

**PUGET SOUND ENERGY
TOTAL COST OF CAPITAL
DECEMBER 31, 2025**

Item	Percent		Cost		Weighted Cost
Short-Term Debt	2.04%	1/	5.07%	3/	0.12% 4/
Long-Term Debt	49.46%	1/	5.27%	3/	2.63% 5/
Common Equity	48.50%	2/	9.50%	9.75% 10.00%	4.61% 4.73% 4.85%
Total	100.00%				7.36% 7.60% 7.48%

1/ Percentages of short-term and long-term debt derived from relative amounts of short-term debt and long-term debt as of December 31, 2025, as contained in response to WUTC Staff-026, Attachment B, page 2 of 4:

	Amount (000)	Percent	Ratio to 51.5%
Short-Term Debt	\$229,672,000	3.97%	2.04%
Long-Term Debt	\$5,556,860,000	96.03%	49.46%
Total Debt	\$5,786,532,000		51.50%

2/ Common equity ratio approved for Puget Sound Energy by Commission in Dockets UE-170033/UG-170034 and Dockets UE-190529/UG-190530.

3/ Cost rates, as contained in Exh. CGP-6C, page 2 of 4.

4/ Includes 0.01% Commitment Fees and 0.01% Amortization of Short-Term Debt Issue, as contained in Exh. CGP-6C, page 1 of 4.

5/ Includes 0.02% Amortization of Reacquired Debt, as contained in Exh. CGP-6C, page 1 of 4.

**PUGET SOUND ENERGY
TOTAL COST OF CAPITAL
DECEMBER 31, 2026**

Item	Percent		Cost		Weighted Cost
Short-Term Debt	1.18%	1/	4.08%	3/	0.06% 4/
Long-Term Debt	50.32%	1/	5.36%	3/	2.71% 5/
Common Equity	48.50%	2/	9.50%	9.75% 10.00%	4.61% 4.73% 4.85%
Total	100.00%				7.37% 7.62% 7.49%

1/ Percentages of short-term and long-term debt derived from relative amounts of short-term debt and long-term debt as of December 31, 2026, as contained in response to WUTC Staff-026, Attachment C, page 2 of 4.

	Amount (000)	Percent	Ratio to 51.5%
Short-Term Debt	\$170,702	2.28%	1.18%
Long-Term Debt	\$7,306,860	97.72%	50.32%
Total Debt	\$7,477,562		51.50%

2/ Common equity ratio approved for Puget Sound Energy by Commission in Dockets UE-170033/UG-170034 and Dockets UE-190529/UG-190530.

3/ Cost rates, as contained in Exh. CGP-7C, page 2 of 4.

4/ Includes 0.01% Commitment Fees, as contained in Exh. CGP-7C, page 1 of 4.

5/ Includes 0.01% Amortization of Reacquired Debt, as contained in Exh. CGP-7C, page 1 of 4.

ECONOMIC INDICATORS

Year	Real GDP* Growth	Industrial Production Growth	Unemployment Rate	Consumer Price Index
1975 - 1982 Cycle				
1975	-1.1%	-8.9%	8.5%	7.0%
1976	5.4%	10.8%	7.7%	4.8%
1977	5.5%	5.9%	7.0%	6.8%
1978	5.0%	5.7%	6.0%	9.0%
1979	2.8%	4.4%	5.8%	13.3%
1980	-0.2%	-1.9%	7.0%	12.4%
1981	1.8%	1.9%	7.5%	8.9%
1982	-2.1%	-4.4%	9.5%	3.8%
Cycle Avg	2.1%	1.7%	7.4%	8.3%
1983 - 1991 Cycle				
1983	4.0%	2.7%	9.6%	3.8%
1984	6.8%	9.3%	7.5%	3.9%
1985	3.7%	1.7%	7.2%	3.8%
1986	3.1%	0.9%	7.0%	1.1%
1987	2.9%	4.9%	6.2%	4.4%
1988	3.8%	4.5%	5.5%	4.4%
1989	3.5%	1.8%	5.3%	4.6%
1990	1.8%	-0.2%	5.6%	6.1%
1991	-0.5%	-2.0%	6.8%	3.1%
Cycle Avg	3.2%	2.6%	6.7%	3.9%
1992 - 2001 Cycle				
1992	3.0%	3.1%	7.5%	2.9%
1993	2.7%	3.4%	6.9%	2.7%
1994	4.0%	5.5%	6.1%	2.7%
1995	3.7%	4.8%	5.6%	2.5%
1996	4.5%	4.3%	5.4%	3.3%
1997	4.5%	7.3%	4.9%	1.7%
1998	4.2%	5.8%	4.5%	1.6%
1999	3.7%	4.5%	4.2%	2.7%
2000	4.1%	4.0%	4.0%	3.4%
2001	1.1%	-3.4%	4.7%	1.6%
Cycle Avg	3.6%	3.9%	5.4%	2.5%
2002 - 2009 Cycle				
2002	1.8%	0.2%	5.8%	2.4%
2003	2.8%	1.2%	6.0%	1.9%
2004	3.8%	2.3%	5.5%	3.3%
2005	3.4%	3.2%	5.1%	3.4%
2006	2.7%	2.2%	4.6%	2.5%
2007	1.8%	2.5%	4.6%	4.1%
2008	-0.3%	-3.6%	5.8%	0.1%
2009	-2.8%	-11.5%	9.3%	2.7%
Cycle Avg	1.7%	-0.4%	5.8%	2.6%
2010 - 2020 Cycle				
2010	2.5%	5.5%	9.6%	1.5%
2011	1.5%	3.1%	8.9%	3.0%
2012	2.3%	3.0%	8.1%	1.7%
2013	2.1%	2.0%	7.4%	1.5%
2014	2.5%	3.0%	6.2%	0.8%
2015	2.9%	-1.4%	5.3%	0.7%
2016	1.8%	-2.1%	4.9%	2.1%
2017	2.5%	1.3%	4.4%	2.1%
2018	3.0%	3.2%	3.9%	1.9%
2019	2.5%	-0.7%	3.7%	2.3%
2020	-2.2%	-7.1%	8.1%	1.4%
Cycle Avg	1.9%	0.9%	6.4%	1.7%
Current Cycle				
2021	5.8%	4.4%	5.3%	7.0%
2022	1.9%	3.4%	3.6%	6.5%
2023	2.5%	0.2%	3.6%	3.4%
2024				
Q1	1.4%	-0.4%	3.8%	4.4%
Q2			4.0%	

*GDP=Gross Domestic Product

Note that certain series of data are periodically revised.

Source: Council of Economic Advisors, Economic Indicators, various issues, certain earlier year data retrieved from sources used by this publication.

