	Jul	7.58	Jul	5.68	Jul	5.38	July	5.13	July	3.99		
Aug	12.77	Aug	7.33	Aug	8.86	Aug	7.49	Aug	5.54	Aug	5.08	Aug	5.00	Aug	3.80		
Sep	12.07	Sep	7.62	Sep	9.03	Sep	7.71	Sep	5.20	Sep	4.76	Sep	4.85	Sep	3.77		
Oct	11.17	Oct	7.70	Oct	8.86	Oct	7.94	Oct	5.01	Oct	4.93	Oct	4.85	Oct	3.87		
Nov	10.54	Nov	7.52	Nov	8.54	Nov	8.08	Nov	5.25	Nov	4.95	Nov	4.69	Nov	4.19		
Dec	10.54	Dec	7.37	Dec	8.24	Dec	7.87	Dec	5.06	Dec	4.92	Dec	4.68	Dec	4.42		
Jan 1983	10.63	Jan 1987	7.39	Jan 1991	8.27	Jan 1995	7.85	Jan 1999	5.16	Jan 2003	4.94	Jan 2007	4.85	Jan 2011	4.52		
Feb	10.88	Feb	7.54	Feb	8.03	Feb	7.61	Feb	5.37	Feb	4.81	Feb	4.82	Feb	4.65		
Mar	10.63	Mar	7.55	Mar	8.29	Mar	7.45	Mar	5.58	Mar	4.80	Mar	4.72	Mar	4.51		
Apr	10.48	Apr	8.25	Apr	8.21	Apr	7.36	Apr	5.55	Apr	4.90	Apr	4.86	Apr	4.50		
May	10.53	May	8.78	May	8.27	May	6.95	May	5.81	May	4.53	May	4.90	May	4.29		
Jun	10.93	Jun	8.57	Jun	8.47	Jun	6.57	Jun	6.04	Jun	4.37	Jun	5.20	Jun	4.23		
Jul	11.40	Jul	8.64	Jul	8.45	Jul	6.72	Jul	5.98	Jul	4.93	July	5.11	Jul	4.27		
Aug	11.82	Aug	8.97	Aug	8.14	Aug	6.86	Aug	6.07	Aug	5.30	Aug	4.93	Aug	3.65		
Sep	11.63	Sep	9.59	Sep	7.95	Sep	6.55	Sep	6.07	Sep	5.14	Sep	4.79	Sep	3.18		
Oct	11.58	Oct	9.61	Oct	7.93	Oct	6.37	Oct	6.26	Oct	5.16	Oct	4.77	Oct	3.13		
Nov	11.75	Nov	8.95	Nov	7.92	Nov	6.26	Nov	6.15	Nov	5.13	Nov	4.52	Nov	3.02		
Dec	11.88	Dec	9.12	Dec	7.70	Dec	6.06	Dec	6.35	Dec	5.08	Dec	4.53	Dec	2.98		

Sources:
<http://finance.yahoo.com/q/!hp?s=^TYX>
<http://research.stlouisfed.org/fred2/data/GS30.txt>

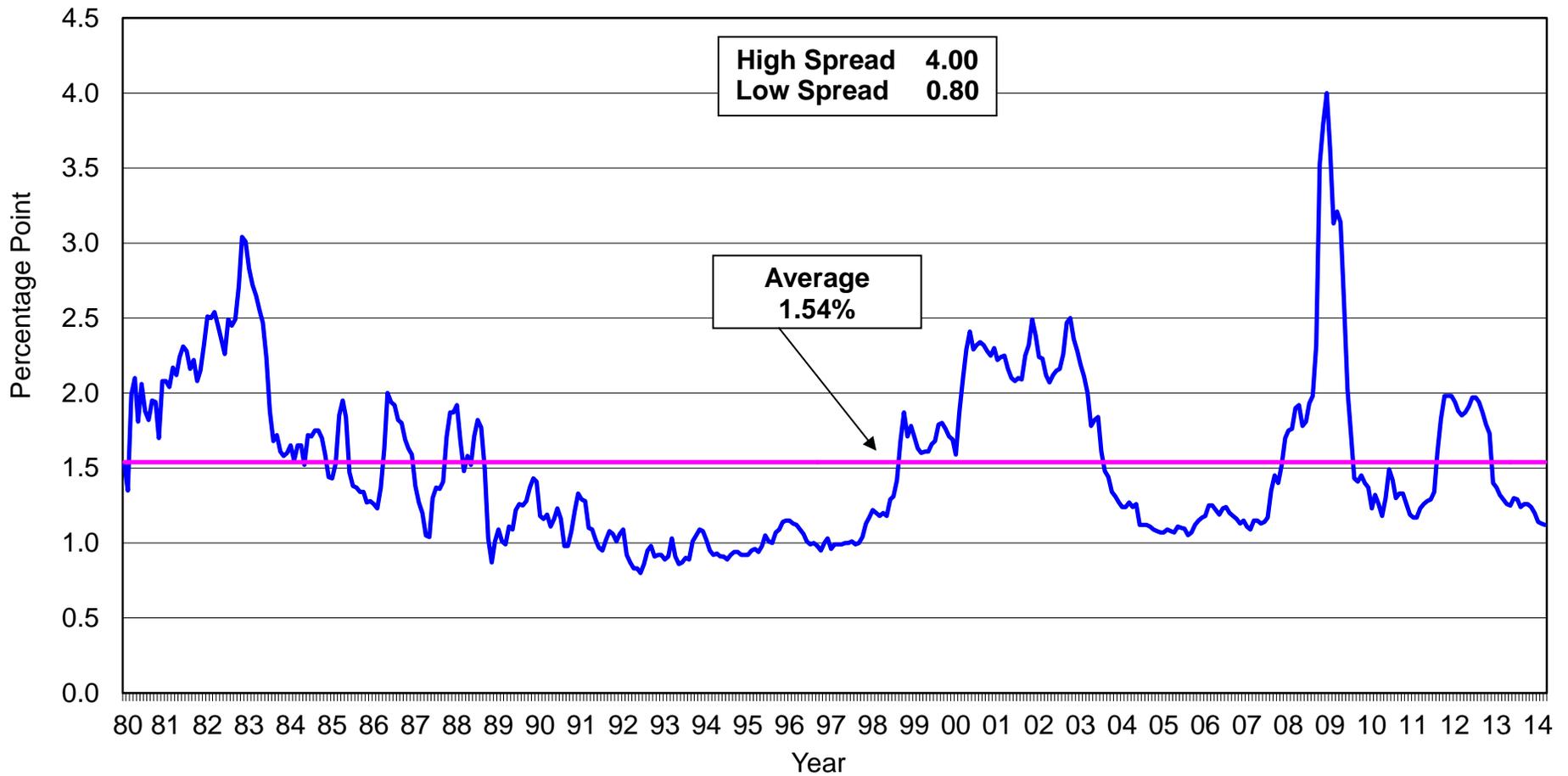
SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086

