Exhibit No.:	
Issue(s):	*Rate of Return*
Witness:	*Christopher C. Walters*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Direct Testimony*
Case No.:	*WR-2024-0104*
Date Testimony Prepared:	*August 20, 2024*

MISSOURI PUBLIC SERVICE COMMISSION

FINANCIAL AND BUSINESS ANALYSIS DIVISION

FINANCIAL ANALYSIS DEPARTMENT

DIRECT TESTIMONY

OF

CHRISTOPHER C. WALTERS

LIBERTY UTILITIES (Missouri Water), LLC,
d/b/a Liberty

CASE NO. WR-2024-0104

Jefferson City, Missouri
August 2024

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CASE NO. WR-2024-0104

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Christopher C. Walters. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q. Please state your occupation.

A. I am a Principal with the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants in the field of public utility regulation.

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of Staff of the Missouri Public Service Commission ("Commission"").

Q. Please describe your educational background and experience.

A. I received a Bachelor of Science Degree in Business Economics and Finance from Southern Illinois University Edwardsville. I have also received a Master of Business Administration Degree from Lindenwood University. I earned the Chartered Financial Analyst ("CFA") designation from the CFA Institute. The CFA charter was awarded after successfully completing three examinations which covered the subject areas of financial accounting and reporting analysis, corporate finance, economics, fixed income and equity valuation, derivatives, alternative investments, risk management, and professional and ethical conduct. I am a member of the CFA Institute and the CFA Society of St. Louis.

As an Associate at BAI, I perform detailed technical analyses and research to support regulatory projects including expert testimony covering various regulatory issues. Since my career at BAI began in 2011, I have held the positions of Analyst, Associate Consultant, Consultant, Senior Consultant, and Associate. Throughout my tenure, I have been involved with several regulated projects for electric, natural gas, and water and wastewater utilities, as well as competitive procurement of electric power and gas supply. My regulatory project work includes estimating the cost of equity capital, capital structure evaluations, assessing financial integrity, merger and acquisition related issues, risk management related issues, depreciation rate studies, and other revenue requirement issues.

BAI was formed in April 1995. BAI and its predecessor firm have participated in more than 700 regulatory proceedings in 40 states and Canada.

BAI provides consulting services in the economic, technical, accounting, and financial aspects of public utility rates and in the acquisition of utility and energy services through requests for proposal and negotiations, in both regulated and unregulated markets. Our clients include large industrial and institutional customers, some utilities and, on occasion, state regulatory agencies. We also prepare special studies and reports, forecasts, surveys and siting studies, and present seminars on utility-related issues.

In general, we are engaged in energy and regulatory consulting, economic analysis and contract negotiation. In addition to our main office in St. Louis, the firm also has branch offices in Corpus Christi, Texas; Detroit, Michigan; Louisville, Kentucky and Phoenix, Arizona.

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to provide a recommendation to the Commission on behalf of Staff regarding the appropriate overall rate of return ("ROR")

including a reasonable capital structure, cost of debt, and return on common equity ("ROE") the Commission should authorize for Liberty Utilities (Missouri Water), LLC, d/b/a Liberty ("Liberty Water") in this general rate case.

My silence with regard to any position taken by Liberty Water in its application or direct testimony in this proceeding does not indicate my endorsement of that position.

II. SUMMARY

Q. Please summarize the rest of your testimony.

A. In Section III of my testimony, I review and analyze the regulated utility industry's access to capital, credit rating trends, and outlooks, as well as the overall trend in the authorized ROE for utilities throughout the country. I conclude that the trend in authorized ROEs for utilities has declined over the last several years and has remained below 10.0% in more recent history. I also review the impact that the Federal Reserve's (the "Fed") monetary policy actions have had on the cost of capital.

In Section IV of my testimony, I outline how a fair ROE should be established, provide an overview of the market's perception of Liberty Water investment risk, comment on Liberty Water's proposed capital structure, and present the analyses I relied on to estimate an appropriate ROE for Liberty Water. Based on the results of several cost of equity ("COE") estimation methods performed on publicly traded utility companies, I estimate the current fair market ROE for Liberty Water to fall within the range of 9.00% to 9.90%. Based on my assessment of Liberty Water's overall risk profile and the results of the analytical methods, I recommend Liberty Water be awarded an ROE of 9.45%, which is the mid-point of my estimated range.

In summary, my recommendations are as follows:

1. I recommend the Commission reject Liberty Water's proposed ROE of 10.62%[1] and instead adopt my recommended ROE of 9.45%, which is based on my assessment of the current and expected capital market environment, Liberty Water's overall risk profile, and the results of several analytical methods which I have used and explained more fully below, to determine a fair and reasonable ROE to be authorized for Liberty Water.

2. I recommend the Commission reject Liberty Water's proposed equity ratio of 52.61%[2] and instead authorize an equity ratio of 50.0% for Liberty Water.

3. I recommend the Commission adopt my recommended ROE and capital structure for Liberty Water, which, along with Liberty Water's embedded cost of debt of 4.97% as of its Update filing, produce an overall ratemaking ROR of 7.21%.

4. Collectively, my recommendations would reduce Liberty Water's consolidated claimed revenue deficiency by approximately $507 thousand.

III. INDUSTRY TRENDS AND ECONOMIC ENVIRONMENT

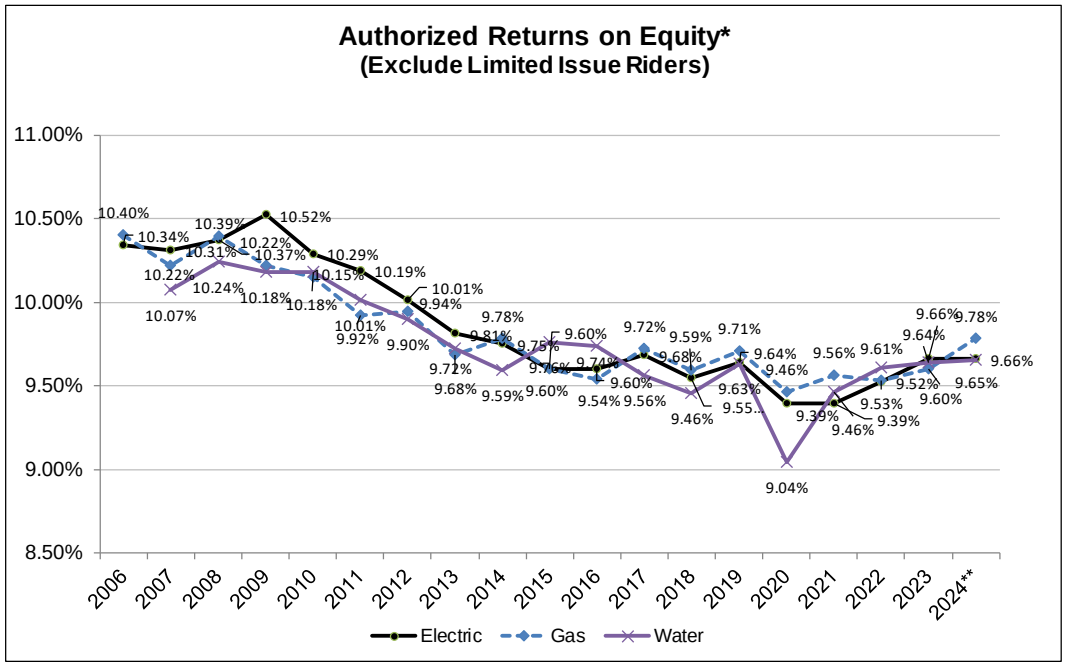
A. Regulated Utilities Have Ample Access to Capital

Q. Please describe the observable evidence regarding trends in authorized ROEs for regulated utilities.

A. Authorized ROEs for regulated utilities have generally declined since peaking in the 2008-2009 period, as illustrated in the below Figure CCW-1, and have been below 10.0% for several years.

[1] I note that Liberty Water updated the cost of equity to 10.79% in its Update Filing on July 1, 2024.
[2] I note that Liberty Water updated its capital structure, including an equity ratio of 52.99% in its Update Filing on July 1, 2024.

FIGURE CCW-1



Source and Notes:
* Electric Returns exclude Limited Issue Riders.
** *S&P Global Market Intelligence*, RRA Regulatory Focus, Major Rate Case Decisions -- January - March 2024, April 19, 2024 at page 3.

Q. Please describe the distribution of authorized ROEs for utilities in recent years.

A. The distribution of data refers to the way data is spread out or distributed across different values or ranges of values. The distribution of authorized ROEs for regulated natural gas distribution and water utility companies, as determined by state public utility regulatory bodies since 2016 is summarized in Table CCW-1 below.

TABLE CCW-1

Distribution of Authorized ROEs

		Natural Gas[1]				Water[2]			
Line	Year	Average	Median	Share of Decisions ≤ 9.5%	Share of Decisions ≤ 9.7%	Average	Median	Share of Decisions ≤ 9.5%	Share of Decisions ≤ 9.7%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	2016	9.53%	9.50%	56.00%	72.00%	9.74%	9.75%	12.50%	12.50%
2	2017	9.73%	9.60%	39.13%	69.57%	9.56%	9.60%	44.44%	66.67%
3	2018	9.59%	9.60%	46.15%	66.67%	9.46%	9.40%	53.33%	86.67%
4	2019	9.73%	9.73%	19.35%	48.39%	9.63%	9.73%	16.67%	50.00%
5	2020	9.47%	9.44%	60.00%	77.14%	9.04%	9.45%	83.33%	100.00%
6	2021	9.56%	9.60%	44.19%	67.44%	9.46%	9.60%	20.00%	100.00%
7	2022	9.53%	9.60%	48.48%	75.76%	9.61%	9.65%	37.50%	62.50%
8	2023	9.60%	9.55%	45.95%	72.97%	9.64%	9.57%	40.00%	60.00%
9	2024	9.93%	9.70%	42.86%	57.14%	9.65%	9.65%	33.33%	66.67%

Source and Notes:
[1] S&P Global Market Intelligence, data through 6/21/24.
[2] S&P Global Market Intelligence, data through 3/31/24.
- Excludes limited issue rider cases.

The distribution shows that the majority of authorized ROEs since 2016 have generally been below 9.7%, with many of those being below 9.5%. I note the 2024 average for natural gas utilities is being heavily influenced by a single authorized ROE of 11.88% in Alaska. If not for that decision, the range of authorized ROEs would be 9.30% to 9.85%.

Q. How has the authorized common equity ratio fluctuated over the same time period for utilities?

A. In general, the utility industry's common equity ratios have not deviated too much from the range of 50.0% to 52.0%. As shown in Table CCW-2 below, I have provided the authorized common equity ratios for utilities around the country, excluding the reported common equity ratios for Arkansas, Florida, Indiana, and Michigan. For my overall market

analysis, I have excluded the reported authorized common equity ratios for these states because these jurisdictions include sources of capital outside of investor-supplied capital such as accumulated deferred income taxes. As such, the reported common equity ratios in these states would result in a downward bias in the reported permanent common equity ratios authorized for ratemaking purposes within my trend analysis.

TABLE CCW-2

Trends in State Authorized Common Equity Ratios
(Industry)

		Electric[1]		Natural Gas[1]		Water[2]	
Line	Year	Average	Median	Average	Median	Average	Median
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	2013	50.12%	51.03%	51.16%	50.43%	48.34%	48.66%
2	2014	50.28%	50.00%	51.90%	51.99%	49.69%	50.27%
3	2015	50.24%	50.48%	49.79%	50.33%	51.52%	51.36%
4	2016	49.70%	49.99%	51.85%	51.35%	50.65%	50.77%
5	2017	50.02%	49.85%	51.13%	51.76%	48.43%	46.09%
6	2018	50.60%	50.23%	52.58%	53.08%	52.41%	53.22%
7	2019	51.55%	51.37%	52.72%	52.22%	50.75%	50.35%
8	2020	50.94%	51.17%	52.34%	52.00%	49.75%	49.10%
9	2021	51.01%	52.00%	51.63%	52.00%	51.96%	52.73%
10	2022	51.57%	51.92%	51.84%	52.00%	51.53%	51.15%
11	2023	51.59%	52.27%	52.45%	52.00%	52.53%	53.40%
12	2024	50.65%	51.90%	52.28%	51.42%	50.56%	50.56%
11	Min	49.70%	49.85%	49.79%	50.33%	48.34%	46.09%
12	Max	51.59%	52.27%	52.72%	53.08%	52.53%	53.40%
13	Average	50.69%	51.02%	51.81%	51.71%	50.68%	50.64%
14	Median	50.62%	51.10%	51.88%	51.99%	50.70%	50.67%

Source and Notes:
[1] S&P Global Market Intelligence; data through June 21, 2024.
[2] S&P Global Market Intelligence; data through March 31, 2024.
- Excludes Arkansas, Florida, Indiana and Michigan because they include non-investor capital.

Q. Have regulated utility companies been able to maintain relatively strong investment-grade credit ratings, even during periods of declining authorized ROEs?

A. Yes. For example, as shown in Table CCW-3, the credit ratings of natural gas delivery operating companies have improved since 2009. In 2009, approximately 75% of natural gas utilities were rated BBB+ or higher. Currently, 88% of the industry has a rating of BBB+ or higher.

TABLE CCW-3

S&P Ratings by Category
Natural Gas Utility Subsidiaries
(Year End)

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
A or higher	50%	50%	50%	50%	38%	33%	33%	44%	56%	33%	38%	38%	13%	15%	17%	18%
A-	0%	0%	0%	0%	38%	33%	33%	22%	11%	11%	38%	38%	38%	38%	38%	34%
BBB+	25%	25%	38%	38%	13%	22%	33%	33%	33%	44%	13%	13%	25%	30%	29%	36%
BBB	13%	13%	0%	0%	0%	0%	0%	0%	0%	11%	13%	13%	25%	18%	16%	12%
BBB-	13%	13%	13%	13%	13%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below BBB-	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: S&P CAPITAL IQ and Market Intelligence, data retrieved 6/5/2024.
Note: Subsidiary ratings used.

Q. Have utilities been able to access external capital to support capital expenditure programs?

A. Yes. In Regulatory Research Associates' ("RRA")[3] April 2, 2024 Utility Capital Expenditures report, *RRA Financial Focus*, made several relevant comments about utility investments generally:

- Multiple drivers are expected to elevate utility capital expenditures over the next several years. Pent-up demand to replace aging equipment continues to propel considerable utility investments in infrastructure, while artificial intelligence increases the power demands of datacenters daily.

- Projected 2024 capital expenditure for the 45 energy utilities included in the RRA representative sample of publicly traded, US-based utilities is $184 billion — an upswell of nearly 11% from

[3] RRA is a division of S&P Global Market Intelligence.

the group's $166 billion of actual spending in 2023. The increase is largely driven by federal legislation enacted in 2021 and 2022 supporting infrastructure investment.