INTEREST RATES

Year	Prime Rate	US Treasury T Bills 3 Month	US Treasury T Bonds 10 Year	Utility Bonds Aa	Utility Bonds A	Utility Bonds Baa
1975 - 1982 Cycle						
1975	7.86%	5.84%	7.99%	9.44%	10.09%	10.96%
1976	6.84%	4.99%	7.61%	8.92%	9.29%	9.82%
1977	6.83%	5.27%	7.42%	8.43%	8.61%	9.06%
1978	9.06%	7.22%	8.41%	9.10%	9.29%	9.62%
1979	12.67%	10.04%	9.44%	10.22%	10.49%	10.96%
1980	15.27%	11.51%	11.46%	13.00%	13.34%	13.95%
1981	18.89%	14.03%	13.93%	15.30%	15.95%	16.60%
1982	14.86%	10.69%	13.00%	14.79%	15.86%	16.45%
Cycle Avg	11.54%	8.70%	9.91%	11.15%	11.62%	12.18%
1983 - 1991 Cycle						
1983	10.79%	8.63%	11.10%	12.83%	13.66%	14.20%
1984	12.04%	9.58%	12.44%	13.66%	14.03%	14.53%
1985	9.93%	7.48%	10.62%	12.06%	12.47%	12.96%
1986	8.33%	5.98%	7.68%	9.30%	9.58%	10.00%
1987	8.21%	5.82%	8.39%	9.77%	10.10%	10.53%
1988	9.32%	6.69%	8.85%	10.26%	10.49%	11.00%
1989	10.87%	8.12%	8.49%	9.56%	9.77%	9.97%
1990	10.01%	7.51%	8.55%	9.65%	9.86%	10.06%
1991	8.46%	5.42%	7.86%	9.09%	9.36%	9.55%
Cycle Avg	9.77%	7.25%	9.33%	10.69%	11.04%	11.42%
1992 - 2001 Cycle						
1992	6.25%	3.45%	7.01%	8.55%	8.69%	8.86%
1993	6.00%	3.02%	5.87%	7.44%	7.59%	7.91%
1994	7.15%	4.29%	7.09%	8.21%	8.31%	8.63%
1995	8.83%	5.51%	6.57%	7.77%	7.89%	8.29%
1996	8.27%	5.02%	6.44%	7.57%	7.75%	8.16%
1997	8.44%	5.07%	6.35%	7.54%	7.60%	7.95%
1998	8.35%	4.81%	5.26%	6.91%	7.04%	7.26%
1999	8.00%	4.66%	5.65%	7.51%	7.62%	7.88%
2000	9.23%	5.85%	6.03%	8.06%	8.24%	8.36%
2001	6.91%	3.44%	5.02%	7.59%	7.78%	8.02%
Cycle Avg	7.74%	4.51%	6.13%	7.72%	7.85%	8.13%
2002 - 2009 Cycle						
2002	4.67%	1.62%	4.61%	7.19%	7.37%	8.02%
2003	4.12%	1.01%	4.01%	6.40%	6.58%	6.84%
2004	4.34%	1.38%	4.27%	6.04%	6.16%	6.40%
2005	6.19%	3.16%	4.29%	5.44%	5.65%	5.93%
2006	7.96%	4.73%	4.80%	5.84%	6.07%	6.32%
2007	8.05%	4.41%	4.63%	5.94%	6.07%	6.33%
2008	5.09%	1.48%	3.66%	6.18%	6.53%	7.25%
2009	3.25%	0.16%	3.26%	5.75%	6.04%	7.06%
Cycle Avg	5.46%	2.24%	4.19%	6.10%	6.31%	6.77%
2010 - 2020 Cycle						
2010	3.25%	0.14%	3.22%	5.24%	5.46%	5.96%
2011	3.25%	0.06%	2.78%	4.78%	5.04%	5.57%
2012	3.25%	0.09%	1.80%	3.83%	4.13%	4.86%
2013	3.25%	0.06%	2.35%	4.24%	4.47%	4.98%
2014	3.25%	0.03%	2.54%	4.19%	4.28%	4.80%
2015	3.26%	0.06%	2.14%	4.00%	4.12%	5.03%
2016	3.51%	0.33%	1.84%	3.73%	3.93%	4.69%
2017	4.10%	0.94%	2.33%	3.82%	4.00%	4.38%
2018	4.91%	1.94%	2.91%	4.09%	4.25%	4.67%
2019	5.28%	2.08%	2.14%	3.61%	3.77%	4.19%
2020	3.54%	0.38%	0.89%	2.79%	3.02%	3.39%
Cycle Avg	3.71%	0.56%	2.27%	4.03%	4.22%	4.77%
Current Cycle						
2021	3.25%	0.04%	1.45%	2.97%	3.11%	3.36%
2022	4.86%	2.04%	2.95%	4.53%	4.72%	5.03%
2023	8.20%	5.08%	3.96%	5.39%	5.54%	5.84%
2024						
Jan	8.50%	5.23%	4.06%	5.34%	5.48%	5.73%
Feb	8.50%	5.23%	4.21%	5.42%	5.56%	5.79%
Mar	8.50%	5.24%	4.21%	5.43%	5.55%	5.79%
Apr	8.50%	5.24%	4.54%	5.67%	5.79%	6.01%
May	8.50%	5.25%	4.48%	5.62%	5.74%	5.97%
June	8.50%	5.25%	4.31%			

Sources: Council of Economic Advisors, Economic Indicators; Mergent Bond Record.

STOCK PRICE INDICATORS

	S&P Composite [1]	NASDAQ Composite [1]	DJIA	S&P E/P
1975 - 1982 Cycle				
1975			802.49	9.15%
1976			974.92	8.90%
1977			894.63	10.79%
1978			820.23	12.03%
1979			844.40	13.46%
1980			891.41	12.66%
1981			932.92	11.96%
1982			884.36	11.60%
Cycle Avg			880.67	11.32%
1983 - 1991 Cycle				
1983			1,190.34	8.03%
1984			1,178.48	10.02%
1985			1,328.23	8.12%
1986			1,792.76	6.09%
1987			2,275.99	5.48%
1988			2,060.82	8.01%
1989	322.84		2,508.91	7.42%
1990	334.59		2,678.94	6.47%
1991	376.18	491.69	2,929.33	4.79%
Cycle Avg			1,993.76	7.16%
1992 - 2001 Cycle				
1992	415.74	\$599.26	3,284.29	4.22%
1993	451.21	715.16	3,522.06	4.46%
1994	460.33	751.65	3,793.77	5.83%
1995	541.64	925.19	4,493.76	6.09%
1996	670.83	1,164.96	5,742.89	5.24%
1997	872.72	1,469.49	7,441.15	4.57%
1998	1,085.50	1,794.91	8,625.52	3.46%
1999	1,327.33	2,728.15	10,464.88	3.17%
2000	1,427.22	2,783.67	10,734.90	3.63%
2001	1,194.18	2,035.00	10,189.13	2.95%
Cycle Avg	844.67	1,496.74	6,829.24	4.36%
2002 - 2009 Cycle				
2002	993.94	1,539.73	9,226.43	2.92%
2003	965.23	1,647.17	8,993.59	3.84%
2004	1,130.65	1,986.53	10,317.39	4.89%
2005	1,207.23	2,099.32	10,547.67	5.36%
2006	1,310.46	2,263.41	11,408.67	5.78%
2007	1,476.66	2,577.12	13,169.98	5.29%
2008	1,220.89	2,162.46	11,252.62	3.54%
2009	946.73	1,841.03	8,876.15	1.86%
Cycle Avg	1,156.47	2,014.60	10,474.06	4.19%
2010 - 2020 Cycle				
2010	1,139.97	2,347.70	10,662.80	6.04%
2011	1,268.89	2,680.42	11,966.36	6.77%
2012	1,379.56	2,965.77	12,967.08	6.20%
2013	1,462.51	3,537.69	14,999.67	5.57%
2014	1,930.67	4,374.31	16,773.99	5.25%
2015	2,061.20	4,943.49	17,590.61	4.59%
2016	2,092.39	4,982.49	17,908.08	4.17%
2017	2,448.22	6,231.28	21,741.91	4.22%
2018	2,744.68	7,419.27	25,045.75	4.66%
2019	2,912.50	7,936.85	26,378.41	4.53%
2020	3,218.50	10,192.67	26,906.89	3.28%
Cycle Avg	2,059.92	5,237.45	18,449.23	5.03%
Current Cycle				
2021	4,266.80	14,358.18	34,009.89	3.79%
2022	4,100.70	12,242.17	32,911.74	4.79%
2023	4,284.25	12,965.43	34,140.79	4.17%
2024				
Q1	4,995.67	15,702.21	38,524.00	3.64%
Q2	5,254.29	16,659.64	38,811.45	