**Average Yields on Public Utility Bonds and
Thirty-Year U.S. Treasury Bonds (1980 - 2014)**

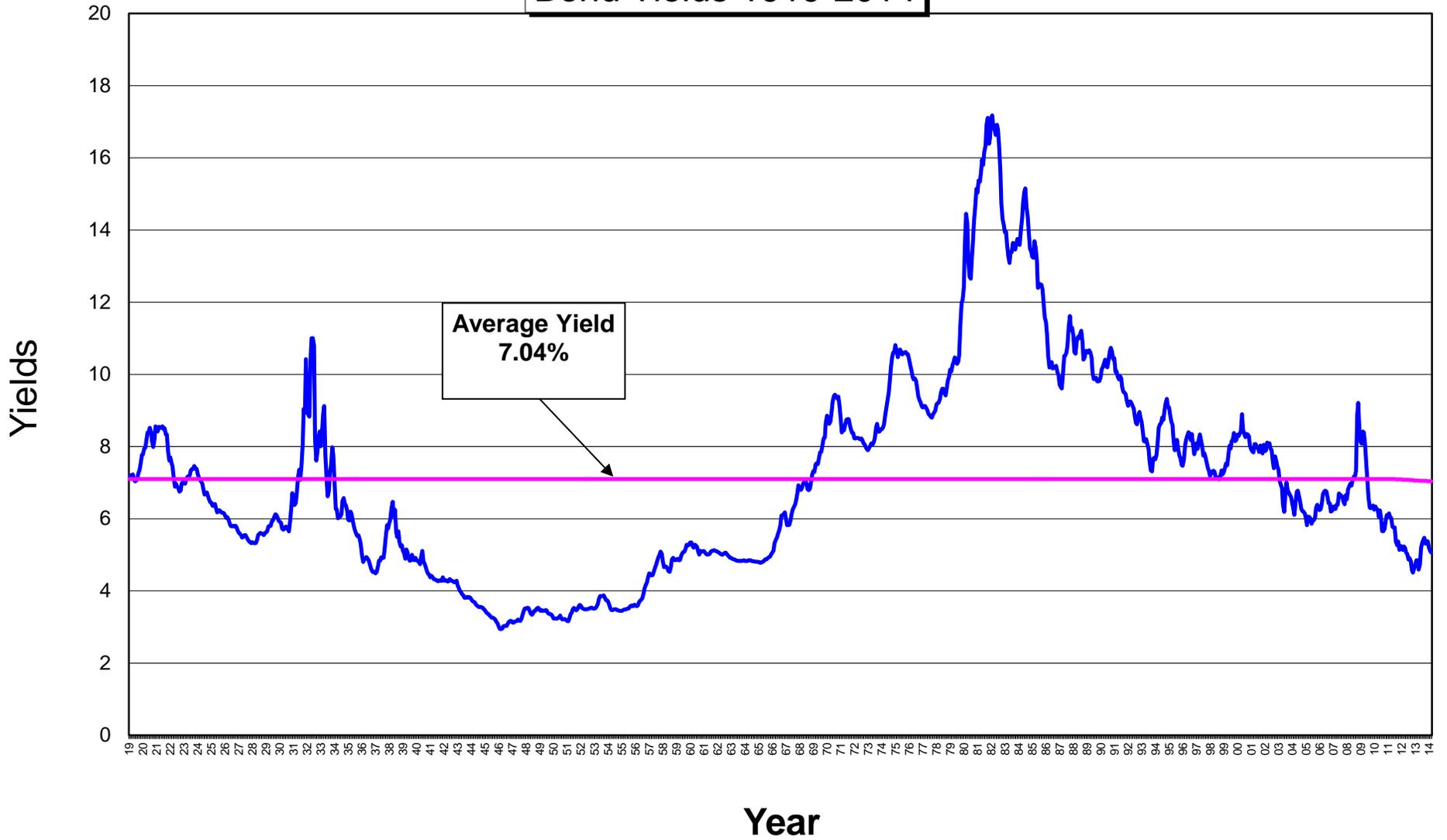


SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086

Monthly Spreads Between Public Utility Bond Yields and
Thirty-Year U.S. Treasury Bond Yields (1980 - 2014)



Moody's Baa Corporate
Bond Yields 1919-2014



SCHEDULE 6-1

HAS BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY

SCHEDULE 6-2

HAS BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY

SCHEDULE 7-1

HAS BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

**Proposed Ratemaking Capital Structure
for Summit Natural Gas of Missouri, Inc.**

<u>Capital Component</u>	<u>Percentage of Capital</u>
Common Stock Equity	40.00%
Long-Term Debt	60.00%
Total Capitalization	100.00%

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

Criteria for Selecting Comparable Natural Gas Distribution Companies

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Natural Gas Utility Companies	Stock Publicly Traded	At least 65% Operating Income Distribution	At least 65% of Assets Distribution	At least 2 analysts in last 90 days and Current Projected L-T EPS Growth Available	Positive 5-year Historical CAGR in DPS	At Least Investment Grade Credit Rating	Comparable Company Met All Criteria
AGL Resources, Inc.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Atmos Energy Corporation	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Corning Natural Gas Holding Corp.	Yes	NA					
Delta Natural Gas Company, Inc.	Yes	Yes	Yes	No			
Energen Corporation	Yes	No					
EQT Corporation	Yes	No					
Gas Natural Inc.	Yes	Yes	Yes	No			
Laclede Group Inc.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
National Fuel Gas Company	Yes	No					
New Jersey Resources Corp.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Northwest Natural Gas Company	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ONE Gas Inc.	Yes	NA					
ONEOK, Inc.	Yes	No					
Piedmont Natural Gas Company, Inc.	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Questar Corporations	Yes	No					
RGC Resources Inc.	Yes	NA					
South Jersey Industries, Inc.	Yes	Yes	Yes	No			
Southern Union Company	No						
Southwest Gas Corporation	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WGL Holdings, Inc.	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: SNL Financial