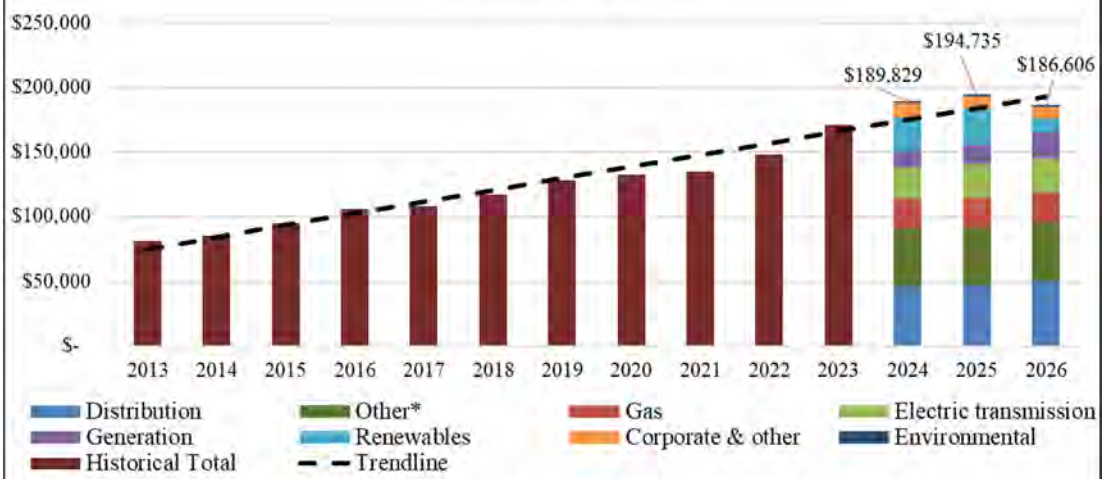
* * *

- Aggregated energy utility capex estimates for both 2024 and 2025 indicate successively higher spending levels, reaching $184 billion and $191 billion, respectively. Spending expectations for 2024 and beyond are likely to increase as the companies' plans for future projects continue to solidify around the new federal legislation supporting infrastructure investment.

- Utilities have multiple opportunities to finance and support energy investments through mechanisms available within the Inflation Reduction Act and the Infrastructure Investment and Jobs Act of 2021. These pieces of legislation provide billions of dollars for power infrastructure investments, financial incentives for nuclear power plants and funding for battery storage technology, among other provisions.[4]

As shown in Figure CCW-2 below, capital expenditures for the regulated electric and natural gas delivery utilities have increased considerably over the period 2023 into 2024, and the forecasted capital expenditures remain elevated through the end of 2025.

FIGURE CCW-2
Utility Capital Expenditures
(Dollars in Millions)



*Other category consists of utilities that do not report capital expenditures by category: Avangrid, Hawaiian Electric, PG&E and Portland General Electric.
Source: *S&P Global Market Intelligence, RRA Financial Focus*, Utility Capital Expenditures Update, March 27, 2024, Tables 1 and 3.

[4] S&P Global Market Intelligence RRA Financial Focus, *Utility capex primed for profusion in 2024 and beyond* (Apr. 2, 2024).

As demonstrated in Figure CCW-2 above, and in the comments made by *RRA S&P Global Market Intelligence*, capital investments for the utility industry continue to stay at elevated levels, and these capital expenditures are expected to fuel utilities' profit growth into the foreseeable future. This is clear evidence that the capital investments are enhancing shareholder value and are attracting both equity and debt capital to the utility industry in a manner that allows for funding these elevated capital investments. While capital markets embrace these profit-driven capital investments, regulatory commissions also must be careful to maintain reasonable prices and tariff terms and conditions to protect customers' need for reliable utility service at reasonable rates. If this is not done, utility rates will expand beyond the ability of customers to pay, resulting in revenue constraints for utilities, which will impact their financial integrity.

Q. What is the significance of these findings?

A. This is clear evidence that the capital investments are enhancing shareholder value, and are attracting both equity and debt capital to the utility industry in a manner that allows for these elevated capital investments.

Q. Is there evidence of robust valuations of regulated utility equity securities?

A. Yes. Robust valuations are an indication that utilities can sell securities at high prices, which is a strong signal that they can access equity capital under reasonable terms and conditions, and at relatively low cost. As shown on Exhibit CCW-1, the historical valuation of utilities followed by *The Value Line Investment Survey* ("*Value Line*"), based on a price-to-earnings ("P/E") ratio, price-to-cash flow ("P/CF") ratio, and market price-to-book value ("M/B") ratio, indicates utility security valuations today are very strong and robust

relative to the last several years. These strong valuations of utility stocks indicate that utilities have access to equity capital under reasonable terms and at lower costs.

Q. What conclusion do you draw from this observable market data in forming your recommended ROE and overall ROR?

A. Generally, authorized ROEs, credit standing, and access to capital have been quite robust for utilities over the last several years, even throughout the duration of the global pandemic. It is critical that this Commission ensure that utility rates are increased no more than necessary to provide fair compensation and maintain financial integrity.

B. Federal Reserve Monetary Policy

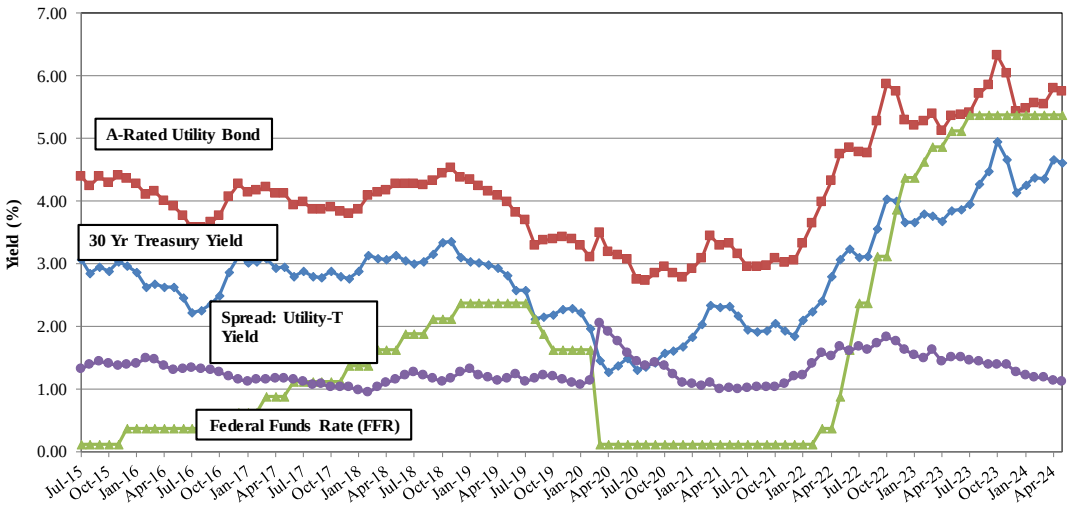
Q. Are the Federal Open Market Committee's ("FOMC") actions known to the market participants, and is it reasonable to believe they are reflected in the market's valuation of both debt and equity securities?

A. Yes to both questions. The FOMC has been transparent about its efforts to support the economy to achieve maximum employment, and to manage long-term inflation to around a 2% level. The FOMC has implemented procedures to support the economy's efforts to achieve these policy objectives. Specifically, the FOMC had previously lowered the Federal Overnight Rate for securities and had engaged in a Quantitative Easing program where the FOMC was buying, on a monthly basis, Treasury and mortgage-backed securities in order to moderate the demand in the marketplaces and support the economy. Currently, the FOMC is unwinding its Quantitative Easing program and taking actions towards monetary policy normalization. Such monetary policy actions include raising the target federal funds rate and allowing maturing bonds to roll off its balance sheet.

A visualization of the bond market's reaction to the FOMC's actions on the federal funds rate is shown in Figure CCW-3.

FIGURE CCW-3

Timeline of Federal Funds Rate Changes Since 2015



Fed FFR Actions:

1	December 2015	0.25	→	0.50	14	March 2020	0.00	→	0.25
2	December 2016	0.50	→	0.75	15	March 2022	0.25	→	0.50
3	March 2017	0.75	→	1.00	16	May 2022	0.75	→	1.00
4	June 2017	1.00	→	1.25	17	June 2022	1.50	→	1.75
5	December 2017	1.25	→	1.50	18	July 2022	2.25	→	2.50
6	March 2018	1.50	→	1.75	19	September 2022	3.00	→	3.25
7	June 2018	1.75	→	2.00	20	November 2022	3.75	→	4.00
8	September 2018	2.00	→	2.25	21	December 2022	4.25	→	4.50
9	December 2018	2.25	→	2.50	22	February 2023	4.50	→	4.75
10	August 2019	2.00	→	2.25	23	March 2023	4.75	→	5.00
11	September 2019	1.75	→	2.00	24	May 2023	5.00	→	5.25
12	October 2019	1.50	→	1.75	25	July 2023	5.25	→	5.50
13	March 2020	1.00	→	1.25					

Sources:
Federal Reserve Bank of New York, https://apps.newyorkfed.org/markets/autorates/fed-funds-search-page
Board of Governors of the Federal Reserve System, https://www.federalreserve.gov/datadownload/
Moody's Credit Trends, https://credittrends.moodys.com/

As shown in Figure CCW-3 above, the rise in the Federal Funds Rate has far outpaced the rise in Utility and Treasury yields while the spread of Utility bonds over Treasury bond yields has stabilized recently.

Q. Has the FOMC made recent comments concerning monetary policy and the potential impact on interest rates?

A. Yes. On May 1, 2024, the FOMC released the following statement:

> Recent indicators suggest that economic activity has continued to expand at a solid pace. Job gains have remained strong, and the unemployment rate has remained low. Inflation has eased over the past year but remains elevated. In recent months, there has been a lack of further progress toward the Committee's 2 percent inflation objective.
>
> The Committee seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run. The Committee judges that the risks to achieving its employment and inflation goals have moved toward better balance over the past year. The economic outlook is uncertain, and the Committee remains highly attentive to inflation risks.
>
> In support of its goals, the Committee decided to maintain the target range for the federal funds rate at 5-1/4 to 5-1/2 percent. In considering any adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks. The Committee does not expect it will be appropriate to reduce the target range until it has gained greater confidence that inflation is moving sustainably toward 2 percent. In addition, the Committee will continue reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities.[5]

The above quotes suggest the FOMC has had some success in taming inflation over the last year, though not as much in recent months. It further reiterated its commitment to stabilizing consumer prices and promoting maximum employment through its monetary policy tools.

Q. What do independent economists' outlooks for future interest rates indicate?

[5] Federal Reserve, Federal Reserve issues FOMC statement, (May 1, 2024) https://www.federalreserve.gov/newsevents/pressreleases/monetary20240501a.htm.

A. Independent economists, as surveyed by *Blue Chip Financial Forecasts*[6], expect current capital costs to increase at mixed rates over the near term, while maintaining levels that are still low by historical standards. For example, independent projections show that the consensus is the federal funds rate will increase at a rate much faster than that of long-term interest rates as measured by the 30-year Treasury bond. Inflation, as measured through the Gross Domestic Product ("GDP") price index, is expected to cool off in the near to intermediate term.

The consensus of projections for the next several quarters are provided in Table CCW-4 below.

continued on next page

[6] Every month, Blue Chip surveys dozens of America's leading business economists and publishes their individual predictions along with an average, or consensus, of their forecasts.

TABLE CCW-4

Blue Chip Financial Forecasts
Projected Federal Funds Rate, 30-Year Treasury Bond Yields, and GDP Price Index

Publication Date	1Q 2023	2Q 2023	3Q 2023	4Q 2023	1Q 2024	2Q 2024	3Q 2024	4Q 2024	1Q 2025	2Q 2025	3Q 2025
Federal Funds Rate											
Jun-23	**4.5**	5.0	5.1	5.0	4.6	4.2	3.9				
Jul-23		5.0	5.3	5.2	5.0	4.6	4.3	3.9			
Aug-23		5.0	5.4	5.4	5.2	4.9	4.4	4.0			
Sep-23		**5.0**	5.3	5.4	5.3	5.0	4.6	4.2			
Oct-23			5.3	5.4	5.4	5.1	4.7	4.3	4.0		
Nov-23			5.3	5.4	5.4	5.2	4.9	4.5	4.1		
Dec-23			**5.3**	5.4	5.4	5.2	4.9	4.6	4.2		
Jan-24				5.3	5.3	5.1	4.8	4.4	4.1	3.8	
Feb-24				5.3	5.3	5.1	4.7	4.4	4.1	3.8	
Mar-24				**5.3**	5.4	5.2	4.9	4.5	4.2	3.8	
Apr-24					5.3	5.2	5.0	4.6	4.2	3.9	3.7
May-24					5.3	5.4	5.2	4.9	4.6	4.3	4.0
Jun-24					**5.3**	5.4	5.2	5.0	4.7	4.4	4.1
T-Bond, 30 yr.											
Jun-23	**3.7**	3.8	3.8	3.8	3.8	3.8	3.7				
Jul-23		3.8	3.9	3.9	3.9	3.8	3.8	3.8			
Aug-23		3.8	4.0	3.9	4.0	3.9	3.9	3.8			
Sep-23		**3.8**	4.1	4.2	4.1	4.0	4.0	3.9			
Oct-23			4.2	4.4	4.3	4.2	4.2	4.1	4.0		
Nov-23			4.2	4.8	4.7	4.5	4.5	4.3	4.2		
Dec-23			**4.2**	4.8	4.7	4.5	4.5	4.4	4.3		
Jan-24				4.6	4.3	4.3	4.2	4.1	4.0	4.0	
Feb-24				4.6	4.3	4.2	4.2	4.1	4.0	4.0	
Mar-24				**4.6**	4.4	4.3	4.2	4.2	4.1	4.1	
Apr-24					4.3	4.3	4.2	4.2	4.1	4.1	4.0
May-24					4.3	4.6	4.5	4.4	4.3	4.2	4.2
Jun-24					**4.3**	4.6	4.5	4.5	4.4	4.3	4.3
GDP Price Index											
Jun-23	**4.2**	3.3	2.8	2.7	2.5	2.5	2.2				
Jul-23		3.3	2.9	2.8	2.5	2.4	2.2	2.2			
Aug-23		2.2	2.7	2.6	2.5	2.3	2.3	2.3			
Sep-23		**2.0**	2.7	2.6	2.4	2.3	2.2	2.2			
Oct-23			2.7	2.7	2.4	2.2	2.2	2.2	2.2		
Nov-23			3.5	2.7	2.4	2.3	2.2	2.2	2.3		
Dec-23			**3.6**	2.7	2.4	2.3	2.2	2.2	2.2		
Jan-24				2.7	2.3	2.3	2.3	2.2	2.2	2.1	
Feb-24				1.5	2.2	2.2	2.3	2.2	2.2	2.1	
Mar-24				**1.6**	2.2	2.3	2.2	2.2	2.1	2.1	
Apr-24					2.2	2.4	2.3	2.2	2.2	2.1	2.2
May-24					3.1	2.7	2.4	2.3	2.3	2.2	2.2
Jun-24					**3.0**	2.8	2.5	2.3	2.3	2.3	2.2

Source and Note:
Blue Chip Financial Forecasts, Jan 2022 through June 2024.
Actual Yields in Bold.

Further, the outlook for long-term interest rates in the intermediate to long term are also impacted by the current Fed actions. Long-term interest rate projections are illustrated in Table CCW-5 below.

TABLE CCW-5

30-Year Treasury Bond Yield Actual Vs. Projection

Description	Actual	Near-Term Projected*	5- to 10-Year Projected
2020			
Q1	1.88%	2.57%	
Q2	1.38%	1.90%	3.0% - 3.8%
Q3	1.36%	1.87%	
Q4	1.62%	1.97%	2.8% - 3.6%
2021			
Q1	2.07%	2.23%	
Q2	2.26%	2.77%	3.5% - 3.9%
Q3	1.93%	2.63%	
Q4	1.95%	2.70%	3.4% - 3.8%
2022			
Q1	2.25%	2.87%	
Q2	3.04%	3.47%	3.8% - 3.9%
Q3	3.26%	3.63%	
Q4	3.90%	3.87%	3.9% - 4.0%
2023			
Q1	3.74%	3.77%	
Q2	3.80%	3.70%	3.8% - 3.9%
Q3	4.24%	3.83%	
Q4	4.58%	4.17%	4.1% - 4.2%
2024			
Q1	4.33%	4.03%	

Source and Note:
Blue Chip Financial Forecasts, January 2019 through March 2024.
*Average of all 3 reports in Quarter.