[1] Note: this source did not publish the S&P Composite prior to 1988 and the NASDAQ Composite prior to 1991.

Source: Council of Economic Advisors, Economic Indicators, various issues.

**PUGET SOUND ENERGY
HISTORY OF CREDIT RATINGS**

Year	Standard & Poor's		Moody's	
	Corp. Issuer	Sen. Secured	Corp. Issuer	Sen. Secured
2016	BBB	A-	Baa1	A2
2017	BBB	A-	Baa1	A2
2018	BBB	A-	Baa1	A2
2019	BBB	A-	Baa1	A2
2020	BBB	A-	Baa1	A2
2021	BBB	A-	Baa1	A2
2022	BBB	A-	Baa1	A2
2023	BBB	A-	Baa1	A2
2024	BBB	A-	Baa1	A2

Source: Response to Staff DR-005.

**PUGET SOUND ENERGY
CAPITAL STRUCTURE RATIOS
REGULATED UTILITY BASIS
2019-2023
(\$000)**

YEAR	COMMON EQUITY 1/	LONG-TERM DEBT 2/	SHORT-TERM DEBT
2019	\$4,009,572 47.7% 49.7%	\$4,059,142 48.3% 50.3%	\$341,629 4.1%
2020	\$4,297,150 48.8% 49.8%	\$4,337,089 49.3% 50.2%	\$167,423 1.9%
2021	\$4,471,264 49.0% 50.0%	\$4,468,766 49.0% 50.0%	\$178,375 2.0%
2022	\$4,632,160 48.7% 49.2%	\$4,785,751 50.3% 50.8%	\$97,854 1.0%
2023	\$4,954,382 49.3% 49.6%	\$5,034,823 50.1% 50.4%	\$62,400 0.6%

Note: Percentages may not total 100.0% due to rounding.

1/ Regulated common equity.

2/ Includes current maturities.

Source: Response to Staff DR-004.

**PUGET SOUND ENERGY
CAPITAL STRUCTURE RATIOS
CONSOLIDATED BASIS
2019-2023
(\$000)**

YEAR	COMMON EQUITY	LONG-TERM DEBT	SHORT-TERM DEBT
2019	\$4,048,680 47.3% 48.3%	\$4,336,142 50.6% 51.7%	\$178,412 2.1%
2020	\$4,181,409 47.0% 49.1%	\$4,338,044 48.8% 50.9%	\$376,212 4.2%
2021	\$4,355,430 46.9% 47.7%	\$4,784,719 51.6% 52.3%	\$140,000 1.5%
2022	\$4,871,083 48.6% 50.4%	\$4,786,765 47.8% 49.6%	\$357,000 3.6%
2023	\$5,050,788 47.8% 49.3%	\$5,184,047 49.0% 50.7%	\$336,400 3.2%

Note: Percentages may not total 100.0% due to rounding.

Source: Puget Energy, Inc. and Puget Sound Energy, Inc., Form 10-Ks.

PUGET ENERGY, INC.
CAPITAL STRUCTURE RATIOS
2019 - 2023
(\$000)

YEAR	COMMON EQUITY	LONG-TERM DEBT 1/	SHORT-TERM DEBT
2019	\$4,000,299	\$6,372,737	\$176,000
	37.9%	60.4%	1.7%
	38.6%	61.4%	
2020	\$4,139,882	\$6,418,852	\$373,800
	37.9%	58.7%	3.4%
	39.2%	60.8%	
2021	\$4,563,316	\$6,653,766	\$140,000
	40.2%	58.6%	1.2%
	40.7%	59.3%	
2022	\$4,964,089	\$6,663,373	\$441,300
	41.1%	55.2%	3.7%
	42.7%	57.3%	
2023	\$4,960,382	\$7,036,642	\$598,100
	39.4%	55.9%	4.7%
	41.3%	58.7%	

1/ Includes current maturities.

Source: Response to Staff DR-004.

**PROXY COMPANIES
COMMON EQUITY RATIOS (EXCLUDING SHORT-TERM DEBT)**

COMPANY	2019	2020	2021	2022	2023	Average	2027-2029
Proxy Group							
ALLETE	61.4%	59.0%	59.8%	59.6%	53.8%	58.7%	59.5%
Avista Corp.	50.6%	49.6%	52.5%	49.6%	48.8%	50.2%	51.5%
Black Hills Corp	42.9%	42.1%	40.3%	45.4%	45.8%	43.3%	44.0%
IDACORP	58.7%	56.1%	57.2%	56.1%	51.2%	55.9%	50.0%
MGE Energy	62.0%	64.5%	61.9%	64.2%	60.7%	62.7%	66.5%
NorthWestern Energy Group	47.5%	47.2%	47.8%	51.8%	50.9%	49.0%	49.5%
OGE Energy	56.4%	51.0%	47.4%	52.4%	49.6%	51.4%	50.0%
Otter Tail Corp	53.1%	58.2%	57.4%	58.3%	58.5%	57.1%	57.5%
Pinnacle West Capital	52.9%	47.2%	46.1%	43.9%	45.0%	47.0%	48.0%
Portland General Electric	48.7%	46.4%	43.2%	43.0%	44.2%	45.1%	41.0%
Average						52.0%	51.8%
Median						50.8%	50.0%

Source: Value Line Investment Survey.