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

**Eight Comparable Natural Gas Distribution Companies
For Summit Natural Gas of Missouri**

Number	Ticker Symbol	Company Name	Bond Rating
1	GAS	AGL Resources, Inc.	BBB+
2	ATO	Atmos Energy Corporation.	A-
3	LG	Laclede Group Inc.	A-
4	NJR	New Jersey Resources Corporation	A
5	NWN	Northwest Natural Gas	A+
6	PNY	Piedmont Natural Gas Company, Inc.	A
7	SWX	Southwest Gas Corporation	A-
8	WGL	WGL Holdings, Inc.	A+
		Average	<hr/> A

Source: S&P

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

**Dividends Per Share
for the Eight Comparable Natural Gas Distribution Companies**

Company Name	Dividends Per Share															
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
AGL Resources, Inc.	1.08	1.08	1.11	1.15	1.30	1.48	1.64	1.68	1.72	1.76	2.26	1.38	1.88	1.94	2.01	2.13
Atmos Energy Corporation	1.16	1.18	1.20	1.22	1.24	1.26	1.28	1.30	1.32	1.34	1.36	1.38	1.40	1.48	1.55	1.64
Laclede Group Inc.	1.34	1.34	1.34	1.36	1.38	1.41	1.46	1.50	1.54	1.58	1.62	1.66	1.70	1.77	1.83	1.94
New Jersey Resources Corp.	0.78	0.80	0.83	0.87	0.91	0.96	1.01	1.11	1.24	1.36	1.44	1.54	1.62	1.71	1.80	1.90
Northwest Natural Gas Co.	1.25	1.26	1.27	1.30	1.32	1.39	1.44	1.52	1.60	1.68	1.75	1.79	1.83	1.85	1.92	NA
Piedmont Natural Gas Co.	0.76	0.79	0.82	0.85	0.91	0.95	0.99	1.03	1.07	1.11	1.15	1.19	1.23	1.27	1.32	1.36
Southwest Gas	0.82	0.82	0.82	0.82	0.82	1.03	0.86	0.90	0.95	1.00	1.06	1.18	1.32	1.37	1.48	1.48
WGL Holdings, Inc.	1.26	1.27	1.28	1.30	1.32	1.35	1.37	1.41	1.46	1.50	1.54	1.59	1.66	1.75	1.83	1.97

	<u>10-Year Historical</u>	<u>5-Year Historical</u>	<u>3-Year Projected</u>
AGL Resources, Inc.	5.38%	2.83%	4.25%
Atmos Energy Corporation	1.58%	1.52%	5.41%
Laclede Group Inc.	2.16%	2.65%	4.50%
New Jersey Resources Corp.	6.68%	8.35%	5.46%
Northwest Natural Gas Co.	3.58%	4.28%	NA
Piedmont Natural Gas Co.	4.16%	3.75%	3.51%
Southwest Gas	3.77%	5.03%	3.81%
WGL Holdings, Inc.	<u>2.34%</u>	<u>3.06%</u>	<u>5.78%</u>
Average	3.71%	3.93%	4.67%

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

**Earnings Per Share
for the Eight Comparable Natural Gas Distribution Companies**

Company Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
AGL Resources, Inc.	1.62	1.82	2.13	2.28	2.48	2.72	2.72	2.84	2.88	3.00	2.12	2.31	2.64	3.33	3.08	3.10
Atmos Energy Corporation	1.47	1.45	1.71	1.58	1.72	1.82	1.92	1.99	2.07	2.12	2.07	2.10	2.50	2.80	2.90	3.07
Laclede Group Inc.	1.61	1.18	1.82	1.82	1.90	2.30	2.12	2.63	2.89	2.43	2.86	2.79	2.02	3.04	3.16	3.20
New Jersey Resources Corp.	1.33	1.39	1.59	1.70	1.81	5.27	1.55	2.59	0.64	2.82	2.44	2.23	2.75	3.95	3.03	3.00
Northwest Natural Gas Co.	1.88	1.62	1.76	1.86	2.11	2.29	2.76	2.61	2.83	2.73	2.36	2.18	2.24	2.28	2.38	2.50
Piedmont Natural Gas Co.	1.01	0.94	1.11	1.27	1.32	1.28	1.40	1.49	1.67	1.96	1.57	1.66	1.78	1.85	1.90	2.00
Southwest Gas	1.15	1.32	1.13	1.60	1.14	2.05	1.95	1.39	1.94	2.27	2.43	2.86	3.11	2.99	3.15	3.29
WGL Holdings, Inc.	1.75	0.80	2.30	1.98	2.16	1.94	2.19	2.33	2.39	2.16	2.28	2.71	1.55	2.36	2.42	2.66

	<u>10-Year Historical</u>	<u>5-Year Historical</u>	<u>3-Year Projected</u>
AGL Resources, Inc.	2.41%	-3.11%	5.50%
Atmos Energy Corporation	3.72%	3.08%	7.08%
Laclede Group Inc.	5.22%	1.70%	16.57%
New Jersey Resources Corp.	5.58%	-4.64%	2.94%
Northwest Natural Gas Co.	2.57%	-2.41%	NA
Piedmont Natural Gas Co.	5.05%	3.74%	3.87%
Southwest Gas	8.84%	9.28%	1.89%
WGL Holdings, Inc.	<u>3.03%</u>	<u>0.25%</u>	<u>19.72%</u>
Average	4.55%	0.99%	8.23%