As outlined in Table CCW-5, the outlook for increases in interest rates has jumped more recently relative to 2020 and part of 2021, but is still relatively modest compared to time periods prior to the beginning of the worldwide pandemic. Indeed, relatively low capital market costs are expected to prevail at least in the near-term and out over the next five to ten years. While there is potential for some upward movement in the cost of capital, that upward movement is uncertain. In fact, as shown on Figure CCW-3 above, increases in the federal funds rate do not necessarily translate into increases in longer-term yields.

C. Market Sentiments and Utility Industry Outlook

Q. Please describe the credit rating outlook for regulated utilities.

A. All credit rating agencies see rate affordability as an important consideration in assessing utility credit, including Standard & Poor's ("S&P") and Moody's Investors Service ("Moody's") as discussed below.

In 2024, S&P updated its industry outlook to "Negative," stating the following:

> **Key Takeaways**
>
> - We are updating our 2024 outlook on the investor-owned North American regulated utility industry to negative.
>
> - Given the relatively high percentage of companies with negative outlooks, we expect that 2024 will likely be the fifth consecutive year that downgrades outpace upgrades.
>
> - The industry faces rising physical risks and high cash flow deficits that may not be sufficiently funded in a credit-supportive manner.
>
> - Still, we expect that the utility industry will maintain a median investment-grade rating of 'BBB+'.
>
> - We also expect that a smaller percentage of companies rated 'BBB' or lower are more likely to implement measures to maintain or even improve credit quality.[7]

[7] S&P Global Ratings, *Rising Risks: Outlook For North American Investor-Owned Regulated Utilities Weakens* at 1 (Feb. 14, 2024).

Specifically, in S&P's utility report, it notes that the credit quality of the industry has changed to BBB+ from an A- rating over the last few years. It notes the recently increased interest rates, which are expected to stabilize and ease the pressure on utilities' financial performance. S&P also comments on the narrowing spread between utilities' authorized returns and the 10-year Treasury yield, which hinders the financial performance of the industry. The credit rating agency expects continued robust capital spending for utilities, projecting over $200 billion investment in 2025. S&P believes that the risks around the industry outlook include regulatory risks in responding to capital spending and the practice of many companies operating with minimal financial cushion from their downgrade thresholds.[8]

Q. Have credit agencies noted concern about rate affordability as a credit risk to utilities?

A. Yes. Credit rating agencies have been emphasizing *rate affordability*, maintaining adequate financial coverages of debt obligations, and supporting utilities' overall investment grade bond ratings.

In a recent industry report, Moody's explained that the regulated utilities' outlook remains "Negative" largely due to increased pricing pressures on customers. Moody's stated that it changed its outlook from "Positive" to "Negative" due to the following:

> We have revised our outlook on the US regulated utilities sector to negative from stable. We changed the outlook because of increasingly challenging business and financial conditions stemming from higher natural gas prices, inflation and rising interest rates. These developments raise *residential customer affordability issues*, increasing the level of uncertainty with regard to the timely recovery of costs for fuel and purchased power, as well as for rate cases more broadly.[9]

[8] *Id*.
[9] Moody's Investors Service Outlook, *Regulated Electric and Gas Utilities – US 2023 outlook negative due to higher natural gas prices, inflation and rising interest rates* at 1 [Emphasis added.] (Nov. 10, 2022).

Also, in a report published in January of 2024, S&P specifically mentioned commodity price volatility, in combination with significant increases in capital investments, as driving utility rate increases which may strain affordability concerns.[10]

Finally, Fitch opined that the regulated utilities' outlook is deteriorating due to elevated capital expenditures that put pressure on credit metrics. Fitch also notes the bill affordability concerns for ratepayers, and regulators' ability to balance the rate requests with *increasing customer bills*. Specifically, Fitch states:

> Fitch Ratings' deteriorating outlook for the North American Utilities, Power & Gas sector reflects continuing macroeconomic headwinds and elevated capex that are putting pressure on credit metrics in the high-cost funding environment. Bill affordability concerns for ratepayers continue to persist despite the pull back in natural gas prices and inflationary pressures. Fitch expects utility capex to grow by double digits in 2024, underpinned by investments needed to make the electric infrastructure more resilient against extreme weather events and to accommodate renewable generation, including distributed sources. Rate case outcomes are key to watch as regulators balance more rate requests with increases in customer bills. Authorized ROEs could prove to be sticky despite an increase in cost of capital. Higher weather-normalized retail electricity sales, driven by datacenter growth and onshoring of manufacturing activities, and tax transferability provisions of the Inflation Reduction Act could somewhat offset headwinds to utilities. Ongoing management actions to sell assets and issue equity, in some cases, is supportive of parent companies' ratings. *Within Fitch's coverage, 90% of ratings hold Stable Rating Outlooks. We expect limited rating movement in 2024. The number of upgrades in 2023 so far exceeds the number of downgrades, and is driven by positive rating actions on several parent holding companies and their regulated subsidiaries*.[11]

As outlined by Moody's, S&P, and Fitch above, credit analysts are focusing on rate affordability as an important factor needed to support strong credit standing. Customers must

[10] S&P Global Ratings, *Industry Credit Outlook 2024: North America Regulated Utilities* at 8 (Jan. 9, 2024).
[11] FitchRatings, *North American Utilities, Power & Gas Outlook 2024* at 1 [Emphasis added.] (Dec. 6, 2023).

be able to afford to pay their utility bills in order for utilities to maintain their financial integrity and strong investment grade credit standing. For this reason, this Commission should carefully assess the reasonableness of cost of service in this proceeding, including an appropriate overall ROR necessitated by a reasonably cost-effective balanced ratemaking capital structure, and a return on equity that represents fair compensation but also maintains competitive, just and reasonable rates.

D. Additional Remarks

Q. In light of higher levels of inflation, and expectations of higher interest rates, how has the market perceived utilities as investment options?

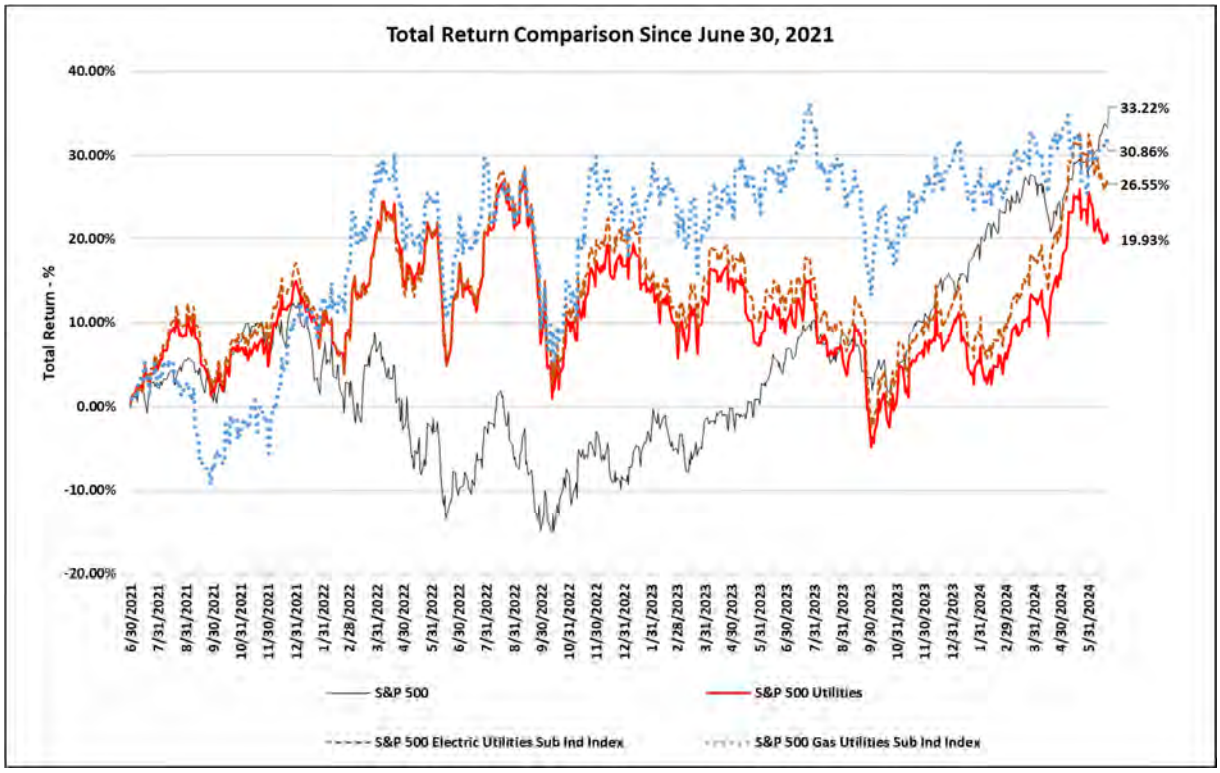
A. Since June 30, 2021, the natural gas and electric utility sectors have outperformed the S&P 500. This is presented below in Figure CCW-4. However, it should be noted that the performance of the S&P 500 has largely been driven by a handful of "mega cap" companies. Because the S&P 500 is a market capitalization weighted index (meaning the higher the market capitalization a company has, the more influence it has on the index's performance). For example, in the S&P Dow Jones Indices report "U.S. Equity Market Attributes April 2024," it is noted that:

> Year-to-date, the S&P 500 remained up 5.57% (with 10 of the 11 sectors up; Real Estate was down 9.86%), as breadth declined but remained positive (302 up and 199 down, compared to last March's 369 and 134 YTD, respectively). *The Magnificent 7 as a group still dominated, accounting for 51% of the index return (which included Apple's 11.5% YTD decline and Tesla's 26.2% YTD decline), as NVIDIA (up 74.5% YTD) represented 41% of the S&P 500's YTD gain.*[12]

[12] S&P Dow Jones Indices, *U.S. Equity Market Attributes April 2024* at 2, https://www.spglobal.com/spdji/en/documents/commentary/market-attributes-us-equities-202404.pdf. The "Magnificent 7" is a reference to Apple, Microsoft, Amazon, Alphabet (Google), Meta Platforms, Nvidia, and Tesla. These seven stocks represent some of the largest and most influential companies in

The regulated utility industry has been able to deliver generally positive and relatively stable returns during a period of elevated inflation, rising interest rates, and uncertainty because of geopolitical events around the world.

Figure CCW-4



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the technology sector, spanning areas like consumer electronics, cloud computing, e-commerce, social media, artificial intelligence, autonomous vehicles, and semiconductors.

IV. RETURN ON EQUITY

Q. Please describe what is meant by a "Utility's Cost of Common Equity."

A. A utility's cost of common equity is the expected return that investors require on an investment in the utility. Investors expect to earn their required return from receiving dividends and through stock price appreciation.

Q. Please describe the framework for determining a regulated utility's cost of common equity.

A. In general, determining a fair cost of common equity for a regulated utility has been framed by two hallmark decisions of the U.S. Supreme Court: Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679 (1923) and Fed. Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944). In these decisions, the Supreme Court found that just compensation depends on many circumstances and must be determined by fair and enlightened judgments based on relevant facts. The Court also found that a utility is entitled to such rates as would permit it to earn a return on a property devoted to the convenience of the public that is generally consistent with the same returns available in other investments of corresponding risk. The Court continued that the utility has "no constitutional rights to profits" such as those "realized or anticipated in highly profitable enterprises or speculative ventures,"[13] and defined the ratepayer/investor balance as follows:

> The return should be reasonably sufficient to assure confidence in the *financial soundness* of the utility and should be adequate, under *efficient and economical management*, to maintain and *support its credit* and *enable it to raise the money* necessary for the proper discharge of its public duties.[14]

[13] *Bluefield*, 262 U.S. at 692-93.
[14] *Id*. at 693. [Emphasis added.]

As such, a fair ROR is based on the expectation that the utility costs reflect efficient and economical management, and the return will support its credit standing and access to capital, but the return will not be in excess of this level. Utility rates that are consistent with these standards will be just and reasonable, and compensation to the utility will be fair and support financial integrity and credit-standing, under economic management of the utility.

Q. Please describe the process you have used to estimate Liberty Water's cost of common equity.

A. First, I assessed the market's assessment of Liberty Water's risk. Then, I developed a proxy group of publicly-traded utility companies that have similar risks and characteristics to Liberty Water and compared potential differences in risks. I then performed several models based on financial theory to estimate Liberty Water's cost of common equity. These models are: (1) a constant growth Discounted Cash Flow ("DCF") model using consensus analysts' growth rate projections; (2) a constant growth DCF model using sustainable growth rate estimates; (3) a multi-stage growth DCF model; (4) a Risk Premium model, and; (5) a Capital Asset Pricing Model ("CAPM").

A. Liberty Water's Investment Risk

Q. Please describe the market's assessment of Liberty Water's investment risk.

A. The market's assessment of a company's investment risk is generally described by credit rating analysts' reports. However, Liberty Water is not a rated entity. While it is not directly comparable, I have considered the credit ratings of the Liberty Water parent company, Liberty Utilities Company ("LUCo"), in assessing the risk of Liberty Water. LUCo's ratings from S&P and Moody's are BBB and Baa2, respectively. These ratings are consistent with the ratings of the ultimate parent company, Algonquin Power and Utilities Corporation ("APUC").

In its most recent report covering APUC, S&P had the following to say about its assessment of APUC and its subsidiaries:

> *Company Description*
> APUC is a diversified mostly energy company with operations across the U.S., Canada, Chile, and Bermuda, serving about 1.2 million customer connections. Through Liberty Utilities Co. (LUCo), APUC owns and operates a portfolio of regulated electric, natural gas, water distribution, and wastewater collection utility systems. APUC also generates and sells electricity through a portfolio of nonregulated renewable and clean-energy power generation facilities at LPCo. In addition, APUC owns approximately 42% equity investment in Atlantica Sustainable Infrastructure PLC.
>
> *Outlook*
> The stable outlook on APUC and its regulated utility subsidiaries reflects our expectation that the company will sell its higher-risk renewable businesses, reducing business risk, but that financial measures will weaken because of expected share repurchases. We expect APUC's funds from operations (FFO) to debt to be 11%-13% through 2026.
>
> *Downside Scenario.*
> We could lower our ratings on APUC and its regulated utility subsidiaries over the next 24 months if the company did not sell its renewable businesses and FFO to debt fell below 14%. We could also downgrade the company if APUC sold its renewable businesses and FFO to debt weakened to below 11%. This could happen if costs increased due to high interest rates and inflationary pressures. We could also downgrade the company if its business risk increased, such that the company were the cause of a catastrophic wildfire in California or its ability to effectively manage regulatory risk weakened.
>
> *Upside Scenario.*
> While unlikely, we could raise our ratings on APUC and its regulated utility subsidiaries over the next 24 months if the company did not sell its renewable businesses and its financial measures materially improved, reflecting FFO to debt greater than 21%, without any material increase to business risk. We could also raise the rating if the company fully divested its unregulated power business and FFO to debt were consistently above 13%.[15]

[15] S&P Ratings Direct, Algonquin Power & Utilities Corp Ratings Affirmed On Planned Sale; Algonquin Power Co. CreditWatch Revised To Developing, A

Clearly, the ratings at APUC, and its rated subsidiaries, are being heavily influenced by its existing nonregulated operations and are not necessarily indicative of a lower-risk, rate regulated water utility like Liberty Water. Given this, I do not believe it to be reasonable to rely on LUCo or APUC's credit ratings as an indicator of Liberty Water's risk profile. Given Liberty Water's ability to file rate cases using end of year rate base, with an update period, and certain cost recovery mechanisms to recover certain costs associated with infrastructure investments as well as variations in certain taxes and franchise fees, there is no reason to believe Liberty Water would be rated much differently than that of the proxy group on a stand-alone basis.