**PROXY COMPANIES
BASIS FOR SELECTION**

Company	Market Capitalization (\$000)	Common Equity Ratio	Value Line Safety	S&P Bond Rating	Moody's Bond Rating
Puget Sound Energy		49.3%		BBB	Baa1
Parcell Proxy Group	\$1 - \$10 Billion	40% Plus	1, 2 or 3	Investment Grade	
ALLETE	\$3,600,000	53.8%	2	BBB	Baa1
Avista Corp.	\$2,600,000	48.8%	3	BBB	Baa2
Black Hills Corp	\$3,700,000	45.8%	3	BBB+	Baa2
IDACORP	\$4,700,000	51.2%	1	BBB	Baa2
MGE Energy	\$2,800,000	60.7%	3	AA-	A1
NorthWestern Energy Group	\$3,000,000	50.9%	3	BBB	Baa2
OGE Energy	\$7,100,000	49.6%	3	BBB+	Baa1
Otter Tail Corp	\$3,800,000	58.3%	2	BBB	Baa2
Pinnacle West Capital	\$8,400,000	45.0%	3	BBB+	Baa2
Portland General Electric	\$4,400,000	44.2%	2	BBB+	A3
Bulkley Proxy Group					
ALLETE	\$3,600,000	53.8%	2	BBB	Baa1
Alliant Energy Corp	\$12,800,000	45.2%	2	A-	Baa2
Ameren Corp	\$19,000,000	43.8%	1	BBB+	Baa2
American Electric Power Co.	\$46,900,000	42.0%	1	BBB+	Baa1
Avista Corp	\$2,600,000	48.8%	3	BBB	Baa2
Black Hills Corp	\$3,700,000	45.8%	3	BBB+	Baa2
CMS Energy Corp	\$18,300,000	33.1%	2	BBB+	Baa2
Duke Energy	\$76,100,000	40.4%	2	BBB+	Baa2
Entergy Corp.	\$23,300,000	38.6%	2	BBB+	Baa2
Evergy	\$12,300,000	48.0%	2	BBB+	Baa2
IDACORP	\$4,700,000	51.2%	1	BBB	Baa2
MGE Energy	\$2,800,000	60.7%	3	AA-	A1
NextEra Energy, Inc.	\$138,000,000	43.6%	3	A-	Baa1
NiSource Inc.	\$10,600,000	35.0%	2	BBB+	Baa2
NorthWestern Energy Group	\$3,000,000	50.9%	3	BBB	Baa2
OGE Energy Corp	\$7,100,000	49.6%	3	BBB+	Baa1
Pinnacle West Capital	\$8,400,000	45.0%	3	BBB+	Baa2
Portland General Electric	\$4,400,000	44.2%	2	BBB+	A3
Southern Co	\$81,200,000	37.6%	2	A-	Baa2
WEC Energy Group	\$25,500,000	44.5%	1	A-	Baa1
Xcel Energy Inc.	\$29,000,000	41.4%	2	BBB+	Baa1

Bold figures indicate criteria of Bulkley proxy group that do not satisfy criteria for Parcell proxy group.

Sources: Value Line, Moody's and S&P websites.

**PROXY COMPANIES
DIVIDEND YIELD**

COMPANY	Qtr DPS	April - June 2024			YIELD	
		DPS	HIGH	LOW		AVERAGE
Proxy Group						
ALLETE	\$0.705	\$2.82	\$65.86	\$56.66	\$61.26	4.6%
Avista Corp.	\$0.480	\$1.92	\$38.91	\$33.00	\$35.96	5.3%
Black Hills Corp	\$0.650	\$2.60	\$58.80	\$50.73	\$54.77	4.7%
IDACORP	\$0.830	\$3.32	\$99.21	\$88.70	\$93.96	3.5%
MGE Energy	\$0.428	\$1.71	\$82.52	\$73.61	\$78.07	2.2%
NorthWestern Energy Group	\$0.650	\$2.60	\$53.03	\$47.48	\$50.26	5.2%
OGE Energy	\$0.418	\$1.67	\$37.30	\$32.37	\$34.84	4.8%
Otter Tail Corp	\$0.468	\$1.87	\$97.19	\$81.65	\$89.42	2.1%
Pinnacle West Capital	\$0.880	\$3.52	\$78.89	\$70.72	\$74.81	4.7%
Portland General Electric	\$0.500	\$2.00	\$45.49	\$40.10	\$42.80	4.7%
Average						4.2%

Source: Yahoo! Finance.

**PROXY COMPANIES
RETENTION GROWTH RATES**

COMPANY	2019	2020	2021	2022	2023	Average	2024	2025	2027-2029	Average
Proxy Group										
ALLETE	2.3%	2.0%	1.5%	2.5%	3.5%	2.4%	2.5%	2.5%	3.5%	2.8%
Avista Corp.	4.9%	0.9%	1.4%	1.1%	1.2%	1.9%	1.5%	2.0%	2.0%	1.8%
Black Hills Corp	3.8%	3.8%	3.3%	3.4%	2.9%	3.4%	2.5%	3.0%	3.0%	2.8%
IDACORP	4.2%	3.9%	3.7%	3.7%	3.4%	3.8%	3.5%	3.5%	3.5%	3.5%
MGE Energy	4.6%	4.2%	5.0%	4.9%	5.0%	4.7%	6.0%	6.5%	7.0%	6.5%
NorthWestern Energy Group	3.1%	2.0%	2.3%	1.7%	1.4%	2.1%	2.0%	2.5%	3.0%	2.5%
OGE Energy	3.6%	2.8%	3.6%	3.0%	3.5%	3.3%	4.5%	4.5%	5.5%	4.8%
Otter Tail Corp	4.0%	4.1%	11.3%	12.4%	7.5%	7.9%	7.0%	7.0%	5.0%	6.3%
Pinnacle West Capital	3.8%	3.5%	4.2%	1.7%	1.9%	3.0%	2.0%	2.5%	3.0%	2.5%
Portland General Electric	3.1%	4.1%	3.5%	3.1%	1.6%	3.1%	3.0%	3.5%	3.5%	3.3%
Average						3.6%				3.7%

Source: Value Line Investment Survey.

**PROXY COMPANIES
PER SHARE GROWTH RATES**

COMPANY	5-Year Historic Growth Rates				Est'd '21-'23 to '27-'29 Growth Rates			
	EPS	DPS	BVPS	Average	EPS	DPS	BVPS	Average
Proxy Group								
ALLETE	0.5%	3.5%	3.0%	2.3%	6.0%	3.5%	3.5%	4.3%
Avista Corp.	1.0%	4.5%	3.5%	3.0%	5.0%	4.0%	2.0%	3.7%
Black Hills Corp	4.0%	6.0%	6.5%	5.5%	4.0%	4.0%	3.5%	3.8%
IDACORP	3.5%	6.5%	4.5%	4.8%	5.5%	5.5%	4.0%	5.0%
MGE Energy	6.5%	4.5%	6.0%	5.7%	7.0%	3.5%	4.5%	5.0%
NorthWestern Energy Group	0.0%	3.5%	4.0%	2.5%	4.0%	2.0%	3.0%	3.0%
OGE Energy	4.5%	6.5%	1.5%	4.2%	6.5%	3.0%	5.5%	5.0%
Otter Tail Corp	14.5%	4.0%	6.0%	8.2%	4.5%	7.0%	8.0%	6.5%
Pinnacle West Capital	2.0%	5.0%	3.5%	3.5%	4.5%	1.5%	4.5%	3.5%
Portland General Electric	3.0%	6.0%	3.0%	4.0%	6.0%	5.5%	4.0%	5.2%
Average				4.4%				4.5%

Source: Value Line Investment Survey.

**PROXY COMPANIES
PROJECTIONS OF EARNINGS PER SHARE GROWTH**

Proxy Group	Value Line	First Call	Zack's	Average
ALLETE	6.0%	8.10%	8.10%	7.4%
Avista Corp.	5.0%	6.20%	6.21%	5.8%
Black Hills Corp	4.0%	0.70%	na	2.4%
IDACORP	5.5%	4.40%	4.38%	4.8%
MGE Energy	7.0%	5.40%	5.35%	5.9%
NorthWestern Energy Group	4.0%	4.50%	5.16%	4.6%
OGE Energy	6.5%	-12.34%	5.00%	5.8%
Otter Tail Corp	4.5%	9.00%	na	6.8%
Pinnacle West Capital	4.5%	7.20%	8.22%	6.6%
Portland General Electric	6.0%	12.50%	5.14%	5.6%
Average				5.5%

Note: EPS growth rates in shaded cells are not included in averages, since they are outliers.

