

## GAS UTILITY RISK PREMIUM

Exhibit AMM-9

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### COST OF EQUITY ESTIMATE

<b><u>Current Equity Risk Premium</u></b>	
(a) Average Yield over Study Period	7.56%
(b) Average Single-A Utility Bond Yield	<u>5.74%</u>
Change in Bond Yield	-1.82%
(c) Risk Premium/Interest Rate Relationship	<u>-0.4756</u>
Adjustment to Average Risk Premium	0.86%
(a) Average Risk Premium over Study Period	<u>3.80%</u>
<b>Adjusted Risk Premium</b>	<b>4.67%</b>
<b><u>Implied Cost of Equity</u></b>	
(b) Baa Utility Bond Yield	5.98%
Adjusted Equity Risk Premium	<u>4.67%</u>
<b>Risk Premium Cost of Equity</b>	<b>10.65%</b>

(a) Exhibit AMM-9, page 4.

(b) Yields on 'A' and 'Baa' utility bonds for the six month period ending Mar. 2024 based on data from Moody's Investors Service at [www.credittrends.com](http://www.credittrends.com).

(c) Exhibit AMM-9, page 5.

AUTHORIZED RETURNS

		(a)	(b)			(a)	(b)		
		Single-A					Single-A		
Year	Qtr.	Allowed ROE	Utility Bond Yield	Risk Premium	Year	Qtr.	Allowed ROE	Utility Bond Yield	Risk Premium
1980	1	13.45%	13.49%	-0.04%	1990	1	12.60%	9.72%	2.88%
	2	14.38%	12.87%	1.51%		2	12.81%	9.91%	2.90%
	3	13.87%	12.88%	0.99%		3	12.34%	9.93%	2.41%
	4	14.35%	14.11%	0.24%		4	12.77%	9.89%	2.88%
1981	1	14.69%	14.77%	-0.08%	1991	1	12.69%	9.58%	3.11%
	2	14.61%	15.82%	-1.21%		2	12.53%	9.50%	3.03%
	3	14.86%	16.65%	-1.79%		3	12.43%	9.33%	3.10%
	4	15.70%	16.57%	-0.87%		4	12.38%	9.02%	3.36%
1982	1	15.55%	16.72%	-1.17%	1992	1	12.42%	8.91%	3.51%
	2	15.62%	16.26%	-0.64%		2	11.98%	8.86%	3.12%
	3	15.72%	15.88%	-0.16%		3	11.87%	8.47%	3.40%
	4	15.62%	14.56%	1.06%		4	11.94%	8.53%	3.41%
1983	1	15.41%	14.15%	1.26%	1993	1	11.75%	8.07%	3.68%
	2	14.84%	13.58%	1.26%		2	11.71%	7.81%	3.90%
	3	15.24%	13.52%	1.72%		3	11.39%	7.28%	4.11%
	4	15.41%	13.38%	2.03%		4	11.15%	7.22%	3.93%
1984	1	15.39%	13.56%	1.83%	1994	1	11.12%	7.55%	3.57%
	2	15.07%	14.72%	0.35%		2	10.81%	8.29%	2.52%
	3	15.37%	14.47%	0.90%		3	10.95%	8.51%	2.44%
	4	15.33%	13.38%	1.95%		4	11.64%	8.87%	2.77%
1985	1	15.03%	13.31%	1.72%	1995	1	(c)	--	--
	2	15.44%	12.95%	2.49%		2	11.00%	7.93%	3.07%
	3	14.64%	12.11%	2.53%		3	11.07%	7.72%	3.35%
	4	14.44%	11.49%	2.95%	1996	4	11.56%	7.37%	4.19%
1986	1	14.05%	10.18%	3.87%		1	11.45%	7.44%	4.01%
	2	13.28%	9.41%	3.87%		2	10.88%	7.98%	2.90%
	3	13.09%	9.39%	3.70%		3	11.25%	7.96%	3.29%
	4	13.62%	9.31%	4.31%	1997	4	11.32%	7.62%	3.70%
1987	1	12.61%	8.96%	3.65%		1	11.31%	7.76%	3.55%
	2	13.13%	9.77%	3.36%		2	11.70%	7.88%	3.82%
	3	12.56%	10.61%	1.95%		3	12.00%	7.49%	4.51%
	4	12.73%	11.05%	1.68%		4	11.01%	7.25%	3.76%
1988	1	12.94%	10.32%	2.62%	1998	1	(c)	--	--
	2	12.48%	10.71%	1.77%		2	11.37%	7.12%	4.25%
	3	12.79%	10.94%	1.85%		3	11.41%	6.99%	4.42%
	4	12.98%	9.98%	3.00%		4	11.69%	6.97%	4.72%
1989	1	12.99%	10.13%	2.86%	1999	1	10.82%	7.11%	3.71%
	2	13.25%	9.94%	3.31%		2	10.82%	7.48%	3.34%
	3	12.56%	9.53%	3.03%		3	(c)	--	--
	4	12.94%	9.50%	3.44%		4	10.33%	8.05%	2.28%