B. Liberty Water's Proposed Capital Structure

Q. What is Liberty Water's proposed capital structure?

A. Liberty Water's proposed capital structure is summarized in Table CCW-6:

Table CCW-6
Investor-Supplied Capital Structure

Description	As-Filed Weight[1]	Update Weight[2]
Long-Term Debt	47.39%	47.01%
Common Equity	52.61%	52.99%
Total	100.00%	100.00%

[1]Schedule JC-14
[2]Update Schedule 8

Q. Do you have any comment on Liberty Water's proposed capital structure?

A. Yes. As I will discuss later, Liberty Water's proposed equity ratio of 52.61% significantly exceeds the equity ratio for the proxy group used to estimate the COE for Liberty Water. As shown on Exhibit CCW-2, the proxy group has an average common equity ratio of 44.8% (including short-term debt) and 48.5% (excluding short-term debt).

Q. Has this Commission recognized the need to align the COE with the capital structure?

A. Yes. In its *Report and Order* issued in File No. WR-2023-0006 on October 25, 2023, the Commission stated as follows:

> The Commission finds that Staff's proposed hypothetical capital structure of 50% equity and 50% debt is appropriate in this case. Ratepayers would benefit from having rates calculated from a 50% debt ratio as debt is a cheaper cost than equity; while the shareholders are benefitting from the rates being calculated from a 50% equity ratio as equity generates a greater return than debt. And each side of the ratemaking calculation, rate payers and shareholders, are protected from the other having a greater share. The Commission finds that a 50/50 capital structure in this case will produce just and reasonable rates.[16]

Q. Are you aware of any other regulatory commissions recognizing the need to align the COE with the capital structure?

A. Yes. In Order No. 87591, the Maryland Public Service Commission rejected Baltimore Gas and Electric Company's proposed capital structure, stating that "[o]verly high equity ratios impose significant burden on ratepayers,"[17] and that "[i]f, as BGE implies, it is able to lower its equity ratio in the near future, Liberty Water would be reaping a windfall because its rates would be based on an excessive equity ratio that exceeds its actual capital

[16] Missouri Public Service Commission, File No. WR-2023-0006, Report and Order, October 25, 2023 at 46.
[17] Case No. 9406, Order No. 87591 at 168 (Jun. 3, 2016).

structure."[18] Additionally, in a recent Order, the Arkansas Public Service Commission imputed the capital structure of Southwestern Electric Power Company ("SWEPCO") to be more in-line with the comparable companies used to estimate the COE.[19] The adjustment was to recognize that there must be *congruence* between the COE and the capital structure. Specifically, the Order states as follows:

> Consistent with our ruling in Order No. 10 of Docket No. 06-101-U, the Commission holds that there should be congruence between the estimated cost of equity and the [debt-to-equity] ratio, whereby a lower [debt-to-equity] ratio decreases financial risk and decreases the cost of equity. The evidence of record supports imputing the average capital structure of companies with comparable risk to SWEPCO for the purposes of determining SWEPCO's overall cost of capital.[20]

As I described above, and in more detail below, my proxy group in this case has an average common equity ratio of 44.8% (including short-term debt) and 48.5% (excluding short-term debt) as calculated by S&P Global Market Intelligence and *Value Line*, respectively. In this case, Liberty Water proposed ratemaking equity ratio of 52.61% (including short-term debt) exceeds that of the proxy group's equity ratio and is not reasonable for ratemaking purposes.

Q. Are you recommending an adjustment be made to Liberty Water's proposed capital structure?

A. Yes. Liberty Water has not reasonably demonstrated a need to be awarded a common equity ratio well in excess of 50.0%. As such, I recommend the Commission authorize Liberty Water an equity ratio of 50.0%. In addition, my recommended capital structure

[18] *Id.* at 170.
[19] APSC Docket No. 21-170-U, Doc. No. 323, Order No. 14 (May 23, 2022).
[20] *Id*. at 25.

is consistent with the mean and median capital structures for Liberty Water witness John Cochrane's proxy group.[21] Should this Commission authorize Liberty Water its requested equity ratio of 52.61%, an ROE in the lower half of my recommended range (i.e. 9.00% to 9.45%) would be warranted to account for the reduced financial risk.

C. Development of Proxy Group

Q. Please briefly describe why a proxy group is needed in estimating the COE.

A. There are a few reasons why a proxy group is needed to estimate the COE. To be consistent with the *Hope* and *Bluefield* standards, as described above, the allowed return should be commensurate with returns on investments in other firms of comparable risk. A proxy group of similarly situated companies of comparable risk is needed to assess Liberty Water's proposal under this standard. In developing the appropriate proxy group for comparison with Liberty Water, analysts should carefully consider factors such as the companies' primary business operations, credit ratings, and overall risk profiles. Ensuring that the proxy group comprises firms with comparable risk characteristics is crucial for producing reliable and meaningful COE estimates that align with the *Hope* and *Bluefield* standards.

Even if Liberty Water were a publicly-traded company, Liberty Water whose securities could be used to estimate its COE, there exists the potential for certain errors and biases which would make the reliance on a single estimate undesirable and potentially less accurate. A proxy group of comparable risk companies adds reliability to the estimates by mitigating the potential for bias that may be introduced by measurement errors of model inputs.

Q. Please describe how you identified a proxy utility group that could be used to estimate Liberty Water's current market COE.

[21] John Cochrane Direct Testimony at page 33 and Direct Schedule JC-13.

A. I started with the same proxy group of six water utilities developed by Liberty Water's witness, Mr. Cochrane. However, it is my opinion that a proxy group of six companies is insufficient to accurately assess the COE for Liberty Water, necessitating an expanded proxy group. As such, I have considered other utilities that have significant regulated distribution utility operations. I started with the natural gas utility universe identified by the *Value Line Investment Survey*. From this group, I have excluded Chesapeake Utilities and NiSource Inc.

First, I removed Chesapeake Utilities for not being a rated entity by S&P or Moody's, as well as its acquisition of Florida City Gas making it a party to significant merger and acquisition ("M&A") activities. Companies involved in M&A tend to have stock prices that do not accurately reflect their underlying fundamentals and risk profile during the transaction period. In addition, not only is Chesapeake Utilities not a rated entity, neither are any of its utility subsidiaries. Credit ratings are a critical, independent assessment of total risk, and one of the most cited screening criteria used by rate of return analysts around the country.

Second, I removed NiSource Inc. for being a party to significant M&A activity. On June 20, 2023, NiSource announced a deal to sell Northern Indiana Public Service Company, a vertically integrated electric utility in Indiana, for $2.15 billion, which represents more than 10% of its market capitalization. The deal closed on January 2, 2024. After the exclusion of these two utilities, that left five remaining natural gas delivery companies to be included in the proxy group.

In addition to the five natural gas delivery companies, I also included Eversource Energy ("Eversource") in my proxy group. Eversource is a multi-utility that has water, natural gas, and electric delivery services.

This proxy group is consistent with the proxy group I utilized in my testimony filed on July 18, 2024 in the Liberty Midstates Case No. GR-2024-0106.

Q. Are you aware of other jurisdictions that consider the use of a mixed group of utilities in a proxy group for determining the authorized return on equity?

A. Yes. Several jurisdictions have explored the use of a broader proxy group to determine the return on equity ("ROE"). The Illinois Commerce Commission ("ICC"), Massachusetts Department of Public Utilities ("MDPU"), the Florida Public Service Commission ("FPUC"), the Kentucky Public Service Commission ("KYPSC"), and the Iowa Utilities Board ("IUB") have all examined the outcomes of a proxy group that involves natural gas and water utility companies to establish the authorized ROE. For example, in the ICC's final order in the most recent rate case of Illinois's largest private investor-owned water utility, Illinois American Water Company, the Commission relied on a proxy group that included both water and gas utilities.[22] Further, the MDPU concluded in Docket No. 17-90 that a natural gas utility proxy group was appropriate to demonstrate the investment risk comparability of the proxy group to Aquarion Water Company.[23]

Similarly, in Docket No. 20180006-WS, the FPUC changed the methodology to include a combined proxy group of natural gas and water utilities to calculate the authorized ROE for water and wastewater utilities in Florida.[24] The FPUC had previously used a natural gas-only proxy group but chose to use a combined proxy group to increase the size of the proxy group.

[22] *See* Final Order at 95, 102, *Ill. Am. Water Co.*, ICC Dkt. 22-0210 (Dec. 15, 2022).
[23] Massachusetts Department of Public Utilities, Docket No. 17-90, Petition of Aquarion Water Company of Massachusetts, Inc., pursuant to G.L. c. 164, § 94, and G.L. c. 165, § 2, for Approval of a General Rate Increase as set forth in M.D.P.U. No. 3., October 31, 2018, p. 286-287.
[24] Docket No. 20180006-WS, In re. Water and wastewater industry annual reestablishment of authorized range of return on common equity for water and wastewater utilities pursuant to Section 367.081(4)(f),F.S., Order No. PSC-2018-0327-PAA-WS, at 7.

The KYPSC also noted in Case No. 2018-00358 for Kentucky-American Water Company that it has considered ROE results based on a proxy group consisting of both natural gas and water utilities. The KYPSC relied on two proxy groups, a water-only proxy group, and a combined proxy group that included natural gas utilities, to develop the DCF and CAPM models.[25]

Finally, in Docket Nos. RPU-2020-00101, TF-2020-0250, the IUB used analyses based on proxy groups composed of water and natural gas companies.[26]

Q. Why do you believe natural gas and electric distribution utility companies should be considered in estimating the COE for Liberty Water?

A. All three types of utility companies—natural gas, electric, and water—operate within a regulated environment. They are subject to oversight by state public utility commissions or equivalent regulatory bodies, which set rates to ensure fair pricing for consumers while allowing the utilities to earn a reasonable return. This regulatory framework creates a common ground for comparison.

There has been significant consolidation in the regulated utility space through M&A activity.

While the specific operational risks may vary, utilities in these sectors share similar overall risk profiles. For example, water utilities may face different environmental risks compared to natural gas utilities, but the overall stability of revenue streams in all these sectors makes them comparably low-risk investments.

[25] Case No. 2018-00358, In the matter of: Electronic Application of Kentucky-American Water Company for an Adjustment of Rates, Order, June 27, 2019, at 66.
[26] State of Iowa Department of Commerce Utilities Board, Docket Nos. RPU-2020-00101, TF -2020-0250, June 28, 2021, at 24-25.

Economic factors affecting one type of utility often similarly affect others. Interest rates, inflation, and economic growth impact the cost of capital and investment attractiveness across all utility sectors. By examining the ROE in natural gas and electric utilities, regulators can better understand the market conditions that should influence the ROE for water utilities.

Comparing water distribution utility companies with natural gas and electric distribution utility companies is reasonable for estimating the COE.

Q. How does the investment risk of Liberty Water compare to that of the proxy group?

A. As shown on my Exhibit CCW-2, the full proxy group has average credit ratings of A- and Baa1 from S&P and Moody's, respectively. However, Liberty Water is an unrated entity. As described above, the ratings at APUC, and its rated subsidiaries, are being heavily influenced by its existing nonregulated operations and are not necessarily indicative of a lower-risk, rate regulated natural gas distribution utility like Liberty Water. Given this, I do not believe it to be reasonable to rely on LUCo or APUC's credit ratings as an indicator of Liberty Water's risk profile. Given Liberty Water's ability to file rate cases using end of year rate base, with an update period, and certain cost recovery mechanisms to recover certain costs associated with infrastructure investments as well as variations in certain taxes and franchise fees, there is no reason to believe Liberty Water would be rated much differently than that of the proxy group on a stand-alone basis.

The capital structure of the utility, which reflects the relative proportions of debt and equity financing, has a direct bearing on the overall cost of capital. If a utility's equity ratio deviates significantly from the proxy group of comparable risk companies, it may indicate that the utility is either over-relying on costlier equity capital or taking on excessive financial risk

through higher leverage. An equity ratio that is too high compared to the proxy group could suggest that the utility is paying more for its capital than similarly situated peers, potentially leading to higher costs for ratepayers. Conversely, an equity ratio that is too low may expose the utility to heightened risk of financial distress in the event of adverse economic conditions or operational challenges. Because Liberty Water is a utility operating company of a publicly traded company, it has no market value equity ratio to compare to the market value equity ratios of the proxy companies. As such, the most relevant, and only applicable capital structure to be used as a comparison is the book value capital structures.

As shown on the same exhibit, the proxy group has an average common equity ratio of 44.8% (including short-term debt) and 48.5% (excluding short-term debt) as calculated by S&P Global Market Intelligence and *Value Line*, respectively. Liberty Water's requested common equity ratio of 52.61% significantly exceeds the proxy group's equity ratio as described above. If such an equity ratio is authorized, the difference in financial risk between Liberty Water and the proxy companies will be too far apart, necessitating a reduction to the authorized ROE. While my recommended ratemaking equity ratio of 50.0% is still higher than that of the proxy group, it provides a more comparable basis to estimate the COE with than the equity ratio requested by Liberty Water. As such, I believe my proxy group is reasonably comparable to Liberty Water, specifically at my recommended equity ratio of 50.0%.

D. Constant Growth DCF

Q. Please describe the DCF model.

A. The DCF model posits that a stock price equals the sum of the present value of expected future cash flows discounted at the investor's required ROR or cost of capital. This model is expressed mathematically as follows:

$$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} \ldots . \frac{D_\infty}{(1+K)^\infty} \quad \text{(Equation 1)}$$

P_0 = Current stock price
D = Dividends in periods 1 - ∞
K = Investor's required return

This model can be rearranged in order to estimate the discount rate or investor-required return, known as "K." If it is reasonable to assume that earnings and dividends will grow at a constant rate, then Equation 1 can be rearranged as follows:

$$K = D_1/P_0 + G \quad \text{(Equation 2)}$$

K = Investor's required return
D_1 = Dividend in first year
P_0 = Current stock price
G = Expected constant dividend growth rate

Equation 2 is referred to as the annual "constant growth" DCF model.

Q. Please describe the input to your constant growth DCF model.

A. As shown in Equation 2 above, the DCF model requires a current stock price, the expected dividend, and the expected growth rate in dividends.

Q. What stock price have you relied on in your constant growth DCF model?

A. I relied on the average of the weekly high and low stock prices of the utilities in the proxy group over a 13-week period ending on June 21, 2024. An average stock price is less susceptible to market price variations than a price at a single point in time. Therefore, an average stock price is less susceptible to aberrant market price movements, which may not reflect the stock's long-term value.

Q. What dividend did you use in your constant growth DCF model?

A. I used each proxy company's most recently paid quarterly dividend as reported in *Value Line*.[27] This dividend was annualized (multiplied by 4) and adjusted for next year's growth to produce the D_1 factor for use in Equation 2 above. In other words, I calculate D_1 by multiplying the annualized dividend (D_0) by (1+G).

Q. What dividend growth rates have you used in your constant growth DCF model?

A. There are several methods that can be used to estimate the expected growth in dividends. However, regardless of the method, for purposes of determining the market-required return on common equity, one must attempt to estimate investors' expectations about what the dividend, or earnings growth rate, will be, and not what an individual investor or analyst may use to make individual investment decisions.

As predictors of future returns, securities analysts' growth estimates have been shown to be more accurate than growth rates derived from historical data.[28] That is, assuming the market generally makes rational investment decisions, analysts' growth projections are more likely to influence investors' decisions, which are captured in observable stock prices, than growth rates derived only from historical data.

For my constant growth DCF analysis, I have relied on a consensus, or mean, of professional securities analysts' earnings growth estimates as a proxy for investors' dividend growth rate expectations. I used the average of analysts' growth rate estimates from three sources: Zacks, S&P Capital IQ Market Intelligence ("MI"), and Yahoo! Finance. All such projections were available on June 21, 2024, and all were reported online.[29]

[27] *The Value Line Investment Survey*.
[28] *See*, e.g., David Gordon, Myron Gordon, and Lawrence Gould, Choice Among Methods of Estimating Share Yield, The Journal of Portfolio Management, Spring 1989.
[29] www.zacks.com; https://finance.yahoo.com; and https://www.capitaliq.spglobal.com/.