**PROXY COMPANIES
DCF COST RATES**

COMPANY	ADJUSTED YIELD	HISTORIC RETENTION GROWTH	PROSPECTIVE RETENTION GROWTH	HISTORIC PER SHARE GROWTH	PROSPECTIVE PER SHARE GROWTH	PROJECTED EPS GROWTH	AVERAGE GROWTH	DCF RATES
Proxy Group								
ALLETE	4.7%	2.4%	2.8%	2.3%	4.3%	7.40%	3.9%	8.5%
Avista Corp.	5.4%	1.9%	1.8%	3.0%	3.7%	5.80%	3.2%	8.7%
Black Hills Corp	4.8%	3.4%	2.8%	5.5%	3.8%	2.35%	3.6%	8.4%
IDACORP	3.6%	3.8%	3.5%	4.8%	5.0%	4.76%	4.4%	8.0%
MGE Energy	2.3%	4.7%	6.5%	5.7%	5.0%	5.92%	5.6%	7.8%
NorthWestern Energy Group	5.2%	2.1%	2.5%	2.5%	3.0%	4.55%	2.9%	8.2%
OGE Energy	4.9%	3.3%	4.8%	4.2%	5.0%	5.75%	4.6%	9.5%
Otter Tail Corp	2.2%	7.9%	6.3%	8.2%	6.5%	6.75%	7.1%	9.3%
Pinnacle West Capital	4.8%	3.0%	2.5%	3.5%	3.5%	6.64%	3.8%	8.6%
Portland General Electric	4.8%	3.1%	3.3%	4.0%	5.2%	5.57%	4.2%	9.0%
Mean	4.3%	3.6%	3.7%	4.4%	4.5%	5.5%	4.3%	8.6%
Median	4.8%	3.2%	3.1%	4.1%	4.7%	5.8%	4.0%	8.6%
Composite - Mean		7.8%	8.0%	8.6%	8.8%	9.8%	8.6%	
Composite - Median		8.0%	7.9%	8.9%	9.5%	10.6%	8.8%	

Note: negative values not used in calculations.

Sources: Prior pages of this schedule.

**STANDARD & POOR'S 500 COMPOSITE
20-YEAR U.S. TREASURY BOND YIELDS
RISK PREMIUMS**

Year	EPS	BVPS	ROE	20-YEAR T-BOND YIELD	RISK PREMIUM
1977		\$79.07			
1978	\$12.33	\$85.35	15.00%	7.90%	7.10%
1979	\$14.86	\$94.27	16.55%	8.86%	7.69%
1980	\$14.82	\$102.48	15.06%	9.97%	5.09%
1981	\$15.36	\$109.43	14.50%	11.55%	2.95%
1982	\$12.64	\$112.46	11.39%	13.50%	-2.11%
1983	\$14.03	\$116.93	12.23%	10.38%	1.85%
1984	\$16.64	\$122.47	13.90%	11.74%	2.16%
1985	\$14.61	\$125.20	11.80%	11.25%	0.55%
1986	\$14.48	\$126.82	11.49%	8.98%	2.51%
1987	\$17.50	\$134.07	13.42%	7.92%	5.50%
1988	\$23.75	\$141.32	17.25%	8.97%	8.28%
1989	\$22.87	\$147.26	15.85%	8.81%	7.04%
1990	\$21.73	\$153.01	14.47%	8.19%	6.28%
1991	\$15.97	\$158.85	10.24%	8.22%	2.02%
1992	\$19.09	\$149.74	12.37%	7.26%	5.11%
1993	\$21.89	\$180.88	13.24%	7.17%	6.07%
1994	\$30.60	\$193.04	16.37%	6.59%	9.78%
1995	\$33.96	\$216.51	16.58%	7.60%	8.98%
1996	\$38.73	\$237.08	17.08%	6.18%	10.90%
1997	\$39.72	\$249.52	16.33%	6.64%	9.69%
1998	\$37.71	\$266.40	14.62%	5.83%	8.79%
1999	\$48.17	\$290.68	17.29%	5.57%	11.72%
2000	\$50.00	\$325.80	16.22%	6.50%	9.72%
2001	\$24.69	\$338.37	7.43%	5.53%	1.90%
2002	\$27.59	\$321.72	8.36%	5.59%	2.77%
2003	\$48.74	\$367.17	14.15%	4.80%	9.35%
2004	\$58.55	\$414.75	14.98%	5.04%	9.94%
2005	\$69.93	\$453.06	16.12%	4.64%	11.48%
2006	\$81.51	\$504.39	17.03%	5.00%	12.03%
2007	\$66.18	\$529.59	12.80%	4.91%	7.89%
2008	\$14.88	\$451.37	3.03%	4.36%	-1.33%
2009	\$50.97	\$513.58	10.56%	4.11%	6.45%
2010	\$77.35	\$579.14	14.16%	4.03%	10.13%
2011	\$86.95	\$613.14	14.59%	3.62%	10.97%
2012	\$86.51	\$666.97	13.52%	2.54%	10.98%
2013	\$100.20	\$715.84	14.49%	3.12%	11.37%
2014	\$102.31	\$726.96	14.18%	3.07%	11.11%
2015	\$88.53	\$740.29	12.07%	2.55%	9.52%
2016	\$94.55	\$768.98	12.53%	2.22%	10.31%
2017	\$109.88	\$826.52	13.77%	2.65%	11.12%
2018	\$132.39	\$851.62	15.78%	3.02%	12.76%
2019	\$139.70	\$914.49	15.82%	2.40%	13.42%
2020	\$94.13	\$927.52	10.22%	1.35%	8.87%
2021	\$197.90	\$1,008.02	20.45%	1.98%	18.47%
2022	\$172.78	\$1,024.56	17.00%	3.30%	13.70%
2023	\$192.43	\$1,106.21	18.06%	4.26%	13.80%
Average					7.93%

Source: Standard & Poor's, Duff & Phelps.

**PROXY COMPANIES
CAPM COST RATES**

COMPANY	RISK-FREE RATE	BETA	RISK PREMIUM	CAPM RATES
Proxy Group				
ALLETE	4.67%	0.95	6.4%	10.8%
Avista Corp.	4.67%	0.95	6.4%	10.8%
Black Hills Corp	4.67%	1.05	6.4%	11.4%
IDACORP	4.67%	0.85	6.4%	10.1%
MGE Energy	4.67%	0.80	6.4%	9.8%
NorthWestern Energy Group	4.67%	0.95	6.4%	10.8%
OGE Energy	4.67%	1.05	6.4%	11.4%
Otter Tail Corp	4.67%	0.95	6.4%	10.8%
Pinnacle West Capital	4.67%	0.95	6.4%	10.8%
Portland General Electric	4.67%	0.95	6.4%	10.8%
Mean				10.7%
Median				10.8%

Sources: Value Line Investment Survey, Standard & Poor's, Federal Reserve.