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

**Book Value Per Share
for the Eight Comparable Natural Gas Distribution Companies**

Company Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
AGL Resources, Inc.	12.19	12.52	14.65	18.06	19.27	20.71	21.74	21.48	22.97	23.24	28.35	28.96	30.54	NA	NA	NA
Atmos Energy Corporation	14.31	13.75	16.66	18.05	19.90	20.16	22.01	22.60	23.52	24.16	24.98	26.14	28.47	32.81	32.98	NA
Laclede Group Inc.	15.26	15.10	15.67	16.96	17.31	18.85	19.79	22.12	23.32	24.02	25.56	26.69	32.00	33.11	34.30	35.74
New Jersey Resources Corp.	8.67	8.87	10.19	11.22	10.52	14.74	15.50	17.31	16.59	17.62	18.74	19.55	21.15	24.34	24.60	NA
Northwest Natural Gas Co.	18.56	18.85	19.52	20.64	21.28	21.97	22.52	23.71	24.88	25.99	26.62	27.11	27.77	30.29	31.91	29.60
Piedmont Natural Gas Co.	8.63	8.91	9.36	11.15	11.53	11.70	11.84	12.11	12.67	13.35	13.79	14.21	15.62	17.04	18.63	18.94
Southwest Gas	17.27	17.91	18.42	19.18	19.10	21.58	22.98	23.49	24.44	25.60	26.68	28.39	30.51	32.25	34.03	35.86
WGL Holdings, Inc.	16.24	15.78	16.83	17.54	18.36	18.86	19.89	20.99	21.89	22.63	23.41	24.60	24.62	26.14	28.62	NA

	<u>10-Year Historical</u>	<u>5-Year Historical</u>	<u>3-Year Projected</u>
AGL Resources, Inc.	8.36%	6.56%	NA
Atmos Energy Corporation	5.93%	4.21%	NA
Laclede Group Inc.	6.23%	6.76%	3.76%
New Jersey Resources Corp.	7.92%	4.57%	NA
Northwest Natural Gas Co.	3.65%	3.62%	2.15%
Piedmont Natural Gas Co.	4.95%	4.12%	6.64%
Southwest Gas	4.79%	4.69%	5.53%
WGL Holdings, Inc.	<u>4.05%</u>	<u>3.99%</u>	<u>NA</u>
Average	5.74%	4.81%	4.52%

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

**Historical and Projected Growth Rates for the
Eight Comparable Natural Gas Distribution Companies**

Company Name	(1)	(2)	(3)
	10-Year Historical Growth Rate (DPS, EPS and BVPS)	5-Year Historical Growth Rate (DPS, EPS and BVPS)	Projected 5-Year EPS Growth FactSet (Mean)
AGL Resources, Inc.	5.38%	2.10%	1.75%
Atmos Energy Corporation	3.74%	2.94%	6.90%
Laclede Group Inc.	4.54%	3.70%	4.78%
New Jersey Resources Corp.	6.73%	2.76%	3.60%
Northwest Natural Gas Co.	3.27%	1.83%	3.50%
Piedmont Natural Gas Co.	4.72%	3.87%	3.67%
Southwest Gas	5.80%	6.34%	2.55%
WGL Holdings, Inc.	3.14%	2.43%	4.95%
	<u>4.67%</u>	<u>3.25%</u>	<u>3.96%</u>

Sources: Column 1 = Average of 10-Year Compound Annual Growth Rates from Schedules 9-1 through 9-3.

Column 2 = Average of 5-Year Compound Annual Growth Rates from Schedules 9-1 through 9-3.

Column 3 = SNL Financial

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

**Long-Term Gas Proxy Group
DPS, EPS, BVPS & GDP
10-Year Compound Growth Rate Averages (1968-2013)**

<u>DPS</u>	<u>EPS</u>	<u>BVPS</u>	<u>Average</u>	<u>GDP</u>				
10 yr compound	10 yr compound	10 yr compound	DPS, EPS and	10 yr compound				
Years	Years	Years	BVPS	Years				
growth rate avgs	growth rate avgs	growth rate avgs		growth rate avgs				
1968-70 to 1978-80	3.82%	1968-70 to 1978-80	5.16%	1968-70 to 1978-80	4.59%	4.52%	1968-70 to 1978-80	9.96%
1969-71 to 1979-81	4.13%	1969-71 to 1979-81	5.07%	1969-71 to 1979-81	4.62%	4.61%	1969-71 to 1979-81	10.31%
1970-72 to 1980-82	4.69%	1970-72 to 1980-82	4.75%	1970-72 to 1980-82	4.51%	4.65%	1970-72 to 1980-82	10.32%
1971-73 to 1981-83	5.10%	1971-73 to 1981-83	4.10%	1971-73 to 1981-83	4.30%	4.50%	1971-73 to 1981-83	10.15%
1972-74 to 1982-84	5.50%	1972-74 to 1982-84	5.20%	1972-74 to 1982-84	4.11%	4.94%	1972-74 to 1982-84	9.98%
1973-75 to 1983-85	5.98%	1973-75 to 1983-85	5.87%	1973-75 to 1983-85	4.08%	5.31%	1973-75 to 1983-85	9.93%
1974-76 to 1984-86	6.31%	1974-76 to 1984-86	5.91%	1974-76 to 1984-86	3.96%	5.39%	1974-76 to 1984-86	9.76%
1975-77 to 1985-87	6.80%	1975-77 to 1985-87	5.28%	1975-77 to 1985-87	4.02%	5.37%	1975-77 to 1985-87	9.34%
1976-78 to 1986-88	7.00%	1976-78 to 1986-88	5.37%	1976-78 to 1986-88	4.27%	5.55%	1976-78 to 1986-88	8.82%
1977-79 to 1987-89	7.21%	1977-79 to 1987-89	5.07%	1977-79 to 1987-89	4.44%	5.57%	1977-79 to 1987-89	8.35%
1978-80 to 1988-90	7.07%	1978-80 to 1988-90	3.85%	1978-80 to 1988-90	4.39%	5.11%	1978-80 to 1988-90	7.96%
1979-81 to 1989-91	6.75%	1979-81 to 1989-91	2.39%	1979-81 to 1989-91	4.05%	4.39%	1979-81 to 1989-91	7.42%
1980-82 to 1990-92	6.13%	1980-82 to 1990-92	2.16%	1980-82 to 1990-92	3.91%	4.07%	1980-82 to 1990-92	7.10%
1981-83 to 1991-93	5.63%	1981-83 to 1991-93	2.86%	1981-83 to 1991-93	3.94%	4.15%	1981-83 to 1991-93	6.75%
1982-84 to 1992-94	5.04%	1982-84 to 1992-94	2.59%	1982-84 to 1992-94	3.98%	3.87%	1982-84 to 1992-94	6.52%
1983-85 to 1993-95	4.40%	1983-85 to 1993-95	2.36%	1983-85 to 1993-95	3.93%	3.56%	1983-85 to 1993-95	6.15%
1984-86 to 1994-96	3.75%	1984-86 to 1994-96	2.94%	1984-86 to 1994-96	3.91%	3.53%	1984-86 to 1994-96	5.92%
1985-87 to 1995-97	3.39%	1985-87 to 1995-97	3.94%	1985-87 to 1995-97	3.92%	3.75%	1985-87 to 1995-97	5.85%
1986-88 to 1996-98	3.02%	1986-88 to 1996-98	3.44%	1986-88 to 1996-98	3.61%	3.36%	1986-88 to 1996-98	5.78%
1987-89 to 1997-99	2.71%	1987-89 to 1997-99	2.29%	1987-89 to 1997-99	3.25%	2.75%	1987-89 to 1997-99	5.66%
1988-90 to 1998-00	2.44%	1988-90 to 1998-00	2.27%	1988-90 to 1998-00	3.16%	2.63%	1988-90 to 1998-00	5.57%
1989-91 to 1999-01	2.19%	1989-91 to 1999-01	4.07%	1989-91 to 1999-01	3.46%	3.24%	1989-91 to 1999-01	5.55%
1990-92 to 2000-02	2.07%	1990-92 to 2000-02	4.73%	1990-92 to 2000-02	3.67%	3.49%	1990-92 to 2000-02	5.49%
1991-93 to 2001-03	2.01%	1991-93 to 2001-03	4.89%	1991-93 to 2001-03	4.03%	3.64%	1991-93 to 2001-03	5.39%
1992-94 to 2002-04	2.05%	1992-94 to 2002-04	4.50%	1992-94 to 2002-04	4.48%	3.68%	1992-94 to 2002-04	5.31%
1993-95 to 2003-05	2.19%	1993-95 to 2003-05	5.00%	1993-95 to 2003-05	4.98%	4.06%	1993-95 to 2003-05	5.37%
1994-96 to 2004-06	2.42%	1994-96 to 2004-06	5.08%	1994-96 to 2004-06	5.41%	4.30%	1994-96 to 2004-06	5.45%
1995-97 to 2005-07	2.66%	1995-97 to 2005-07	4.84%	1995-97 to 2005-07	5.69%	4.40%	1995-97 to 2005-07	5.45%
1996-98 to 2006-08	2.91%	1996-98 to 2006-08	5.35%	1996-98 to 2006-08	5.98%	4.75%	1996-98 to 2006-08	5.26%
1997-99 to 2007-09	3.18%	1997-99 to 2007-09	6.29%	1997-99 to 2007-09	6.18%	5.22%	1997-99 to 2007-09	4.77%
1998-00 to 2008-10	3.47%	1998-00 to 2008-10	6.81%	1998-00 to 2008-10	6.23%	5.50%	1998-00 to 2008-10	4.26%
1999-01 to 2009-11	3.78%	1999-01 to 2009-11	6.28%	1999-01 to 2009-11	6.25%	5.43%	1999-01 to 2009-11	3.92%
2000-02 to 2010-12	4.02%	2000-02 to 2010-12	5.75%	2000-02 to 2010-12	6.29%	5.35%	2000-02 to 2010-12	3.89%
2001-03 to 2011-13	4.24%	2001-03 to 2011-13	4.59%	2001-03 to 2011-13	6.27%	5.03%	2001-03 to 2011-13	3.91%
Average	4.24%	Average	4.44%	Average	4.53%	Average	6.81%	
Average of 10-year Rolling Averages EPS, DPS and BVPS			4.40%					