Each growth rate projection is based on a survey of independent securities analysts. There is no clear evidence whether a particular analyst is most influential on general market investors. Therefore, a single analyst's projection does not predict investor outlooks as reliably as does a consensus of market analysts' projections. The consensus of estimates is a simple arithmetic average, or mean, of surveyed analysts' earnings growth forecasts. A simple average of the growth forecasts gives equal weight to all surveyed analysts' projections. Therefore, a simple average, or arithmetic mean, of analysts' forecasts is a good proxy for investor expectations.

The growth rates I used in my DCF analysis are shown in Exhibit CCW-3. The average growth rate for my proxy group is 6.01% and a median growth rate of 6.09%.

Q. What are the results of your constant growth DCF model?

A. As shown in Exhibit CCW-4, page 1, the average and median constant growth DCF returns for my proxy group for the 13-week analysis are 9.63% and 9.89%, respectively.

Q. Are there limitations of the constant growth DCF analysis?

A. Yes. The constant growth DCF analysis for my proxy group is based on a group average long-term growth rate of 6.01%. The three- to five-year growth rates are approximately 42% higher than the long-term projected GDP growth rate of 4.24%, described below. In my professional opinion, I do not consider a 6.01% growth rate to be a realistic forward-looking projection. As I explain in detail below, the consensus of research on the subject finds a utility's growth rate cannot exceed the growth rate of the economy in which it provides services in perpetuity, which is the time period assumed by the DCF model.

Q. How did you identify the long-term projected GDP growth rate?

A. Although there may be short-term peaks, the long-term sustainable growth rate for a utility stock cannot exceed the growth rate of the economy in which it sells its goods and services. The long-term maximum sustainable growth rate for a utility investment is limited by the projected long-term GDP growth rate, as that reflects the projected long-term growth rate of the economy as a whole. *Blue Chip Financial Forecasts* projects that over the next 5 and 10 years, the U.S. nominal GDP will grow at an annual rate of approximately 4.24%.[30] As such, the average nominal growth rate over the next 10 years is around 4.24%, which I believe is a reasonable proxy of long-term growth.

Later in this testimony, I discuss academic and investment-practitioner support for using the projected long-term GDP growth outlook as a maximum long-term growth rate projection. Using the long-term GDP growth rate as a conservative projection for the maximum growth rate is logical, and is generally consistent with academic and economic-practitioner accepted practices.

E. Sustainable Growth DCF

Q. Please describe what the sustainable growth DCF method is and how you estimated a sustainable growth rate for your sustainable growth DCF model.

A. The sustainable growth rate, also referred to as the internal growth rate, is determined by the proportion of the utility's earnings that is retained and reinvested in its plant and equipment. These reinvested earnings enhance the earnings base, also known as the rate base. The earnings grow as the plant, funded by the reinvested earnings, is put into operation, allowing the utility to receive its authorized return on the additional rate base investment.

[30] Blue Chip Financial Forecast, May 31, 2024 at page 14.

The internal growth approach is linked to the percentage of earnings retained within Liberty Water, as opposed to being paid out as dividends. The earnings retention ratio is calculated as 1 minus the dividend payout ratio. As the payout ratio decreases, the retention ratio increases, leading to stronger growth as Liberty Water funds more investments using retained earnings.

The payout ratios of the proxy group are shown in my Exhibit CCW-5. These dividend-payout ratios and earnings-retention ratios can then be used to develop a long-term growth rate driven by earnings retention.

The data used to estimate the long-term sustainable growth rate is based on Liberty Water's current market-to-book ratio and on *Value Line*'s three- to five-year projections of earnings, dividends, earned returns on book equity, and stock issuances.

As shown in Exhibit CCW-6, the average and median sustainable growth rates for the proxy group using this internal growth rate model are 4.63% and 4.30%, respectively.

Q. What is the DCF estimate using these sustainable growth rates?

A. A DCF estimate based on these sustainable growth rates is developed in Exhibit CCW-7. As shown there, and using the same formula in Equation 2 above, a sustainable growth DCF analysis produces proxy group average and median DCF results for the 13-week period of 8.21% and 8.13%, respectively.

F. Multi-Stage Growth DCF Model

Q. Have you conducted any other DCF studies?

A. Yes. As previously noted, the DCF model is intended to represent the present value of an endless series of future cash flows. Nevertheless, the initial constant growth DCF that I described above is based on analyst growth rate projections, providing a plausible

representation of rational investment expectations over the next three-to-five years as that is the time period the growth forecasts cover. The limitation of this constant growth DCF model is that it cannot reflect a reasonable expectation of a shift in growth from a high or low short-term rate to a rate that aligns more with long-term sustainable growth. To accommodate changing growth expectations, I conducted a multi-stage DCF analysis that reflects growth rate change over time.

Q. Why do you believe growth rates can change over time?

A. The growth rate projections by analysts for the next three-to-five years are subject to change as the outlook for utility earnings-growth evolves. Utility companies experience fluctuations in their investment cycles. When these companies are undertaking substantial investments, the growth of their rate base accelerates, leading to an increase in earnings growth. However, once a major construction cycle reaches completion or plateaus, the growth in the utility rate base slows down, and its earnings growth rate declines, from an abnormally high three-to-five-year rate, to a lower, sustainable growth rate.

As construction cycles become longer in duration, even with an aggressive construction plan, the growth rate of the utility will naturally slow due to a decrease in rate base growth, as the utility has limited human and capital resources to expand its construction activities. Therefore, the three-to-five-year growth rate projection should be viewed as a long-term sustainable growth rate, but not without considering the current market conditions, industry trends, and determining whether the three-to-five-year growth outlook is feasible and sustainable.

Q. Please describe your multi-stage DCF model.

A. The multi-stage DCF model reflects the possibility of non-constant growth for a company over time. The multi-stage DCF model reflects three growth periods: (1) a short-term growth period consisting of the first five years; (2) a transition period, consisting of the next five years (6 through 10); and (3) a long-term growth period starting in year 11 and extending into perpetuity.

For the short-term growth period, I relied on the consensus of analysts' growth projections described above in relationship to my constant growth DCF model. For the transition period, the growth rates were reduced or increased by an equal factor reflecting the difference between the analysts' growth rates and the long-term sustainable growth rate. For the long-term growth period, I assumed each company's growth would converge to the maximum sustainable long-term growth rate.

Q. Why is the GDP growth projection a reasonable proxy for the maximum sustainable long-term growth rate?

A. Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the economy in which they sell services. A utilities' earnings and dividend growth is created by increased utility investment in its rate base. Examples of what can drive such investment are: service area economic growth or system reliability upgrades. As such, nominal GDP growth is a reasonable upper limit for utility sales growth, rate base growth, and earnings growth in the long-run. Therefore, the U.S. GDP nominal growth rate is a conservative proxy for the highest sustainable long-term growth rate of a utility.

Q. Is there research that supports your position that, over the long-term, a company earnings and dividends cannot grow at a rate greater than the rate of growth of the U.S. GDP?

A. Yes. This concept is supported in published analyst literature and academic work. Specifically, in a textbook titled "Fundamentals of Financial Management," published by Eugene Brigham and Joel F. Houston, the authors' state as follows:

> The constant growth model is most appropriate for mature companies with a stable history of growth and stable future expectations. Expected growth rates vary somewhat among companies, but *dividends for mature firms are often expected to grow in the future at about the same rate as nominal gross domestic product (real GDP plus inflation).*[31]

The use of the economic growth rate is also supported by investment practitioners as outlined as follows:

> **Estimating Growth Rates**
>
> One of the advantages of a three-stage discounted cash flow model is that it fits with life cycle theories in regards to company growth. In these theories, companies are assumed to have a life cycle with varying growth characteristics. Typically, the potential for extraordinary growth in the near-term eases over time and eventually growth slows to a more stable level.
>
> * * *
>
> Another approach to estimating long-term growth rates is to focus on estimating the overall economic growth rate. Again, this is the approach used in the *Ibbotson Cost of Capital Yearbook.* To obtain the economic growth rate, a forecast is made of the growth rate's component parts. Expected growth can be broken into two main parts: expected inflation and expected real growth. By analyzing these components separately, it is easier to see the factors that drive growth.[32]

Q. How did you determine a long-term growth rate that reflects the current consensus of independent market participants?

[31] Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial Management* at 298, Eleventh Edition (2007). [Emphasis added.]
[32] Morningstar, Inc., *Ibbotson SBBI 2013 Valuation Yearbook* at 51-52.

A. I relied on the consensus, or the average of survey respondents, of long-term GDP growth projections as projected by independent economists. *Blue Chip Financial Forecasts* publishes the consensus for GDP growth projections twice a year. These projections reflect current outlooks for GDP and are likely to be influential on investors' expectations of future growth outlooks. The consensus of projected GDP growth is about 4.24% over the next 10 years.[33]

Q. Do you consider other sources of projected long-term GDP growth?

A. Yes, and these alternative sources corroborate the consensus analysts' projections I relied on. Several projections are shown in Table CCW-7.

TABLE CCW-7

GDP Forecasts

Source	Projected Period	Real GDP	Inflation	Nominal GDP
Blue Chip Economic Indicators [1]	5-10 Yrs	2.1%	2.2%	4.2%
Congressional Budget Office[2]	30 Yrs	1.7%	2.0%	3.8%
Moody's Analytics[3]	31 Yrs	1.9%	2.1%	4.1%
Social Security Administration[4]	76 Yrs	1.6%	2.4%	4.0%
Economist Intelligence Unit[5]	31 Yrs	1.7%	2.2%	4.0%

Sources:

[1] Blue Chip Financial Forecasts, May 31, 2024 at 14.

[2] Congressional Budget Office, Long-Term Budget Outlook, March 28, 2024.

[3] Moody's Analytics Forecast, last updated March 11, 2024.

[4] Social Security Administration, "2024 OASDI Trustees Report," Table VI.G6. May 6, 2024.

[5] S&P MI, Economist Intelligence Unit, downloaded on April 26, 2024.

[33] Wolters Kluwer, Blue Chip Financial Forecast, May 31, 2024 at page 14.

As shown in the table above, the real GDP and the inflation fall in the range of 1.6% to 1.9% and 2.0% to 2.4%, respectively. This results in a nominal GDP in the range of 3.8% to 4.1%. Therefore, the nominal GDP growth projections made by these independent sources support my use of 4.24% as a reasonable estimate of market participants' expectations for long-term GDP growth. The real GDP and nominal GDP growth projections made by these independent sources support my use of 4.24% as a reasonable estimate of market participants' expectations for long-term GDP growth.

Q. What stock price, dividend, and growth rates did you use in your multi-stage DCF analysis?

A. I relied on the same 13-week average stock prices and the most recent quarterly dividend payment data discussed above. For the first stage, I used the consensus of analysts' growth rate projections discussed above in my constant growth DCF model. The first stage covers the first five years, consistent with the time horizon of the securities analysts' growth rate projections. The second stage, or transition stage, begins in year 6 and extends through year 10. The second stage growth transitions the growth rate from the first stage to the third stage using a straight linear trend. For the third stage, or long-term sustainable growth stage, starting in year 11, I used a 4.24% long-term sustainable growth rate based on the consensus of economists' long-term projected nominal GDP growth rate.

Q. What are the results of your multi-stage DCF model?

A. As shown in Exhibit CCW-8, the average and median DCF COE estimates for my proxy group using the 13-week average stock price are 8.18% and 8.02%, respectively.

Q. Please summarize the results from your DCF analyses.

A. The DCF results are summarized in Table CCW-8 below. As described above, the results of the constant growth DCF using analysts' growth rates assume an average long-term growth rate of 6.01%, which is approximately 42% higher than the long-term projected GDP growth rate of 4.24%. This is an unsustainable assumption, and likely leads to an overstatement in the COE for a low-risk regulated utility. As such, it is my opinion that more weight should be given to the sustainable growth and multi-stage models of the DCF.

Table CCW-8

Summary of DCF Results

	Proxy Group	
Description	**Mean**	**Median**
Constant Growth DCF Model (Analysts' Growth)	9.63%	9.89%
Constant Growth DCF Model (Sustainable Growth)	8.21%	8.13%
Multi-Stage DCF Model	8.18%	8.02%
Average of Full Group Results	**8.67%**	**8.68%**

G. Risk Premium Model

Q. Please describe your bond yield plus risk premium model.

A. This model is based on the principle that investors require a higher return to assume greater risk. Common equity investments have greater risk than bonds because bonds have more security of payment in bankruptcy proceedings than common equity and the coupon payments on bonds represent contractual obligations. In contrast, companies are not required

to pay dividends or guarantee returns on common equity investments. Therefore, common equity securities are considered to be riskier than bond securities.

This risk premium model is based on two estimates of an equity risk premium. First, I quantify the difference between regulatory commission-authorized returns on common equity and contemporary U.S. Treasury bonds. The difference between the authorized return on common equity and the Treasury bond yield is the risk premium. I estimated the risk premium on an annual basis for each year since January 1986. The authorized ROEs were based on regulatory commission-authorized returns for utility companies. Authorized returns are typically based on expert witnesses' estimates of the investor-required return at the time of the proceeding.

The second equity risk premium estimate is based on the difference between regulatory commission-authorized returns on common equity and contemporary "A" rated utility bond yields by Moody's. I selected the period 1986 through 2023 because public utility stocks consistently traded at a premium to book value during that period. This is illustrated in Exhibit CCW-9, which shows the market-to-book ratio since 1986 for the utility industry was consistently above a multiple of 1.0x. Over this period, an analyst can infer that authorized ROEs were sufficient to support market prices that at least exceeded book value. This is an indication that commission-authorized returns on common equity supported a utility's ability to issue additional common stock without diluting existing shares. It further demonstrates that utilities were able to access equity markets without a detrimental impact on current shareholders.

Based on this analysis, as shown in Exhibit CCW-10, the average indicated equity risk premium over U.S. Treasury bond yields has been 5.63%. Since the risk premium can vary

depending upon market conditions and changing investor risk perceptions, I believe using an estimated range of risk premiums provides the best method to measure the current return on common equity for a risk premium methodology.

I assessed the five-year and ten-year rolling average risk premiums over the study period to gauge the variability over time of risk premiums. These rolling average risk premiums mitigate the impact of anomalous market conditions and skewed risk premiums over an entire business cycle. As shown on my Exhibit CCW-10, the five-year rolling average risk premium over Treasury bonds ranged from 4.17% to 7.17%, while the ten-year rolling average risk premium ranged from 4.30% to 6.92%.

As shown on my Exhibit CCW-11, the average indicated equity risk premium over contemporary "A" rated Moody's utility bond yields was 4.27%. The five-year and ten-year rolling average risk premiums ranged from 2.80% to 5.97% and 3.11% to 5.75%, respectively.

Q. Why are the time periods used to derive these equity risk premium estimates appropriate to form accurate conclusions about contemporary market conditions?

A. Contemporary market conditions can change dramatically during the period that rates determined in this proceeding will be in effect. A relatively long period of time where stock valuations reflect premiums to book value indicates that the authorized ROEs and the corresponding equity risk premiums were supportive of investors' return expectations and provided utilities access to the equity markets under reasonable terms and conditions. Further, this time period is long enough to smooth abnormal market movement that might distort equity risk premiums. While market conditions and risk premiums do vary over time, this historical time period is a reasonable period to estimate contemporary risk premiums.