20-year Treasury Bonds

<u>Month</u>	<u>Rate</u>
Apr-24	4.77%
May-24	4.71%
June 24	4.54%
Average	4.67%

**PROXY COMPANIES
RATES OF RETURN ON AVERAGE COMMON EQUITY**

COMPANY	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2002-2008	2009-2020	2021	2022	2023	2024	2025	2027-29	Average
																				Average	Average							
Proxy Group																												
ALLETE				12.0%	13.2%	13.4%	11.4%	7.3%	8.2%	9.5%	8.7%	8.4%	8.6%	9.4%	8.3%	8.0%	8.2%	7.8%	7.7%		8.3%	7.2%	7.3%	9.0%	8.0%	8.0%	9.0%	8.1%
Avista Corp.	4.5%	6.7%	4.6%	5.8%	8.8%	4.1%	7.6%	8.4%	8.5%	8.6%	6.4%	8.7%	8.1%	7.8%	8.6%	7.5%	7.8%	10.6%	6.5%	6.0%	8.1%	7.1%	6.9%	7.1%	7.5%	7.5%	8.5%	7.4%
Black Hills Corp	12.1%	8.9%	7.9%	9.4%	9.6%	10.9%	0.7%	8.4%	5.9%	3.6%	7.1%	9.1%	9.6%	9.5%	8.9%	10.9%	10.2%	9.4%	9.4%	8.5%	8.5%	8.9%	9.0%	8.5%	8.0%	8.0%	8.5%	8.5%
IDACORP	7.1%	4.2%	8.2%	7.3%	9.4%	7.1%	8.0%	9.3%	9.8%	10.5%	9.9%	10.1%	10.2%	9.7%	9.4%	9.6%	9.8%	9.6%	9.4%	7.3%	9.8%	9.4%	9.4%	9.1%	9.0%	9.0%	9.0%	9.2%
MGE Energy	13.2%	12.5%	11.4%	9.4%	11.8%	12.1%	11.8%	10.4%	11.3%	11.3%	11.4%	12.5%	12.6%	10.6%	10.7%	10.2%	10.6%	10.4%	10.1%	11.7%	11.0%	10.5%	9.0%	9.1%	11.0%	11.5%	12.0%	10.5%
NorthWestern Energy Group					6.4%	6.9%	8.4%	9.4%	9.6%	10.9%	9.3%	9.5%	10.3%	9.0%	10.0%	9.4%	9.1%	8.9%	7.9%		9.4%	8.3%	7.5%	7.1%	7.5%	8.0%	8.0%	7.7%
OGE Energy	11.1%	13.2%	12.7%	12.5%	15.0%	14.7%	13.0%	12.9%	13.5%	14.0%	13.2%	13.2%	12.5%	10.3%	10.0%	10.5%	10.8%	11.0%	10.7%	13.2%	11.9%	12.3%	10.7%	9.4%	12.5%	12.5%	13.0%	11.7%
Otter Tail Corp	15.2%	12.0%	10.8%	11.6%	10.4%	10.4%	5.9%	3.7%	2.1%	2.7%	6.9%	9.4%	10.3%	9.9%	9.7%	10.7%	11.4%	11.5%	11.6%	10.9%	8.3%	18.9%	25.5%	23.9%	13.0%	12.5%	11.5%	16.3%
Pinnacle West Capital	8.6%	8.3%	8.2%	6.7%	9.2%	8.5%	6.1%	6.8%	9.3%	8.7%	9.8%	9.9%	9.2%	9.7%	9.4%	10.1%	9.9%	10.1%	9.9%	8.9%	9.4%	10.7%	8.1%	8.2%	8.0%	8.0%	8.5%	8.6%
Portland General Electric						11.5%	6.5%	6.2%	8.0%	9.0%	8.3%	7.7%	9.1%	8.2%	8.3%	8.6%	8.6%	8.4%	5.9%	9.0%	8.0%	9.1%	8.9%	7.4%	9.0%	9.5%	9.5%	8.9%
Average	10.3%	9.4%	9.1%	9.3%	10.4%	10.0%	7.9%	8.3%	8.6%	8.9%	9.1%	9.9%	10.1%	9.4%	9.3%	9.6%	9.6%	9.8%	8.9%	9.4%	9.3%	10.2%	10.2%	8.3%	9.4%	9.5%	9.8%	9.7%
Median	11.1%	8.9%	8.2%	9.4%	9.6%	10.7%	7.8%	8.4%	8.9%	9.3%	9.0%	9.5%	9.9%	9.6%	9.4%	9.9%	9.9%	9.9%	9.4%	9.4%	9.4%	9.3%	9.0%	8.5%	8.5%	8.5%	9.0%	8.8%

Note: The absence of figures for a specific company for a particular year is due to the fact that Value Line did not report the relevant figures (to calculate the appropriate ratios) for that company for that year.

Source: Calculations made from data contained in Value Line Investment Survey.

PROXY COMPANIES
MARKET TO BOOK RATIOS

COMPANY	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2002-2008	2009-2020
																				Average	Average
Proxy Group																					
ALLETE				212%	219%	195%	156%	113%	127%	138%	136%	152%	151%	146%	153%	182%	181%	189%	152%		152%
Avista Corp.	85%	94%	111%	115%	135%	127%	110%	94%	106%	119%	123%	125%	143%	141%	158%	174%	178%	160%	146%	111%	139%
Black Hills Corp	143%	134%	134%	165%	153%	164%	124%	77%	108%	109%	121%	161%	181%	152%	186%	207%	174%	191%	171%	145%	153%
IDACORP	134%	112%	125%	122%	139%	132%	104%	94%	113%	119%	123%	136%	159%	158%	177%	203%	199%	212%	183%	124%	156%
MGE Energy	214%	223%	207%	207%	191%	178%	159%	154%	171%	182%	203%	214%	227%	217%	274%	298%	261%	285%	253%	197%	228%
NorthWestern Energy Group					160%	147%	109%	105%	122%	138%	146%	159%	174%	167%	171%	169%	154%	170%	154%		152%
OGE Energy	147%	154%	178%	187%	205%	197%	145%	139%	180%	197%	204%	231%	228%	184%	170%	192%	181%	206%	179%	173%	191%
Otter Tail Corp	245%	209%	185%	183%	178%	200%	167%	108%	120%	123%	152%	196%	196%	186%	207%	244%	253%	274%	217%	195%	190%
Pinnacle West Capital	116%	114%	130%	130%	129%	127%	100%	90%	113%	125%	141%	153%	158%	160%	172%	191%	182%	191%	169%	121%	154%
Portland General Electric					153%	140%	101%	83%	97%	109%	117%	131%	145%	148%	155%	173%	162%	179%	163%	131%	139%
Average	155%	149%	153%	165%	166%	161%	128%	106%	126%	136%	147%	166%	176%	166%	182%	203%	193%	206%	179%	150%	165%
Median	143%	134%	134%	174%	157%	156%	117%	100%	117%	124%	139%	156%	167%	159%	172%	192%	181%	191%	170%	145%	155%

Note: The absence of figures for a specific company for a particular year is due to the fact that Value Line did not report the relevant figures (to calculate the appropriate ratios) for that company for that year.