Source: Value Line Investment Survey and SNL Financial

SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086

**Long-Term Gas Proxy Group Excluding Atmos
DPS, EPS, BVPS & GDP
10-Year Compound Growth Rate Averages (1968-2013)**

<u>DPS</u>	<u>EPS</u>	<u>BVPS</u>	<u>Average</u>	<u>GDP</u>				
10 yr compound growth rate avgs	10 yr compound growth rate avgs	10 yr compound growth rate avgs	DPS, EPS and BVPS	10 yr compound growth rate avgs				
Years	Years	Years	Years	Years				
1968-70 to 1978-80	3.82%	1968-70 to 1978-80	5.16%	1968-70 to 1978-80	4.59%	4.52%	1968-70 to 1978-80	9.96%
1969-71 to 1979-81	4.13%	1969-71 to 1979-81	5.07%	1969-71 to 1979-81	4.62%	4.61%	1969-71 to 1979-81	10.31%
1970-72 to 1980-82	4.69%	1970-72 to 1980-82	4.75%	1970-72 to 1980-82	4.51%	4.65%	1970-72 to 1980-82	10.32%
1971-73 to 1981-83	5.10%	1971-73 to 1981-83	4.10%	1971-73 to 1981-83	4.30%	4.50%	1971-73 to 1981-83	10.15%
1972-74 to 1982-84	5.50%	1972-74 to 1982-84	5.20%	1972-74 to 1982-84	4.11%	4.94%	1972-74 to 1982-84	9.98%
1973-75 to 1983-85	5.98%	1973-75 to 1983-85	5.87%	1973-75 to 1983-85	4.08%	5.31%	1973-75 to 1983-85	9.93%
1974-76 to 1984-86	6.31%	1974-76 to 1984-86	5.91%	1974-76 to 1984-86	3.96%	5.39%	1974-76 to 1984-86	9.76%
1975-77 to 1985-87	6.80%	1975-77 to 1985-87	5.28%	1975-77 to 1985-87	4.02%	5.37%	1975-77 to 1985-87	9.34%
1976-78 to 1986-88	7.00%	1976-78 to 1986-88	5.37%	1976-78 to 1986-88	4.27%	5.55%	1976-78 to 1986-88	8.82%
1977-79 to 1987-89	7.21%	1977-79 to 1987-89	5.07%	1977-79 to 1987-89	4.44%	5.57%	1977-79 to 1987-89	8.35%
1978-80 to 1988-90	7.07%	1978-80 to 1988-90	3.85%	1978-80 to 1988-90	4.39%	5.11%	1978-80 to 1988-90	7.96%
1979-81 to 1989-91	6.75%	1979-81 to 1989-91	2.39%	1979-81 to 1989-91	4.05%	4.39%	1979-81 to 1989-91	7.42%
1980-82 to 1990-92	6.13%	1980-82 to 1990-92	2.16%	1980-82 to 1990-92	3.91%	4.07%	1980-82 to 1990-92	7.10%
1981-83 to 1991-93	5.63%	1981-83 to 1991-93	2.86%	1981-83 to 1991-93	3.94%	4.15%	1981-83 to 1991-93	6.75%
1982-84 to 1992-94	5.04%	1982-84 to 1992-94	2.59%	1982-84 to 1992-94	3.98%	3.87%	1982-84 to 1992-94	6.52%
1983-85 to 1993-95	4.40%	1983-85 to 1993-95	2.36%	1983-85 to 1993-95	3.93%	3.56%	1983-85 to 1993-95	6.15%