Q. Please explain other market evidence you relied on in determining an appropriate equity risk premium.

A. The equity risk premium should reflect the market's perception of risk in the utility industry today. I have gauged investor perceptions in utility risk today in Exhibit CCW-12, where I show the yield-spread between utility bonds and Treasury bonds since 1980. As shown in this schedule, the average utility bond yield-spreads over Treasury bonds for "A" and "Baa" rated utility bonds for this historical period are 1.48% and 1.90%, respectively.

A current 13-week average "A" rated utility bond yield of 5.71% when compared to the current Treasury bond yield of 4.57%, as shown in Exhibit CCW-13, page 1, implies a yield-spread of 1.14%. This current utility bond yield-spread is lower than the long-term average-spread for "A" rated utility bonds of 1.48%. The 13-week average yield on "Baa" rated utility bonds is 5.93%. This indicates a current spread for the "Baa" rated utility bond yield of 1.36%, which is lower than the long-term average of 1.90%.

Q. What are the results based on your risk premium analyses?

A. I give primary consideration to the Risk Premium results using Treasury bond and A-rated utility bonds. My recommendation also takes the results of adding the Baa-rated utility bond yield to the equity risk premium over A-rated utility bonds into consideration.

Considering the current and projected economic environment, current yield spreads and equity risk premiums, as well as current levels of interest rates and interest rate projections, a more normalized equity risk premium is warranted. As such, I believe an average equity risk premium over Treasury yields of 5.63% is appropriate. Adding this risk premium to the projected Treasury yield of 4.30% produces a COE of 9.93%.

Applying a similar methodology as described above, the average of the rolling five-year average risk premiums over A-rated utility bonds is 4.27%. The A-rated utility bond yield has averaged 5.71% over the 13-week period ending June 21, 2024 while the Baa-rated utility bond yield has averaged 5.93% over the same period. Adding this risk premium to the 13-week A-rated utility bond yield of 5.71% produces an estimated COE of 9.98%. Adding this risk premium to the 13-week Baa-rated utility bond yield of 5.93% produces an estimated COE of 10.20%.

The A-rated utility bond yield has averaged 5.61% over the 26-week period ending June 21, 2024 while the Baa-rated utility bond yield has averaged 5.84% over the same period. Adding this risk premium to the 26-week A-rated utility bond yield of 5.61% produces an estimated COE of 9.88%. Adding this risk premium to the 26-week Baa-rated utility bond yield of 5.84% produces an estimated COE of 10.11%.

The results of my risk premium analyses are summarized in Table CCW-9.

Table CCW-9

Summary of Risk Premium Results

Description	
Projected Treasury Yield	9.93%
13-Week Yields	
A-Rated Utility Bond	9.98%
Baa-Rated Utility Bond	10.20%
26-Week Yields	
A-Rated Utility Bond	9.88%
Baa-Rated Utility Bond	10.11%

H. Capital Asset Pricing Model ("CAPM")

Q. Please describe the CAPM.

A. The CAPM method of analysis is based upon the theory that the market-required ROR for a security is equal to the risk-free rate, plus a risk premium associated with the specific security. This relationship between risk and return can be expressed mathematically as follows:

$R_i = R_f + B_i \times (R_m - R_f)$ where:

R_i = Required return for stock i
R_f = Risk-free rate
R_m = Expected return for the market portfolio
B_i = Beta - Measure of the risk for stock

The term "beta" in the equation represents the stock-specific risk that cannot be reduced through diversification. In a well-diversified portfolio, specific risks related to individual stocks can be reduced by balancing the portfolio with securities that offset the impact of firm-specific factors, such as business cycle, competition, product mix, and production limitations.

Non-diversifiable risks, on the other hand, are related to market conditions and are referred to as systematic risks. These risks cannot be reduced through diversification and are considered market risks. Conversely, non-systematic risks, also known as business risks, can be reduced through diversification.

According to the CAPM, the market does not compensate investors for taking on risks that can be diversified away. Thus, investors are only compensated for taking on systematic, or non-diversifiable, risks. Beta is a measure of these systematic risks.

Q. Please describe the inputs to your CAPM.

A. The CAPM requires an estimate of the market risk-free rate, Liberty Water's beta, and the market risk premium.

Q. What did you use as an estimate of the market risk-free rate?

A. As published in the *Blue Chip Financial Forecasts,* the projected 30-year Treasury bond yield is 4.30%.[34] The current 30-year Treasury bond yield is 4.57%, as shown in Exhibit CCW-13 at page 1. Because the COE is a forward-looking exercise, I used *Blue Chip Financial Forecasts*' projected 30-year Treasury bond yield of 4.30% for my CAPM analysis.

Q. Why did you use long-term Treasury bond yields as an estimate of the risk-free rate?

A. Treasury securities are backed by the full faith and credit of the United States government, so long-term Treasury bonds are considered to have negligible credit risk. Also, long-term Treasury bonds have an investment horizon similar to that of common stock. As a result, investor-anticipated long-run inflation expectations are reflected in both common stock required returns and long-term bond yields. Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate) included in a long-term bond yield is a reasonable estimate of the nominal risk-free rate included in common stock returns.

Treasury bond yields, however, do include risk premiums related to future inflation and liquidity. In this regard, a Treasury bond yield is not entirely risk-free. Risk premiums related to unanticipated inflation and interest rates reflect systematic market risks. Consequently, for a company with a beta less than 1.0, using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis can produce an overstated estimate of the CAPM return.

Q. What Beta did you use in your analysis?

A. As shown in Exhibit CCW-14, the current proxy group average and median *Value Line* beta estimates are both 0.85. In my experience, these beta estimates are abnormally

[34] Blue Chip Financial Forecast May 31, 2024.

high and are unlikely to be sustained over the long-term. As such, I have also reviewed the historical average of the proxy group's *Value Line* betas. The historical average *Value Line* beta since 2014 is 0.75 and has ranged from 0.64 to 0.82. Prior to the recent pandemic, the high end of this range was 0.75.

In addition to *Value Line*, I have also included adjusted beta estimates as provided by Market Intelligence's Beta Generator Model. This model relied on a five-year period on a weekly basis ending June 21, 2024. The average and median Market Intelligence betas are 0.75 and 0.75, respectively. Market Intelligence betas, as calculated using its Beta Generator Model, are adjusted using the Vasicek method and calculated using the S&P 500 as the proxy for the investable market. This is in stark contrast with the *Value Line* beta estimates that are adjusted using a constant weighting of 67%/35% to the raw beta/market beta and use the New York Stock Exchange ("NYSE") as the proxy for the investable market. Because I rely on the S&P 500 to estimate the expected return on the investable market, it makes sense to rely on beta estimates that are calculated using the S&P 500 as the benchmark for the market. Further, as S&P explains:

> The Vasicek Method is a superior alternative to the Bloomberg Beta adjustment. The Bloomberg adjustment is not appropriate for a vast number of situations, as it assigns constant weighting regardless of the standard error in the raw beta estimation (Bloomberg Beta = 1/3*market beta + 2/3*Raw Beta). Given the statistical fact that a larger sample size yields a smaller error, the Vasicek method more appropriately adjusts the raw beta via weights determined by the variance of the individual security versus the variance of a larger sample of comparable companies. The weights are designed to bring the raw beta closer to whichever beta estimation has the smallest error. This is a feature the Bloomberg beta cannot replicate.[35]

[35] S&P Market Intelligence, Beta Generator Model.

Notably, while S&P references the Bloomberg method of applying 2/3 and 1/3 weights to the raw beta and market beta, respectively, the comparison still applies to *Value Line's* methodology of applying 67% and 35% weights. Both methods are forms of the Blume adjustment.[36] While the weights are slightly different between the Bloomberg and *Value Line* methods, they are similar and apply a constant weight without any regard to accuracy. As such, S&P's criticisms apply to both Bloomberg betas and *Value Line* betas.

Q. How did you derive your market risk premium estimates?

A. My market risk premium estimates are derived using two general approaches: a risk premium approach and a DCF approach. I also consider the normalized market risk premium of 5.00% with the normalized risk-free rate of 4.67% as recommended by Kroll, formerly known as Duff & Phelps.[37] Based on this methodology and utilizing a "normalized" risk-free rate of 4.67%, Kroll concludes that the current expected, or forward-looking, market risk premium is 5.00%, implying an expected return on the market of 9.67%.[38]

Q. Please describe your market risk premium estimate derived using the risk premium methodology.

[36] The Blume adjustment is a tool used to refine a beta measurement in finance. In general, Beta attempts to explain how much a particular investment's price moves compared to the overall market. But beta is often based on historical data, which may not be an accurate method for predicting the future. The Blume adjustment tries to address this by considering the idea that, in the long run, most investments tend to become more similar in their riskiness to the overall market (represented by a beta of 1).

[37] Kroll, and its predecessor Duff & Phelps, is a provider of economic, financial, and valuation data that is often relied on by finance professionals and cited in ROR testimony.

[38] Kroll, *Kroll Increases U.S. Normalized Risk-Free Rate from 3.0% to 3.5%, but Spot 20-Year U.S. Treasury Yield Preferred When Higher* (Jun. 16, 2022). The current 20-year yield of 4.67% exceeds the "normalized" yield of 3.5%. In accordance with Kroll's prescribed method, the greater of the two shall be used under the normalized Kroll methodology, i.e., 4.67%.

A. The forward-looking risk premium-based estimate was derived by estimating the expected return on the market (as represented by the S&P 500) and subtracting the risk-free rate from this estimate. I estimated the expected return on the S&P 500 by adding an expected inflation rate to the long-term historical arithmetic average real return on the market. The real return on the market represents the achieved return above the rate of inflation.

The Kroll *2023 SBBI Yearbook* estimates the historical, arithmetic-average, real-market return over the period 1926 to 2022 to be 9.02%.[39] A current consensus for projected inflation is 2.40%.[40] Using these estimates, the expected market return is 11.64%.[41] The market risk premium then is the difference between the 11.64% expected market return and the projected risk-free rate of 4.30%, or 7.34%.

Q. Please describe your market risk premium estimates derived using the DCF methodology.

A. I employed two versions of the constant growth DCF model to develop estimates of the market risk premium. I first employed the Federal Energy Regulatory Commission's ("FERC") method of estimating the expected return on the market that was established in its Opinion No. 569-A. FERC's method for estimating the expected return on the market is to perform a constant growth DCF analysis on each of the dividend-paying companies of the S&P 500 index. The growth rate component is based on the average of the growth projections excluding companies with growth rates that were negative or greater than 20%.[42] The weighted average growth rate for the remaining companies is 10.90%. After reflecting the FERC

[39] Kroll, 2023 SBBI Yearbook at 138.
[40] Blue Chip Financial Forecast May 31, 2024.
[41] [(1 +9.02%) ∗ (1 + 2.40%) - 1] ∗ 100.
[42] Opinion No. 569-A, at 210.

prescribed method of adjusting the dividend yield by (1+ 0.5g), the weighted average expected dividend yield is 1.79%. Thus, the DCF-derived expected return on the market is the sum of those two components, or 12.69%. The market risk premium then is the expected market return of 12.69%, less the projected risk-free rate of 4.30%, or 8.40%.

My second DCF-based market risk premium estimate was derived by performing the same DCF analysis described above, except I used all companies in the S&P 500 index rather than just the dividend-paying companies. The weighted average growth rate for these companies is 11.10%. After reflecting the FERC-prescribed method of adjusting the dividend yield by (1+ 0.5g), the weighted average expected dividend yield is 1.69%. Thus, the DCF-derived expected return on the market is the sum of those two components, or 12.79%. The market risk premium then is the expected market return of 12.79% less the projected risk-free rate of 4.30%, or 8.50%.

The average expected market return based on the DCF model is 12.74% and the average market risk premium based on the two DCF estimates is 8.45%.

Q. How do your expected market returns compare to current expectations of financial institutions?

A. As shown in Table CCW-10 below, my average expected market return of 11.35%[43] exceeds long-term market expectations of several financial institutions.

[43] 11.35% = (9.67% + 12.74% + 11.64%) / 3.

TABLE CCW-10

Long-Term Expected Return on the Market

Source	Term	Expected Return Large Cap Equities
BlackRock Capital Management[1]	30 Years	7.00%
JP Morgan Chase[2]	10 - 15 Years	7.00%
Vanguard[3]	10 Years	4.2% - 6.2%
Research Affiliates[4]	10 Years	4.00%

Sources:
[1]BlackRock Investment Institute, November 2023 report.
[2]JP Morgan Chase, Long-Term Capital Market Assumptions, 2024 Report.
[3]Vanguard economic and market outlook for 2024: A Return to Sound Money.
[4]Research Affiliates, Asset Allocation Interactive. Retrieved 1/05/2024.

When compared to the expected market returns of financial institutions above, my average expected market return of 11.35% is greater than all of them. For these reasons, my expected market returns, and the associated market risk premiums, should be considered reasonable, if not high-end estimates.

Q. How do your estimated market risk premiums compare to that estimated by Kroll?

A. The Kroll analysis indicates a market risk premium falls somewhere in the range of 5.00% to 7.32%. My market risk premium estimates are in the range of 5.00% to 8.45%.

Q. How does Kroll measure a market risk premium?

A. Kroll's range is based on several methodologies. First, Kroll estimated a market risk premium of 7.32% based on the difference between the total market return on common stocks (S&P 500) less the income return on 20-year Treasury bond investments over the 1926-2022 period.[44]

Second, Kroll used the Ibbotson & Chen supply-side model which produced a market risk premium estimate of 6.22%.[45] Kroll explains that the historical market risk premium based on the S&P 500 was influenced by an abnormal expansion of P/E ratios relative to earnings and dividend growth. In order to control for the volatility of extraordinary events and their impacts on P/E ratios, Kroll takes into consideration the three-year average P/E ratio as the current P/E ratio. Therefore, Kroll adjusted this market risk premium estimate to normalize the growth in the P/E ratio to be more in line with the growth in dividends and earnings.

Finally, Kroll developed its own recommended equity, or market risk premium, by employing an analysis that takes into consideration a wide range of economic information, multiple risk premium estimation methodologies, and the current state of the economy by observing measures such as the level of stock indices and corporate spreads as indicators of perceived risk. Based on this methodology, and utilizing a "normalized" risk-free rate of 4.67%, Kroll concludes that the current expected, or forward-looking, market risk premium is 5.00%, implying an expected return on the market of 9.67%.[46]

[44] Kroll, 2023 SBBI Yearbook at 191.
[45] *Id.* at 199.
[46] Kroll, *Kroll Increases U.S. Normalized Risk-Free Rate from 3.0% to 3.5%, but Spot 20-Year U.S. Treasury Yield Preferred When Higher* (Jun. 16, 2022).

Q. What are the results of your CAPM analysis?

A. As shown in Exhibit CCW-15, I have provided the results of nine different applications of the CAPM. The first three results presented are based on the proxy group's current average *Value Line* beta of 0.85. The results of the CAPM based on these inputs range from 8.94% to 11.52%.

The next set of three results presented are based on the proxy group's historical *Value Line* beta of 0.75. The results of the CAPM based on these inputs range from 8.43% to 10.65%.

The last set of three results presented are based on the proxy group's current S&P Global Market Intelligence beta of 0.75. The results of the CAPM based on these inputs range from 8.42% to 10.63%. My CAPM results are summarized in Table CCW-11 below.