Source: Calculations made from data contained in Value Line Investment Survey.

**BULKLEY PROXY COMPANIES
RATES OF RETURN ON COMMON EQUITY
MARKET TO BOOK RATIOS**

COMPANY	Actual Returns on Average Common Equity			Estimated Returns on Equity		
	2021	2022	2023	2024	2025	2027-29
Bulkley Proxy Group						
ALLETE	7.2%	7.3%	9.0%	8.0%	8.0%	9.0%
Alliant Energy Corp	11.3%	11.2%	10.8%	11.0%	11.5%	12.0%
Ameren Corp	10.5%	10.6%	10.9%	11.0%	11.0%	10.0%
American Electric Power Co.	11.6%	11.2%	11.0%	10.0%	10.0%	11.0%
Avista Corp	7.1%	6.9%	7.1%	7.5%	7.5%	8.5%
Black Hills Corp	8.9%	9.0%	8.5%	8.0%	8.0%	8.5%
CMS Energy Corp	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%
Duke Energy	8.6%	8.6%	8.9%	9.0%	9.0%	9.0%
Entergy Corp.	12.3%	9.0%	17.1%	9.0%	9.0%	10.0%
Evergy	9.7%	7.9%	7.6%	9.0%	9.0%	10.0%
IDACORP	9.4%	9.4%	9.1%	9.0%	9.0%	9.0%
MGE Energy	10.5%	9.0%	9.1%	11.0%	11.5%	12.0%
NextEra Energy, Inc.	13.6%	15.0%	14.8%	14.0%	14.0%	13.0%
NiSource Inc.	10.5%	11.0%	8.9%	8.5%	10.0%	11.0%
NorthWestern Energy Group	8.3%	7.5%	7.1%	7.5%	8.0%	8.0%
OGE Energy Corp	12.3%	10.7%	9.4%	12.5%	12.5%	13.0%
Pinnacle West Capital	10.7%	8.1%	8.2%	8.0%	8.0%	8.5%
Portland General Electric	9.1%	8.9%	7.4%	9.0%	9.0%	9.5%
Southern Co	13.0%	13.3%	12.8%	13.0%	13.0%	14.5%
WEC Energy Group	12.1%	12.5%	8.4%	12.5%	12.5%	13.0%
Xcel Energy Inc.	10.6%	10.7%	10.8%	10.5%	11.0%	11.5%
Average	10.5%	10.0%	10.0%	10.0%	10.2%	10.6%
Median	10.5%	9.4%	9.1%	9.0%	10.0%	10.0%

Source: Calculations made from data contained in Value Line Investment Survey.

**STANDARD & POOR'S 500 COMPOSITE
RETURNS AND MARKET-TO-BOOK RATIOS
2002 - 2023**

YEAR	RETURN ON AVERAGE EQUITY	MARKET-TO BOOK RATIO
2002	8.4%	295%
2003	14.2%	278%
2004	15.0%	291%
2005	16.1%	278%
2006	17.0%	277%
2007	12.8%	284%
2008	3.0%	224%
2009	10.6%	187%
2010	14.2%	208%
2011	14.6%	207%
2012	13.5%	214%
2013	14.5%	237%
2014	14.2%	268%
2015	11.8%	273%
2016	12.5%	271%
2017	13.8%	310%
2018	15.8%	316%
2019	15.8%	322%
2020	10.2%	378%
2021	20.5%	438%
2022	17.0%	409%
2023	18.1%	403%
Averages:		
2002-2008	12.4%	275%
2009-2023	14.5%	296%

Return on average equity = earnings per share divided by average of year-begin and year-end book value per share.

Market-to-book ratio = ratio of average stock price (average of high and low stock prices for each year) and average book value (average of year-begin and year-end book value per share).

Source: Standard & Poor's.

RISK INDICATORS

COMPANY	VALUE LINE SAFETY	VALUE LINE BETA	VALUE LINE FINANCIAL STRENGTH	
Proxy Group				
ALLETE	2	0.95	A	4.00
Avista Corp.	3	0.95	B++	3.67
Black Hills Corp	3	1.05	B++	3.67
IDACORP	1	0.85	A	4.00
MGE Energy	3	0.80	B++	3.67
NorthWestern Energy Group	3	0.95	B+	3.33
OGE Energy	3	1.05	B++	3.67
Otter Tail Corp	2	0.95	A	4.00
Pinnacle West Capital	3	0.95	B++	3.67
Portland General Electric	2	0.95	B++	3.67
	2.5	0.95	B++	3.74

RISK INDICATORS

GROUP	VALUE LINE SAFETY	VALUE LINE BETA	VALUE LINE FIN STR
S & P's 500 Composite	2.4	1.04	B++
Proxy Group	2.5	0.95	B++

Sources: Value Line Investment Survey, Standard & Poor's Stock Guide.

Definitions:

Safety rankings are in a range of 1 to 5, with 1 representing the highest safety or lowest risk.

Beta reflects the variability of a particular stock, relative to the market as a whole. A stock with a beta of 1.0 moves in concert with the market, a stock with a beta below 1.0 is less variable than the market, and a stock with a beta above 1.0 is more variable than the market.

Financial strengths range from C to A++, with the latter representing the highest level.

Common stock rankings range from D to A+, with the later representing the highest level.

RISK PREMIUM ANALYSIS

Line No.		Low	High	Source	Low	High
		<u>2012 - 2019 Period</u>			<u>2012 - 2023 Period</u>	
1	Risk Premium Range	4.84%	5.01%	1/	5.04%	5.10%
2	Current level of Baa-rated Utility bonds	5.92%	5.92%	2/	5.92%	5.92%
3	Interest Rate Range	4.45%	5.17%	3/	3.28%	5.54%
4	Difference in Interest Rate Levels	1.47%	0.75%	4/	2.64%	0.38%
5	Relationship between Interest Rates and Risk Premiums	-0.576	-0.576	5/	-0.576	-0.576
6	Required change in Risk Premium	-0.85%	-0.43%	6/	-1.52%	-0.22%
7	Risk Premium	3.99%	4.58%	7/	3.52%	4.88%
8	RP Result	9.91%	10.50%	8/	9.44%	10.80%

1/ As developed in testimony and page 2 of this exhibit.

2/ Average yield on Baa-rated utility bonds for three-month period April - June, 2024, as shown on Exh. DCP-15, page 2.

3/ As shown on page 2 of this exhibit.

4/ Difference between lines 2 and 3.

5/ As shown in Direct Testimony of PSE witness Bulkley on Exh. AEB-9, page 4.

6/ Lines 4 times lines 5.

7/ Lines 1 plus 6.

8/ Lines 2 plus lines 7.