1984-86 to 1994-96	3.75%	1984-86 to 1994-96	2.94%	1984-86 to 1994-96	3.91%	3.53%	1984-86 to 1994-96	5.92%
1985-87 to 1995-97	3.25%	1985-87 to 1995-97	3.93%	1985-87 to 1995-97	3.80%	3.66%	1985-87 to 1995-97	5.85%
1986-88 to 1996-98	2.85%	1986-88 to 1996-98	3.30%	1986-88 to 1996-98	3.49%	3.21%	1986-88 to 1996-98	5.78%
1987-89 to 1997-99	2.49%	1987-89 to 1997-99	2.34%	1987-89 to 1997-99	3.14%	2.65%	1987-89 to 1997-99	5.66%
1988-90 to 1998-00	2.19%	1988-90 to 1998-00	2.48%	1988-90 to 1998-00	3.09%	2.59%	1988-90 to 1998-00	5.57%
1989-91 to 1999-01	1.95%	1989-91 to 1999-01	4.34%	1989-91 to 1999-01	3.38%	3.22%	1989-91 to 1999-01	5.55%
1990-92 to 2000-02	1.83%	1990-92 to 2000-02	4.88%	1990-92 to 2000-02	3.59%	3.43%	1990-92 to 2000-02	5.49%
1991-93 to 2001-03	1.78%	1991-93 to 2001-03	4.93%	1991-93 to 2001-03	3.91%	3.54%	1991-93 to 2001-03	5.39%
1992-94 to 2002-04	1.86%	1992-94 to 2002-04	4.54%	1992-94 to 2002-04	4.35%	3.58%	1992-94 to 2002-04	5.31%
1993-95 to 2003-05	2.04%	1993-95 to 2003-05	5.14%	1993-95 to 2003-05	4.79%	3.99%	1993-95 to 2003-05	5.37%
1994-96 to 2004-06	2.33%	1994-96 to 2004-06	5.28%	1994-96 to 2004-06	5.24%	4.28%	1994-96 to 2004-06	5.45%
1995-97 to 2005-07	2.66%	1995-97 to 2005-07	5.06%	1995-97 to 2005-07	5.52%	4.41%	1995-97 to 2005-07	5.45%
1996-98 to 2006-08	2.99%	1996-98 to 2006-08	5.78%	1996-98 to 2006-08	5.89%	4.88%	1996-98 to 2006-08	5.26%
1997-99 to 2007-09	3.33%	1997-99 to 2007-09	6.62%	1997-99 to 2007-09	6.10%	5.35%	1997-99 to 2007-09	4.77%
1998-00 to 2008-10	3.70%	1998-00 to 2008-10	7.03%	1998-00 to 2008-10	6.16%	5.63%	1998-00 to 2008-10	4.26%
1999-01 to 2009-11	4.07%	1999-01 to 2009-11	6.21%	1999-01 to 2009-11	6.21%	5.50%	1999-01 to 2009-11	3.92%
2000-02 to 2010-12	4.36%	2000-02 to 2010-12	5.83%	2000-02 to 2010-12	6.27%	5.49%	2000-02 to 2010-12	3.89%
2001-03 to 2011-13	4.62%	2001-03 to 2011-13	4.67%	2001-03 to 2011-13	6.32%	5.20%	2001-03 to 2011-13	3.91%

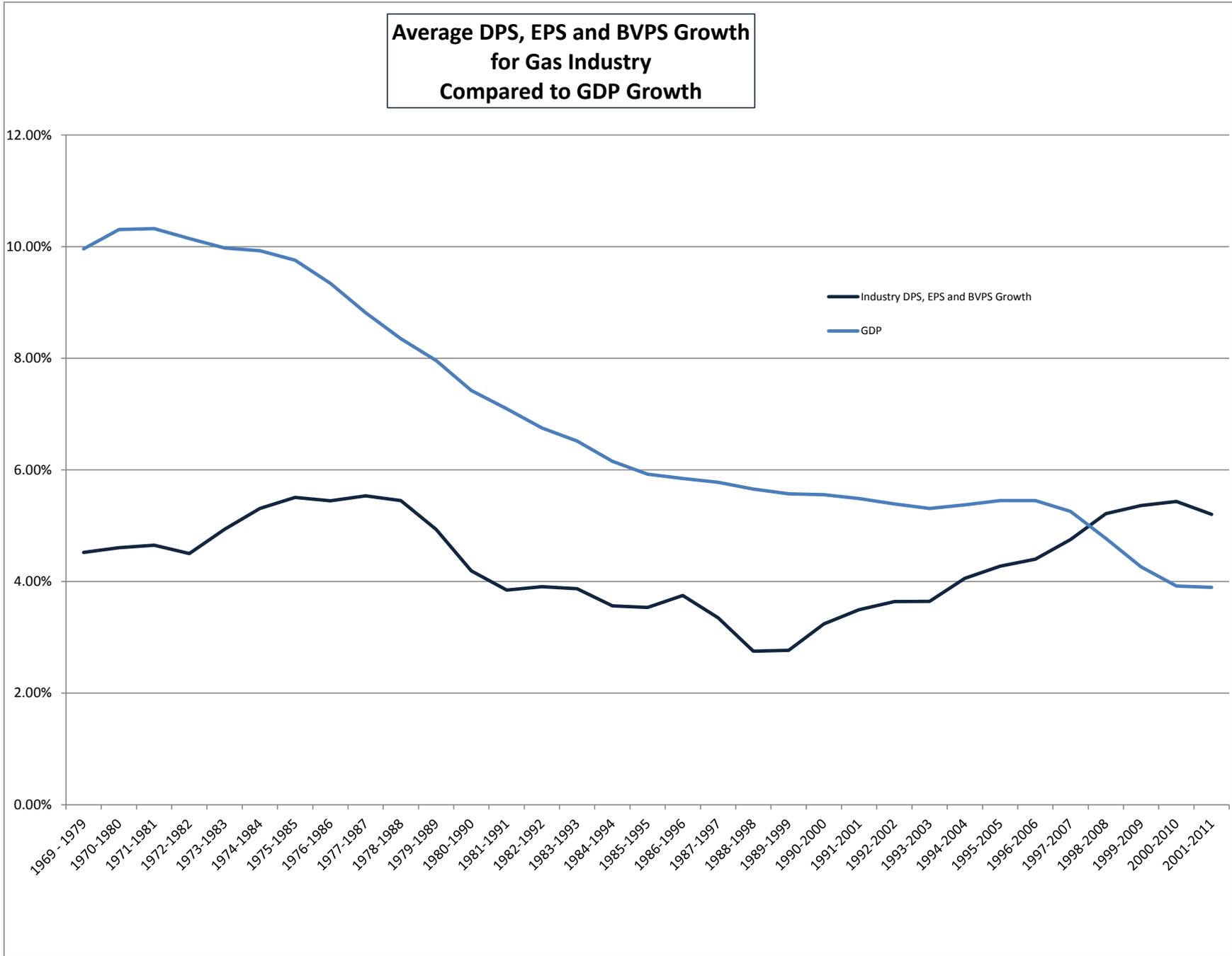
Average	4.22%	Average	4.51%	Average	4.48%	Average	6.81%
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Average of 10-year Rolling Averages EPS, DPS and BVPS **4.40%**