Because current beta estimates are based on the most recent five years of historical stock returns and volatility, they are being heavily impacted by the market fallout in early 2020 as the global pandemic set in and the market reacted, with this S&P 500 falling more than 40%. For this reason, it is not reasonable to assume current beta estimates, particularly Blume-adjusted betas such as those published by *Value Line*, are reflective of investor expectations at this time. As such, I am giving primary consideration to the results of my CAPM analyses using long-term average *Value Line* betas.

continued on next page

Table CCW-11

CAPM Results Summary

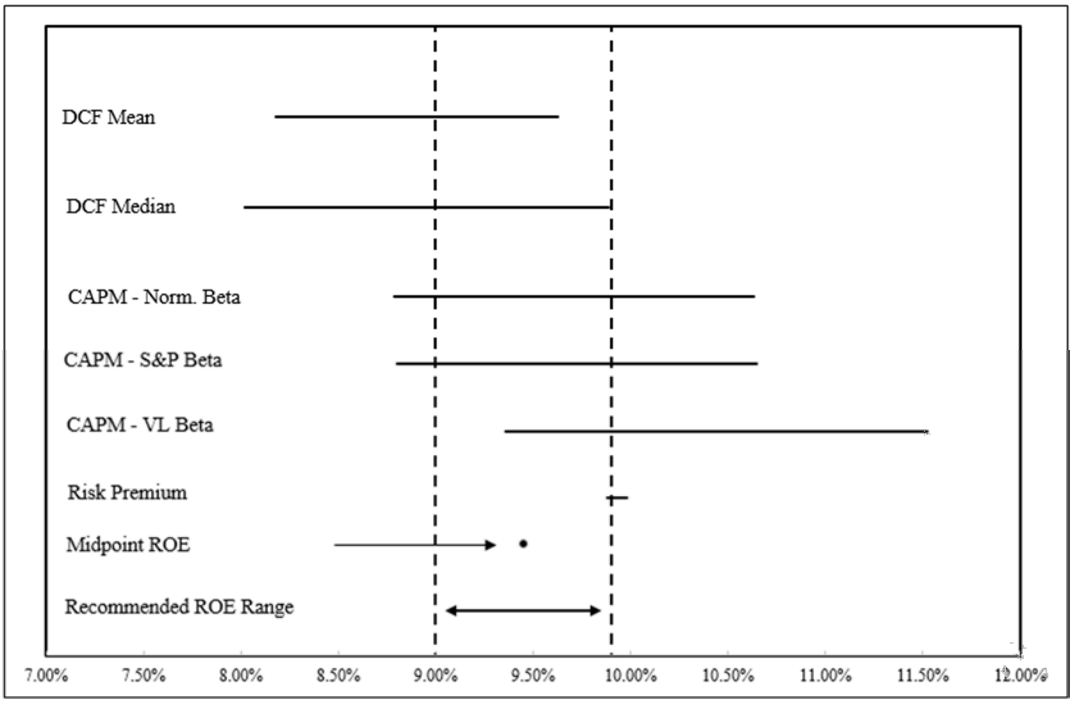
Description	Current VL Beta	Historical VL Beta	Current S&P Beta
Kroll Method	8.94%	8.43%	8.42%
Risk Premium Method	10.54%	9.79%	9.77%
FERC DCF Method	11.52%	10.65%	10.63%
Average	10.30%	9.57%	9.56%

I. Return on Equity Summary

Q. Based on the results of your return on common equity analyses described above, what return on common equity do you recommend for Liberty Water?

A. The results of my analyses are summarized in Figure CCW-5. In this figure, I present the various measures of central tendency for each of my analytical models.

FIGURE CCW-5



Based on my analyses of the various methodologies described above, I estimate Liberty Water's current market COE to be in the reasonable range of 9.00% to 9.90%. My recommended range accounts for the unsustainable growth rates assumed in the constant growth DCF model and the irrational assumption that *Value Line*'s current beta estimates are reflective of current investor expectations. In addition, my recommended range is captured by the range of results for each of the models and is consistent with measures of central tendency of those results. Based on my assessment of Liberty Water's overall risk profile and the results of these analytical methods, I would recommend that this Commission authorize Liberty Water an ROE of 9.45%, which is the midpoint of the range produced by these models.

Q. Based on your recommendations, what is the resulting overall ROR you recommend be authorized?

A. The overall ROR produced by my recommendations is 7.21%, which is based on my midpoint ROE recommendation of 9.45%, a balanced capital structure including 50.0% equity and 50.0% debt, and Liberty Water's embedded cost of debt of 4.97% as filed in its Update Schedule 8. The ROR ranges from a low of 6.99% to a high 7.44% based on my recommended range for the COE. This is demonstrated in Table CCW-12.

TABLE CCW-12

Rate of Return

Capital Component	Capital	Percentage of Capital	Embedded Cost[1]	Allowed Rate of Return Common Equity Return of: Lower 9.00%	ROE 9.45%	Upper 9.90%
Common Stock Equity	$ 21,062,978	50.00%		4.50%	4.73%	4.95%
Long-Term Debt	21,062,978	50.00%	4.97%	2.49%	2.49%	2.49%
Total	$ 42,125,955 [1]	100.00%		**6.99%**	**7.21%**	**7.44%**

Notes:
[1]Update Schedule 8.

Q. Are you recommending any adjustments be added to your recommended allowed ROE to account for flotation cost or a premium for small size?

A. No, I am not

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

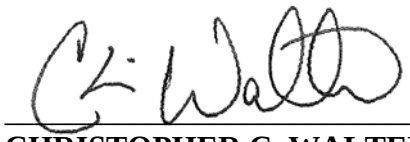
In the Matter of the Request of Liberty Utilities (Missouri Water) LLC d/b/a Liberty for Authority to Implement a General Rate Increase for Water and Wastewater Service Provided in its Missouri Service Areas	)))))	Case No. WR-2024-0104

AFFIDAVIT OF CHRISTOPHER C. WALTERS

STATE OF MISSOURI)
) ss.
COUNTY OF ST. LOUIS)

COMES NOW CHRISTOPHER C. WALTERS and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Direct Testimony of Christopher C. Walters*; and that the same is true and correct according to his best knowledge and belief.

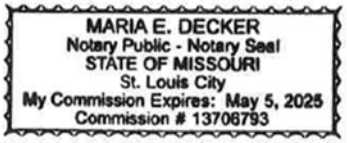
Further the Affiant sayeth not.

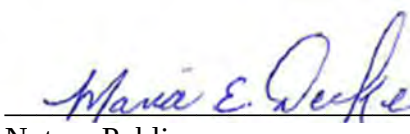


CHRISTOPHER C. WALTERS

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for St. Louis County, State of Missouri, at my office in Chesterfield, on this 14th day of August 2024.





Notary Public

Qualifications of Christopher C. Walters

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Christopher C. Walters. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a Principal with the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EMPLOYMENT EXPERIENCE.

A I received a Bachelor of Science Degree in Business Economics and Finance from Southern Illinois University Edwardsville. I have also received a Master of Business Administration Degree from Lindenwood University.

As a Principal at BAI, I perform detailed technical analyses and research to support regulatory projects including expert testimony covering various regulatory issues. Since my career at BAI began in 2011, I have held the positions of Analyst, Associate Consultant, Consultant, Senior Consultant, and Associate. Throughout my tenure, I have been involved with several regulated projects for electric, natural gas and water and wastewater utilities, as well as competitive procurement of electric power and gas supply. My regulatory project work includes estimating the cost of equity capital, capital structure evaluations, assessing financial integrity, merger and acquisition related issues, risk management related issues, depreciation rate studies, and other revenue requirement issues.

BAI was formed in April 1995. BAI and its predecessor firm have participated in more than 700 regulatory proceedings in 40 states and Canada.

BAI provides consulting services in the economic, technical, accounting, and financial aspects of public utility rates and in the acquisition of utility and energy services through RFPs and negotiations, in both regulated and unregulated markets. Our clients include large industrial and institutional customers, some utilities and, on occasion, state regulatory agencies. We also prepare special studies and reports, forecasts, surveys and siting studies, and present seminars on utility-related issues.

In general, we are engaged in energy and regulatory consulting, economic analysis and contract negotiation. In addition to our main office in St. Louis, the firm also has branch offices in Corpus Christi, Texas; Louisville, Kentucky and Phoenix, Arizona.

Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

A Yes. I have sponsored testimony before state regulatory commissions including: Arizona, Arkansas, Colorado, Delaware, Florida, Georgia, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Texas, Utah, and Wyoming. In addition, I have also sponsored testimony before the City Council of New Orleans and an affidavit before the FERC.

Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR ORGANIZATIONS TO WHICH YOU BELONG.

A I earned the Chartered Financial Analyst (“CFA”) designation from the CFA Institute. The CFA charter was awarded after successfully completing three examinations

which covered the subject areas of financial accounting and reporting analysis, corporate finance, economics, fixed income and equity valuation, derivatives, alternative investments, risk management, and professional and ethical conduct. I am a member of the CFA Institute and the CFA Society of St. Louis.

Brubaker & Associates, Inc.
Testimony Filed Since
January, 2019
by Christopher C. Walters

Date Filed	State	Docket No.	Utility	Type	Subjects	On Behalf Of
qdatefiled	qtstate2	qtdocket234	qtutility	qtestimonytype	qsubjects	qonbehalfof23
5/28/2024	IA	RPU-2023-0002	INTERSTATE POWER AND LIGHT COMPANY	Surrebuttal	Rate of Return / Capital Structure	Iowa Business Energy Coalition
5/22/2024	IL	24-0097	ILLINOIS-AMERICAN WATER COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Illinois Industrial Water Consumers; Citizens Utility Board; Village of Bolingbr
5/7/2024	MI	U-21291	DTE GAS COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
5/1/2024	IL	24-0044	AQUA ILLINOIS, INC.	Direct / Responsive	Rate of Return / Capital Structure	Viscofan USA, Inc., Citizens Utility Board and the Village of University Park
4/26/2024	OK	PUD2023-000087	OKLAHOMA GAS AND ELECTRIC COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
4/22/2024	DC	1176	POTOMAC ELECTRIC POWER COMPANY	Surrebuttal	Rate of Return / Capital Structure	Office of the People's Counsel for the District of Columbia
4/16/2024	IA	RPU-2023-0002	INTERSTATE POWER AND LIGHT COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Iowa Business Energy Coalition
3/14/2024	AK	U-23-047 / U-23-048	CHUGACH ELECTRIC ASSOCIATION, INC.	Direct / Responsive	TIER Ratio; Rate of Return / Capital Structure	Federal Executive Agencies
3/8/2024	NM	23-00255-UT	NEW MEXICO GAS COMPANY, INC.	Direct / Responsive	Stipulations / Settlements / Agreements	New Mexico Affordable Reliable Energy Alliance
2/21/2024	NM	23-00255-UT	NEW MEXICO GAS COMPANY, INC.	Direct / Responsive	Rate of Return / Capital Structure	New Mexico Affordable Reliable Energy Alliance
2/15/2024	GA	55378	GEORGIA POWER COMPANY	Direct / Responsive	IRP	The United States Department of Defense and All Other Federal Executive A
2/9/2024	MI	U-21461	INDIANA MICHIGAN POWER COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
1/18/2024	MI	U-21461	INDIANA MICHIGAN POWER COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
1/12/2024	DC	1176	POTOMAC ELECTRIC POWER COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Office of the People's Counsel for the District of Columbia
9/8/2023	NJ	ER-23030144	JERSEY CENTRAL POWER & LIGHT COMPANY	Direct / Responsive	Rate of Return / Capital Structure	United States Department of Defense and all other Federal Executive Agenc
8/29/2023	MI	U-21389	CONSUMERS ENERGY COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
8/22/2023	OR	UE 416	PORTLAND GENERAL ELECTRIC COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Alliance of Western Energy Consumers and Oregon Citizens' Utility Board
8/22/2023	WY	30010-215-GR-23 (17253)	QIESTAR GAS COMPANY DBA DOMINIO ENERGY	Direct / Responsive	Rate of Return / Capital Structure	Wyoming Office of Consumer Advocate
8/14/2023	WY	20000-633-ER-23 (17252)	ROCKY MOUNTAIN POWER	Direct / Responsive	Rate of Return / Capital Structure	Wyoming Office of Consumer Advocate
8/4/2023	TX	54634	SOUTHWESTERN PUBLIC SERVICE COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Texas Industrial Energy Consumers
7/28/2023	NM	22-00270-UT	PUBLIC SERVICE COMPANY OF NEW MEXICO	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	New Mexico Affordable Reliable Energy Alliance
7/26/2023	AZ	E-01345A-22-0144	ARIZONA PUBLIC SERVICE COMPANY	Surrebuttal	Rate of return / Capital Structure	Federal Executive Agencies
7/21/2023	MO	WR-2023-0006 / SR-2023-0007	CONFLUENCE RIVERS UTILITY OPERATING COMPANY, I	Surrebuttal	Rate of Return / Capital Structure	Missouri Public Service Commission
7/17/2023	IL	23-0068 / 23-0069	PEOPLES GAS, LIGHT, AND COKE COMPANY / NORTH SH	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Citizens Utility Board, and People for Community Recovery
7/13/2023	IL	22-04-87 / 23-0082	AMEREN ILLINOIS COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Illinois Industrial Energy Consumers, Federal Executive Agencies, Citizens U
7/7/2023	IL	23-0067	AMEREN ILLINOIS COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Illinois Industrial Energy Consumers, Federal Executive Agencies, Citizens U
6/29/2023	MO	WR-2023-0006 / SR-2023-0007	CONFLUENCE RIVERS UTILITY OPERATING COMPANY, I	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Missouri Public Service Commission
6/23/2023	NM	22-00270-UT	PUBLIC SERVICE COMPANY OF NEW MEXICO	Direct / Responsive	Rate of Return / Capital Structure	New Mexico Affordable Reliable Energy Alliance
6/20/2023	MD	9692	BALTIMORE GAS AND ELECTRIC COMPANY	Direct / Responsive	Rate of Return / Capital Structure	United States Department of Defense and all other Federal Executive Agenc
6/13/2023	OR	UE 416	PORTLAND GENERAL ELECTRIC COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Alliance of Western Energy Consumers and Oregon Citizens' Utility Board
6/13/2023	MI	U-21297	DTE ELECTRIC COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
6/5/2023	AZ	E-01345A-22-0144	ARIZONA PUBLIC SERVICE COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
5/26/2023	MO	WR-2023-0006 / SR-2023-0007	CONFLUENCE RIVERS UTILITY OPERATING COMPANY, I	Direct / Responsive	Rate of Return / Capital Structure	Missouri Public Service Commission
5/23/2023	AR	22-064-U	LIBERTY UTILITIES (PINE BLUFF WATER) INC.	Surrebuttal		The Office of The Arkansas Attorney General Tim Griffin
5/11/2023	IL	22-0487 / 23-0082	AMEREN ILLINOIS COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Illinois Industrial Energy Consumers, Federal Executive Agencies, Citizens U
5/9/2023	IL	23-0068 / 23-0069	PEOPLES GAS, LIGHT, AND COKE COMPANY / NORTH SH	Direct / Responsive	Rate of Return / Capital Structure	Citizens Utility Board, and People for Community Recovery
5/5/2023	IL	23-0067	AMEREN ILLINOIS COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Illinois Industrial Energy Consumers, Federal Executive Agencies, Citizens U
4/21/2023	NM	22-00286-UT	SOUTHWESTERN PUBLIC SERVICE COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies and Louisiana Energy Services, LLC (d/b/a URE
3/28/2023	AR	22-064-U	LIBERTY UTILITIES (PINE BLUFF WATER) INC.	Direct / Responsive	Rate of Return / Capital Structure	The Office of The Arkansas Attorney General Tim Griffin
3/27/2023	NC	E-2, Sub 1300	DUKE ENERGY PROGRESS LLC	Direct / Responsive	Rate of Return / Capital Structure; Multi-Year Grid / Rate Plan	North Carolina Utilities Commission Public Staff
3/9/2023	MI	U-21193	DTE ELECTRIC COMPANY	Direct / Responsive	Stranded Investments; Securitization; Purchased Power Contracts	Association of Businesses Advocating Tariff Equity
3/7/2023	OK	PUD 2022-000093	PUBLIC SERVICE COMPANY OF OKLAHOMA	Direct / Responsive	Rate of Return / Capital Structure	United States Department of Defense and All Other Federal Executive Agenc
3/6/2023	AZ	E-01933A-22-0107	TUCSON ELECTRIC POWER COMPANY	Surrebuttal	Rate of Return / Capital Structure	The United States Department of Defense and all other Federal Executive Ag
1/31/2023	CO	22A-0515E	PUBLIC SERVICE COMPANY OF COLORADO	Direct / Responsive	Coal Plant Retirements	Colorado Energy Consumers
1/11/2023	AZ	E-01933A-22-0107	TUCSON ELECTRIC POWER COMPANY	Direct / Responsive	Rate of Return / Capital Structure	The United States Department of Defense and all other Federal Executive Ag
12/22/2022	SC	2022-254-E	DUKE ENERGY PROGRESS, LLC	Surrebuttal	Rate of Return / Capital Structure	Federal Executive Agencies
12/19/2022	MT	2022.07.078	NORTHWESTERN ENERGY	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
12/1/2022	SC	2022-254-E	DUKE ENERGY PROGRESS, LLC	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
11/8/2022	WY	20003-214-ER-22 (17072)	CHEYENNE LIGHT, FUEL AND POWER COMPANY D/B/A B	Direct / Responsive	Rate of Return / Capital Structure	Dyno Nobel and Cheyenne Renewable Diesel Company LLC
10/13/2022	UT	22-057-03	DOMINION ENERGY UTAH	Surrebuttal	Rate of Return / Capital Structure	Federal Executive Agencies
8/26/2022	UT	22-057-03	DOMINION ENERGY UTAH	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
8/26/2022	FL	20220069-GU	FLORIDA CITY GAS	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
8/24/2022	MI	U-21224	CONSUMERS ENERGY COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
8/18/2022	IL	22-0297	AMEREN ILLINOIS COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Citizens Utility Board
7/29/2022	IA	RPU-2022-0001	MIDAMERICAN ENERGY COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Iowa Business Energy Coalition
7/28/2022	IL	22-0210	ILLINOIS-AMERICAN WATER COMPANY	Rebuttal / Cross-Answering	Incentive Compensation; Rate Subsidy; Rate Case Expense; Rate of	Illinois Industrial Water Consumers, Citizens Utility Board and Federal Execu
7/22/2022	AR	21-097-U	BLACK HILLS ENERGY ARKANSAS, INC.	Surrebuttal	Rate of Return / Capital Structure	The Office of the Arkansas Attorney General Leslie Rutledge
7/13/2022	IA	RPU-2021-0003	INTERSTATE POWER AND LIGHT COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Iowa Business Energy Coalition
6/23/2022	IL	22-0297	AMEREN ILLINOIS COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Citizens Utility Board
6/15/2022	CO	22AL-0046G	PUBLIC SERVICE COMPANY OF COLORADO	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
6/6/2022	MN	E015/GR-21-335	MINNESOTA POWER	Surrebuttal	Rate of Return / Capital Structure	Large Power Intervenors
6/3/2022	AR	21-097-U	BLACK HILLS ENERGY ARKANSAS, INC.	Direct / Responsive	Rate of Return / Capital Structure	The Office of the Arkansas Attorney General Leslie Rutledge
6/2/2022	IL	22-0210	ILLINOIS-AMERICAN WATER COMPANY	Direct / Responsive	Class Cost of Service / Rate Design / Revenue Allocation	Illinois Industrial Water Consumers and Federal Executive Agencies
5/19/2022	MI	U-20836	DTE ELECTRIC COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
4/27/2022	OK	PUD 202100164	OKLAHOMA GAS AND ELECTRIC COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
4/18/2022	MN	E015/GR-21-335	MINNESOTA POWER	Direct / Responsive	Rate of Return / Capital Structure	Large Power Intervenors
3/14/2022	IA	RPU-2021-0003	INTERSTATE POWER AND LIGHT COMPANY	Direct / Responsive	Advanced Ratemaking Procedures; Rate of Return / Capital	Iowa Business Energy Coalition
2/17/2022	AR	21-070-U	SOUTHWESTERN ELECTRIC POWER COMPANY	Surrebuttal	Rate of Return / Capital Structure	The Office of the Arkansas Attorney General Leslie Rutledge
12/7/2021	AR	21-070-U	SOUTHWESTERN ELECTRIC POWER COMPANY	Direct / Responsive	Rate of Return / Capital Structure	The Office of the Arkansas Attorney General Leslie Rutledge
11/3/2021	CO	21AL-0317E	PUBLIC SERVICE COMPANY OF COLORADO	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
10/28/2021	MI	U-21090	CONSUMERS ENERGY COMPANY	Direct / Responsive	Securitization; PPA	Association of Businesses Advocating Tariff Equity
10/27/2021	LA	U-35441	SOUTHWESTERN ELECTRIC POWER COMPANY	Surrebuttal	Rate of Return / Capital Structure	Federal Executive Agencies
10/27/2021	LA	U-35441	SOUTHWESTERN ELECTRIC POWER COMPANY	Surrebuttal	Formula Rates	Federal Executive Agencies
8/25/2021	OH	20-1651-EL-AIR; 20-1652-EL-A	DAYTON POWER AND LIGHT COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Office of the Ohio Consumers' Counsel
8/6/2021	OK	PUD 202100055	PUBLIC SERVICE COMPANY OF OKLAHOMA	Direct / Responsive	Rate of Return / Capital Structure	United States Department of Defense and all other Federal Executive Agenc
7/21/2021	LA	U-35441	SOUTHWESTERN ELECTRIC POWER COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
7/7/2021	IL	21-0098	NICOR GAS COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Illinois Industrial Energy Consumers and Citizens Utility Board
7/1/2021	NM	20-00238-UT	SOUTHWESTERN PUBLIC SERVICE COMPANY	Stipulations / Agreements / Settlements	Rate of Return / Capital Structure	Federal Executive Agencies and Louisiana Energy Services, LLC (d/b/a URI
6/25/2021	US	ER19-2019-001 / ER-2023-001 (	TUCSON ELECTRIC POWER COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Pattern New Mexico Wind LLC and Freeport McMoran Copper & Gold Energ
6/22/2021	MI	U-20963	CONSUMERS ENERGY COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
5/17/2021	NM	20-00238-UT	SOUTHWESTERN PUBLIC SERVICE COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies and Louisiana Energy Services, LLC (d/b/a URI