**RISK PREMIUM ANALYSIS
CALCULATION OF RISK PREMIUMS**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2012-19 Average	2012-23 Average
Average Authorized ROE General Rate Cases	10.02%	9.82%	9.76%	9.60%	9.60%	9.68%	9.56%	9.65%	9.39%	9.39%	9.58%	9.66%	9.71%	9.64%
Annual Average Yields on Baa rated Utility Bonds														
No Lag	4.86%	4.98%	4.80%	5.03%	4.68%	4.38%	4.67%	4.19%	3.39%	3.36%	5.03%	5.84%	4.70%	4.60%
3 Months Lag	5.00%	4.81%	4.93%	4.82%	4.91%	4.48%	4.48%	4.50%	3.53%	3.33%	4.37%	5.78%	4.74%	4.58%
6 Months Lag	5.12%	4.70%	5.07%	4.68%	5.18%	4.46%	4.38%	4.71%	3.71%	3.00%	3.85%	5.61%	4.79%	4.54%
9 Months Lag	5.32%	4.78%	5.07%	4.65%	5.24%	4.50%	4.32%	4.77%	3.92%	3.33%	3.49%	5.44%	4.83%	4.57%
12 Months Lag	5.57%	4.86%	4.96%	4.80%	5.03%	4.68%	4.38%	4.67%	4.19%	3.39%	3.36%	5.03%	4.87%	4.58%
Average	5.17% 5.17%	4.83%	4.97%	4.80%	5.01%	4.50%	4.45% 4.45%	4.57%	3.75%	3.28%	4.02%	5.54%	4.79%	4.57%
Risk Premiums of ROEs vs Baa rated Utility Bonds														
No Lag	5.16%	4.84%	4.96%	4.57%	4.92%	5.30%	4.89%	5.46%	6.00%	6.03%	4.55%	3.82%	5.01%	5.04%
3 Months Lag	5.02%	5.01%	4.83%	4.78%	4.69%	5.20%	5.08%	5.15%	5.86%	6.06%	5.21%	3.88%	4.97%	5.06%
6 Months Lag	4.90%	5.12%	4.69%	4.92%	4.42%	5.22%	5.18%	4.94%	5.68%	6.39%	5.73%	4.05%	4.92%	5.10%
9 Months Lag	4.70%	5.04%	4.69%	4.95%	4.36%	5.18%	5.24%	4.88%	5.47%	6.06%	6.09%	4.22%	4.88%	5.07%
12 Months Lag	4.45%	4.96%	4.80%	4.80%	4.57%	5.00%	5.18%	4.98%	5.20%	6.00%	6.22%	4.63%	4.84%	5.07%
Average	4.85%	4.99%	4.79%	4.80%	4.59%	5.18%	5.11%	5.08%	5.64%	6.11%	5.56%	4.12%	4.93%	5.07%

Sources: S&P Global Intelligence; Mergent Bond Record.

RISK PREMIUM ANALYSIS
YIELDS ON Baa RATED PUBLIC UTILITY BONDS

Year/Month	Yield	Annual Average Yield	3-Month Lagged Average Yield	6-Month Lagged Average Yield	9-Month Lagged Average Yield	12-Month Lagged Average Yield	Yield	Annual Average Yield	3-Month Lagged Average Yield	6-Month Lagged Average Yield	9-Month Lagged Average Yield	12-Month Lagged Average Yield	
2011							2018						
Jan	6.06%						Jan	4.18%					
Feb	6.10%						Feb	4.42%					
Mar	5.97%						Mar	4.52%					
Apr	5.98%						Apr	4.58%					
May	5.74%						May	4.71%					
Jun	5.67%						Jun	4.71%					
Jul	5.70%						Jul	4.67%					
Aug	5.22%						Aug	4.64%					
Sep	5.11%						Sep	4.74%					
Oct	5.24%						Oct	4.91%					
Nov	4.93%						Nov	5.03%					
Dec	5.07%	5.57%					Dec	4.92%	4.67%	4.48%	4.38%	4.32%	4.38%
2012							2019						
Jan	5.06%						Jan	4.91%					
Feb	5.02%						Feb	4.76%					
Mar	5.13%						Mar	4.65%					
Apr	5.11%						Apr	4.55%					
May	4.97%						May	4.47%					
Jun	4.91%						Jun	4.31%					
Jul	4.85%						Jul	4.13%					
Aug	4.88%						Aug	3.63%					
Sep	4.81%						Sep	3.71%					
Oct	4.54%						Oct	3.72%					
Nov	4.42%						Nov	3.76%					
Dec	4.56%	4.86%	5.00%	5.12%	5.32%	5.57%	Dec	3.73%	4.19%	4.50%	4.71%	4.77%	4.67%
2013							2020						
Jan	4.66%						Jan	3.60%					
Feb	4.74%						Feb	3.42%					
Mar	4.72%						Mar	3.96%					
Apr	4.49%						Apr	3.82%					
May	4.65%						May	3.63%					
Jun	5.08%						Jun	3.44%					
Jul	5.21%						Jul	3.09%					
Aug	5.28%						Aug	3.06%					
Sep	5.31%						Sep	3.17%					
Oct	5.17%						Oct	3.27%					
Nov	5.24%						Nov	3.17%					
Dec	5.25%	4.98%	4.81%	4.70%	4.76%	4.86%	Dec	3.05%	3.39%	3.53%	3.71%	3.92%	4.19%
2014							2021						
Jan	5.09%						Jan	3.18%					
Feb	5.01%						Feb	3.37%					
Mar	5.00%						Mar	3.72%					
Apr	4.85%						Apr	3.57%					
May	4.69%						May	3.58%					
Jun	4.73%						Jun	3.41%					
Jul	4.66%						Jul	3.20%					
Aug	4.65%						Aug	3.19%					
Sep	4.79%						Sep	3.19%					
Oct	4.67%						Oct	3.32%					
Nov	4.75%						Nov	3.25%					
Dec	4.70%	4.80%	4.93%	5.07%	5.07%	4.98%	Dec	3.36%	3.36%	3.33%	3.30%	3.33%	3.39%
2015							2022						
Jan	4.39%						Jan	3.57%					
Feb	4.44%						Feb	3.95%					
Mar	4.51%						Mar	4.28%					
Apr	4.51%						Apr	4.61%					
May	4.91%						May	5.07%					
Jun	5.13%						Jun	5.22%					
Jul	5.22%						Jul	5.15%					
Aug	5.23%						Aug	5.09%					
Sep	5.42%						Sep	5.61%					
Oct	5.47%						Oct	6.18%					
Nov	5.57%						Nov	6.05%					
Dec	5.55%	5.03%	4.82%	4.68%	4.65%	4.80%	Dec	5.57%	5.03%	4.37%	3.85%	3.49%	3.36%
2016							2023						
Jan	5.49%						Jan	5.49%					
Feb	5.28%						Feb	5.54%					
Mar	5.12%						Mar	5.68%					
Apr	4.75%						Apr	5.47%					
May	4.60%						May	5.71%					
Jun	4.47%						Jun	5.73%					
Jul	4.16%						Jul	5.73%					
Aug	4.20%						Aug	6.08%					
Sep	4.27%						Sep	6.15%					
Oct	4.34%						Oct	6.61%					
Nov	4.64%						Nov	6.20%					
Dec	4.79%	4.68%	4.91%	5.18%	5.24%	5.03%	Dec	5.68%	5.84%	5.78%	5.61%	5.44%	5.03%
2017													
Jan	4.62%												
Feb	4.58%												
Mar	4.62%												
Apr	4.51%												
May	4.50%												
Jun	4.32%												
Jul	4.36%												
Aug	4.23%												
Sep	4.24%												
Oct	4.26%												
Nov	4.16%												
Dec	4.14%	4.38%	4.48%	4.46%	4.50%	4.68%							

Source: Mergent Bond Record.