Source: Value Line Investment Survey and SNL Financial

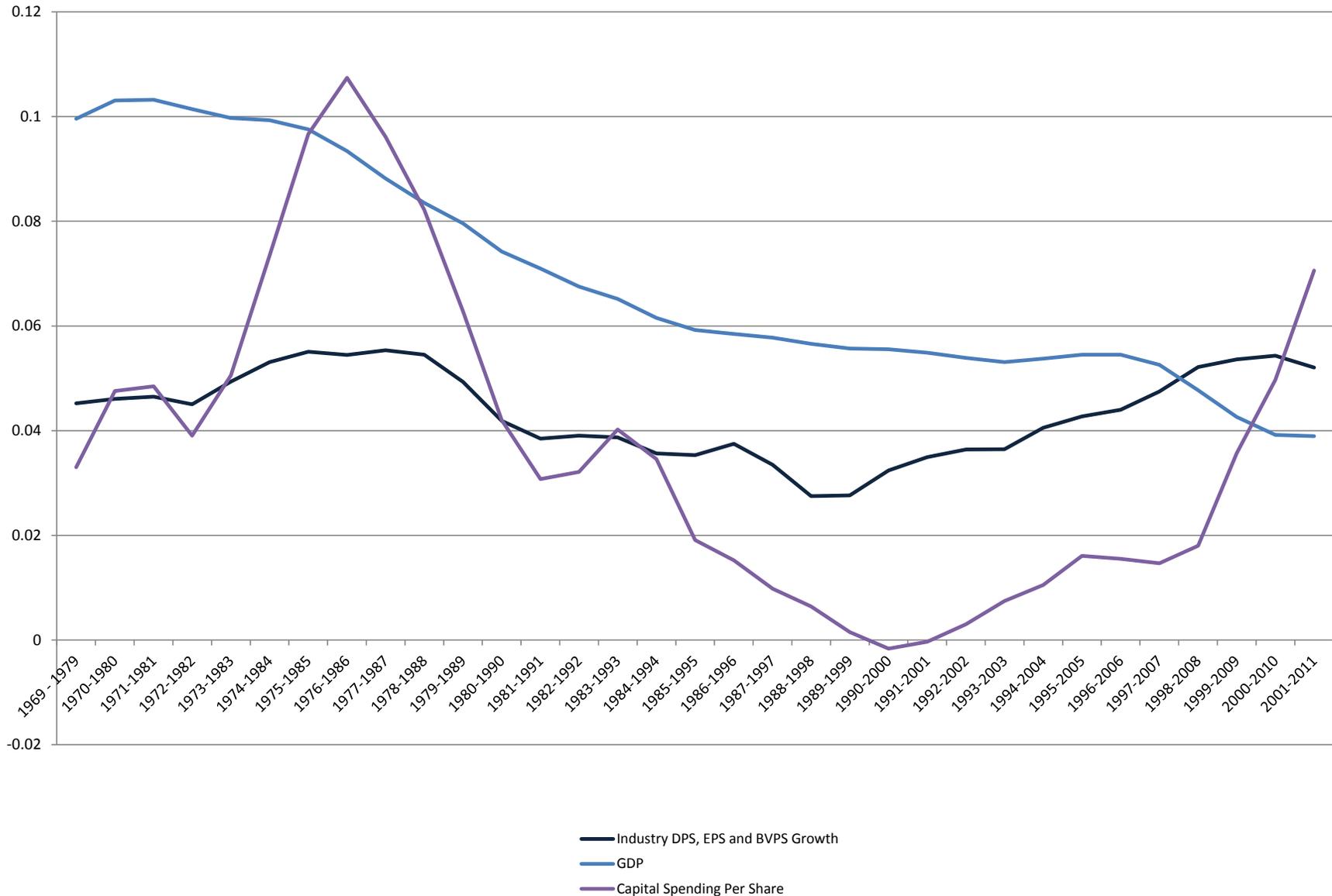
SUMMIT NATURAL GAS OF MISSOURI
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Average DPS, EPS and BVPS Growth
for Gas Industry
Compared to GDP Growth



SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086

Average DPS, EPS and BVPS Growth
for Gas Industry Capital Spending
Compared to GDP Growth



**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

**Average High / Low Stock Price for January 2014 through March 2014
for the Eight Comparable Natural Gas Distribution Companies**

Company Name	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	-- February 2014 --		--March 2014--		--April 2014--		Average High/Low Stock Price
	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	(2/14 - 4/14)
AGL Resources, Inc.	47.95	45.30	49.84	46.65	54.07	48.29	48.68
Atmos Energy Corp.	48.06	44.26	47.21	44.84	51.82	46.42	47.10
Laclede Group Inc.	46.28	43.95	47.48	45.02	47.47	44.75	45.83
New Jersey Resources Corp.	45.82	43.75	50.47	44.17	50.32	47.70	47.04
Northwest Natural Gas Co.	43.04	40.05	44.09	41.58	45.05	43.60	42.90
Piedmont Natural Gas Co.	33.99	32.12	35.78	33.23	36.55	35.07	34.46
Southwest Gas Corp.	54.98	51.45	55.18	52.42	55.69	52.21	53.66
WGL Holdings, Inc.	40.50	35.35	40.72	38.36	40.45	38.28	38.94

Notes:

Column 7 = [(Column 1 + Column 2 + Column 3 + Column 4 + Column 5 + Column 6) / 6].