AUTHORIZED RETURNS

Year	Qtr.	(a)	(b)	Risk Premium	Year	Qtr.	(a)	(b)	Risk Premium
		Allowed ROE	Single-A Utility Bond Yield				Allowed ROE	Single-A Utility Bond Yield	
2000	1	10.71%	8.29%	2.42%	2010	1	10.24%	5.83%	4.41%
	2	11.08%	8.45%	2.63%		2	9.99%	5.61%	4.38%
	3	11.33%	8.25%	3.08%		3	9.93%	5.09%	4.84%
	4	12.50%	8.03%	4.47%		4	10.09%	5.34%	4.75%
2001	1	11.16%	7.74%	3.42%	2011	1	10.10%	5.60%	4.50%
	2	10.75%	7.93%	2.82%		2	9.88%	5.38%	4.50%
	3	(c)	--	--		3	9.65%	4.81%	4.84%
	4	10.65%	7.68%	2.97%		4	9.88%	4.37%	5.51%
2002	1	10.67%	7.65%	3.02%	2012	1	9.63%	4.39%	5.24%
	2	11.64%	7.50%	4.14%		2	9.83%	4.23%	5.60%
	3	11.50%	7.19%	4.31%		3	9.75%	3.98%	5.77%
	4	10.78%	7.15%	3.63%		4	10.07%	3.93%	6.14%
2003	1	11.38%	6.93%	4.45%	2013	1	9.57%	4.18%	5.39%
	2	11.36%	6.40%	4.96%		2	9.47%	4.23%	5.24%
	3	10.61%	6.64%	3.97%		3	9.60%	4.74%	4.86%
	4	10.84%	6.35%	4.49%		4	9.83%	4.76%	5.07%
2004	1	11.10%	6.09%	5.01%	2014	1	9.54%	4.56%	4.98%
	2	10.25%	6.48%	3.77%		2	9.84%	4.32%	5.52%
	3	10.37%	6.13%	4.24%		3	9.45%	4.20%	5.25%
	4	10.66%	5.94%	4.72%		4	10.28%	4.03%	6.25%
2005	1	10.65%	5.74%	4.91%	2015	1	9.47%	3.66%	5.81%
	2	10.54%	5.52%	5.02%		2	9.43%	4.10%	5.33%
	3	10.47%	5.51%	4.96%		3	9.75%	4.35%	5.40%
	4	10.40%	5.82%	4.58%		4	9.68%	4.35%	5.33%
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	2	10.50%	6.37%	4.13%		2	9.42%	3.90%	5.52%
	3	10.45%	6.19%	4.26%		3	9.47%	3.61%	5.86%
	4	10.14%	5.86%	4.28%		4	9.68%	4.04%	5.64%
2007	1	10.44%	5.90%	4.54%	2017	1	9.60%	4.18%	5.42%
	2	10.12%	6.09%	4.03%		2	9.47%	4.06%	5.41%
	3	10.03%	6.22%	3.81%		3	10.14%	3.91%	6.23%
	4	10.27%	6.08%	4.19%		4	9.68%	3.84%	5.84%
2008	1	10.38%	6.15%	4.23%	2018	1	9.68%	4.03%	5.65%
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2009	1	10.24%	6.37%	3.87%	2019	1	9.55%	4.25%	5.30%
	2	10.11%	6.39%	3.72%		2	9.73%	3.96%	5.77%
	3	9.88%	5.74%	4.14%		3	9.80%	3.45%	6.35%
	4	10.27%	5.66%	4.61%		4	9.74%	3.41%	6.33%

**AUTHORIZED RETURNS**

Year	Qtr.	(a)	(b)	Risk Premium
		Allowed ROE	Single-A Utility Bond Yield	
2020	1	9.35%	3.30%	6.05%
	2	9.55%	3.13%	6.42%
	3	9.52%	2.77%	6.75%
	4	9.50%	2.86%	6.64%
2021	1	9.71%	3.15%	6.56%
	2	9.48%	3.26%	6.22%
	3	9.43%	2.95%	6.48%
	4	9.59%	3.05%	6.54%
2022	1	9.38%	3.66%	5.72%
	2	9.23%	4.64%	4.59%
	3	9.52%	4.94%	4.58%
	4	9.65%	5.63%	4.02%
2023	1	9.75%	5.29%	4.46%
	2	9.45%	5.29%	4.16%
	3	9.66%	5.66%	4.00%
	4	9.63%	5.94%	3.69%
2024	1	9.78%	5.53%	4.25%
<b>Average</b>		<b>11.36%</b>	<b>7.56%</b>	<b>3.80%</b>

(a) S&P Global Market Intelligence, *Major Rate Case Decisions*, (Apr. 19, 2024; Jan. 31, 2020; Jan. 14, 2016; Jan. 7, 2011; Apr. 5, 2004; Jan. 21, 1998; July 12, 1991; and Jan. 16, 1990).

(b) Moody's Investors Service.

(c) No decisions reported.

REGRESSION RESULTS