SUMMIT NATURAL GAS OF MISSOURI
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Expected Annual Dividend for the Eight Comparable Natural Gas Distribution Companies

Company Name	FactSet Mean DPS 2014Y	FactSet Mean DPS 2015Y
AGL Resources Inc.	1.94	2.02
Atmos Energy Corporation	1.48	1.55
Laclede Group, Inc. (The)	1.76	1.83
New Jersey Resources Corporation	1.71	1.80
Northwest Natural Gas Company	1.85	1.91
Piedmont Natural Gas Company, Inc.	1.27	1.32
Southwest Gas Corporation	1.35	1.45
WGL Holdings, Inc.	1.74	1.82

Company Name	Expected Annual Dividend
AGL Resources, Inc.	\$1.97
Atmos Energy Corp.	\$1.52
Laclede Group Inc.	\$1.80
New Jersey Resources Corp.	\$1.76
Northwest Natural Gas Co.	\$1.87
Piedmont Natural Gas Co.	\$1.29
Southwest Gas Corp.	\$1.38
WGL Holdings, Inc.	\$1.79

Source: SNL Financial

SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086

**Discounted Cash Flow (DCF) Estimated Costs of Common Equity
for the Eight Comparable Natural Gas Distribution Companies,**

	(1)	(2)	(3)
Company Name	Expected Annual Dividend ¹	Average High/Low Stock Price	Projected Dividend Yield
AGL Resources, Inc.	\$1.97	\$48.68	4.04%
Atmos Energy Corp.	\$1.52	\$47.10	3.23%
Laclede Group Inc.	\$1.80	\$45.83	3.93%
New Jersey Resources Corp.	\$1.76	\$47.04	3.74%
Northwest Natural Gas Co.	\$1.87	\$42.90	4.36%
Piedmont Natural Gas Co.	\$1.29	\$34.46	3.76%
Southwest Gas Corp.	\$1.38	\$53.66	2.57%
WGL Holdings, Inc.	\$1.79	\$38.94	4.59%
Average			<u>3.78%</u>

<u>Note: Rounded to 10 basis points</u>	Proposed Dividend Yield:	3.80%
	Proposed Range of Growth:	4.00% - 5.00%
	Estimated Proxy Cost of Common Equity:	7.80% - 8.80%
	Adjustment	2.00%
	Recommended Cost of Common Equity Midpoint	9.80% 10.80% 10.30%

Notes:

1 = Expected Annual Dividend based on weighted average of each companies 2014 fiscal year and 2015 fiscal year FactSet projected dividends per share according to SNL Financial.

2 = Three month average (February - April 2014) of differences between 'A' - rated 'BB' - rated 30-year bonds from Reuters Corporate Spreads for Utilities - BondsOnline data.

Sources: Column 1 = Schedule 11.
Column 2 = Schedule 10.

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

**Capital Asset Pricing Model (CAPM) Costs of Common Equity Estimates
Based on Historical Return Differences Between Common Stocks and Long-Term U.S. Treasuries
for the Eight Comparable Natural Gas Distribution Companies**

	(1)	(2)	(3)	(4)	(5)	(6)
			Arithmetic Average Market Risk Premium (1926-2013)	Geometric Average Market Risk Premium (1926-2013)	Arithmetic CAPM Cost of Common Equity (1926-2013)	Geometric CAPM Cost of Common Equity (1926-2013)
Company Name	Risk Free Rate	Beta				
AGL Resources, Inc.	3.60%	0.83	6.20%	4.64%	8.72%	7.43%
Atmos Energy Corp.	3.60%	0.83	6.20%	4.64%	8.72%	7.43%
Laclede Group Inc.	3.60%	0.75	6.20%	4.64%	8.26%	7.09%
New Jersey Resources Corp.	3.60%	0.81	6.20%	4.64%	8.59%	7.33%
Northwest Natural Gas Co.	3.60%	0.76	6.20%	4.64%	8.30%	7.12%
Piedmont Natural Gas Co.	3.60%	0.78	6.20%	4.64%	8.40%	7.19%
Southwest Gas Corp.	3.60%	0.89	6.20%	4.64%	9.09%	7.71%
WGL Holdings, Inc.	3.60%	0.77	6.20%	4.64%	8.34%	7.15%
Average		0.80			8.55%	7.31%

Sources:

Column 1 = The appropriate yield is equal to the average 30-year U.S. Treasury Bond yield for February, March and April 2014, which was obtained from the St. Louis Federal Reserve website at <http://research.stlouisfed.org/fred2/series/GS30/22>

Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole. Staff calculated the unadjusted Beta for each company using an Excel spreadsheet designed specifically to be used with the SNL database of market and financial information, then adjusted each Beta using the Blume adjustment formula used by Value Line: Prospective Beta = 0.371 + 0.635 * Historical Beta.

Column 3 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium for the period 1926 - 2013 was determined to be 6.20% based on an arithmetic average as calculated in Duff & Phelps 2014 Valuation Handbook: A Guide to the Cost of Capital.

Column 4 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium for the period 1926 - 2013 was determined to be 4.64% based on a geometric average calculated by using the arithmetic average as calculated in Duff & Phelps 2014 Valuation Handbook: A Guide to the Cost of Capital.

$$R_A = R_f + (\sigma^2/2)$$

R_A = Arithmetic Return Average
 R_f = Geometric Return Average
 σ = standard deviation of equity returns

Column 5 = (Column 1 + (Column 2 * Column 3)).

Column 6 = (Column 1 + (Column 2 * Column 4)).

**SUMMIT NATURAL GAS OF MISSOURI
CASE NO. GR-2014-0086**

**Weighted Average Cost of Capital
for Summit Natural Gas of Missouri**

Capital Component	Percentage of Capital	Embedded Cost	Weighted Cost of Capital Using Common Equity Return of:		
			9.80%	10.30%	10.80%
Common Stock Equity	40.00%	-----	3.92%	4.12%	4.32%
Long-Term Debt	60.00%	5.00%	3.00%	3.00%	3.00%
	100.00%		6.92%	7.12%	7.32%