Case No. WR-2024-0104

Brubaker & Associates, Inc.
Testimony Filed Since
January, 2019
by Christopher C. Walters

Date Filed	State	Docket No.	Utility	Type	Subjects	On Behalf Of
5/11/2021	IL	21-0098	NICOR GAS COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Illinois Industrial Energy Consumers and Citizens Utility Board
3/5/2021	KY	2020-00349 / 2020-00350	KENTUCKY UTILITIES COMPANY / LOUISVILLE GAS AND I	Direct / Responsive	Rate of Return / Capital Structure	United States Department of Defense and all other Federal Executive Agenc
12/4/2020	AZ	E-01345A-19-0236	ARIZONA PUBLIC SERVICE COMPANY	Surrebuttal	Rate of Return / Capital Structure	Federal Executive Agencies
11/17/2020	AR	16-036-FR	ENTERGY ARKANSAS, INC.	Surrebuttal	Rate of Return / Capital Structure	The Federal Executive Agencies
10/7/2020	MD	9645	BALTIMORE GAS AND ELECTRIC COMPANY	Surrebuttal	Rate of Return / Capital Structure	The United States Department of Defense and all other Federal Executive Ag
10/2/2020	AZ	E-01345A-19-0236	ARIZONA PUBLIC SERVICE COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
8/19/2020	IL	20-0308	AMEREN ILLINOIS COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Illinois Industrial Energy Consumers, Citizens Utility Board and Federal Exec
8/14/2020	MD	9645	BALTIMORE GAS AND ELECTRIC COMPANY	Direct / Responsive	Rate of Return / Capital Structure	The United States Department of Defense and all other Federal Executive Ag
6/19/2020	IL	20-0308	AMEREN ILLINOIS	Direct / Responsive	Rate of Return / Capital Structure	Illinois Industrial Energy Consumers, Citizens Utility Board and Federal Exec
5/8/2020	MA	D.P.U. 19-120	NSTAR GAS COMPANY D/B/A EVERSOURCE ENERGY	Surrebuttal	Rate of Return / Capital Structure	United States Department of Defense and all other Federal Executive Agenc
3/30/2020	MA	D.P.U. 19-120	NSTAR GAS COMPANY D/B/A EVERSOURCE ENERGY	Direct / Responsive	Rate of Return / Capital Structure	United States Department of Defense and all other Federal Executive Agenc
1/21/2020	MO	ER-2019-0335	AMEREN MISSOURI	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Missouri Industrial Energy Consumers
12/4/2019	MO	ER-2019-0335	AMEREN MISSOURI	Direct / Responsive	Rate of Return / Capital Structure	Missouri Industrial Energy Consumers
12/2/2019	MI	U-20561	DTE ELECTRIC COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
11/12/2019	MI	U-20359	INDIANA MICHIGAN POWER COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
11/6/2019	MI	U-20561	DTE ELECTRIC COMPANY	Direct / Responsive	Rate of Return / Capital Structure / Regulatory Plan / Tree Trimming	Association of Businesses Advocating Tariff Equity
11/1/2019	WY	30026-2-GR-19 (Record No. 15	BLACK HILLS WYOMING GAS, LLC D/B/A BLACK HILLS EN	Direct / Responsive	Stipulations / Agreements / Settlements	Federal Executive Agencies
10/22/2019	MD	9610	BALTIMORE GAS AND ELECTRIC COMPANY	Surrebuttal	Rate of Return / Capital Structure	United States Department of Defense and all other Federal Executive Agenc
10/17/2019	MI	U-20359	INDIANA MICHIGAN POWER COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Association of Businesses Advocating Tariff Equity
10/4/2019	WY	30026-2-GR-19 (Record No. 15	BLACK HILLS WYOMING GAS, LLC D/B/A BLACK HILLS EN	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
9/24/2019	AR	19-008-U	SOUTHWESTERN ELECTRIC POWER COMPANY	Surrebuttal	Rate of Return / Capital Structure	The Office of the Arkansas Attorney General Leslie Rutledge
9/10/2019	MD	9610	BALTIMORE GAS AND ELECTRIC COMPANY	Direct / Responsive	Rate of Return / Capital Structure	United States Department of Defense and all other Federal Executive Agenc
9/10/2019	IA	RPU-2019-0001	INTERSTATE POWER AND LIGHT COMPANY	Rebuttal / Cross-Answering	Rate of Return / Capital Structure	Iowa Business Energy Coalition
9/4/2019	NV	19-06002	SIERRA PACIFIC POWER COMPANY D/B/A NV ENERGY	Direct / Responsive	Rate of Return / Capital Structure	Switch, Ltd.
8/1/2019	IA	RPU-2019-0001	INTERSTATE POWER AND LIGHT COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Iowa Business Energy Coalition
7/16/2019	AR	19-008-U	SOUTHWESTERN ELECTRIC POWER COMPANY	Direct / Responsive	Rate of Return / Capital Structure	The Office of the Arkansas Attorney General Leslie Rutledge
4/26/2019	LA	UD-18-07	ENTERGY NEW ORLEANS, INC.	Surrebuttal	Rate of Return / Capital Structure	Air Products and Chemicals, Inc.
4/22/2019	OK	PUD 201800140	OKLAHOMA GAS AND ELECTRIC COMPANY	Direct / Responsive	Rate of Return / Capital Structure	Federal Executive Agencies
3/1/2019	MI	U-20298	DTE GAS COMPANY	Direct / Responsive	TCJA	Association of Businesses Advocating Tariff Equity
2/21/2019	MI	U-20276	UPPER PENINSULA POWER COMPANY	Direct / Responsive	Rate of Return / Capital Structure; Revenue Credits	Association of Businesses Advocating Tariff Equity and Calumet Electronics
2/1/2019	LA	UD-18-07	ENTERGY NEW ORLEANS, INC.	Direct / Responsive	Rate of Return / Capital Structure	Air Products and Chemicals, Inc.
1/16/2019	KY	2018-00294 / 2018-00295	KENTUCKY UTILITIES COMPANY / LOUISVILLE GAS AND I	Direct / Responsive	Rate of Return / Capital Structure	United States Department of Defense and all other Federal Executive Agenc

Case No. WR-2024-0104

Liberty Utilities (Missouri Water) LLC

Electric Utilities
(Valuation Metrics)

Line	Company	23-Year Average (1)	2024 [2] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)	2005 (21)	2004 (22)	2003 (23)	2002 (24)
		Price to Earnings (P/E) Ratio [1]																							
1	ALLETE	18.15	16.80	16.80	18.10	20.60	18.30	24.70	22.20	23.00	18.60	15.10	17.20	18.60	15.90	14.70	16.00	16.10	13.90	14.80	16.55	17.91	25.21	N/A	N/A
2	Alliant Energy	16.95	16.40	16.40	21.40	21.20	21.20	21.20	19.10	20.60	22.30	18.10	16.60	15.30	14.50	14.50	12.50	13.90	13.40	15.10	16.82	12.59	14.00	12.69	19.93
3	Ameren Corp.	16.68	15.50	15.50	21.50	21.40	22.20	22.10	18.30	20.60	18.30	17.50	16.70	16.50	13.40	11.90	9.70	9.30	14.20	17.40	19.39	16.72	16.28	13.51	15.78
4	American Electric Power	15.24	15.90	15.90	21.10	17.10	19.60	21.40	18.00	19.30	15.20	15.80	15.90	14.50	13.80	11.90	13.40	10.00	13.10	16.30	12.91	13.70	12.42	10.66	12.68
5	Avangrid, Inc.	22.95	16.30	16.30	19.60	23.20	23.60	23.10	26.10	27.30	20.50	33.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Avista Corp.	18.16	14.60	14.60	20.00	20.20	21.20	15.00	24.50	23.40	18.80	17.60	17.30	14.60	19.30	14.10	12.70	11.40	15.00	30.90	15.39	19.45	24.43	13.84	19.27
7	Black Hills	17.46	14.20	14.20	18.10	17.70	17.00	21.20	16.80	19.50	22.30	16.10	19.00	18.20	17.10	31.10	18.10	9.90	NMF	15.00	15.77	17.27	17.13	15.95	12.52
8	CenterPoint Energy	17.03	20.40	20.40	18.70	26.10	15.90	19.50	37.00	17.90	21.90	18.10	17.00	18.70	14.80	14.60	13.80	11.80	11.30	15.00	10.27	19.06	17.84	6.05	5.59
9	CMS Energy Corp.	18.35	18.60	18.60	22.90	23.60	23.30	24.30	20.30	21.30	20.90	18.30	17.30	16.30	15.10	13.60	12.50	13.60	10.90	26.80	22.18	12.60	12.39	N/A	N/A
10	Consol. Edison	16.19	17.70	17.70	20.30	17.20	19.00	19.70	17.10	19.80	18.80	15.60	15.90	14.70	15.40	15.10	13.30	12.50	12.30	13.80	15.49	15.13	18.21	14.30	13.28
11	Dominion Resources	18.34	18.30	18.30	18.70	19.50	22.60	18.20	17.50	22.20	21.30	22.10	23.00	19.20	18.90	17.30	14.30	12.70	13.80	20.60	15.98	24.89	15.07	15.24	12.05
12	DTE Energy	16.73	16.90	16.90	22.40	30.00	16.30	19.90	17.40	18.60	19.00	18.10	14.90	17.90	14.90	13.50	12.30	10.40	14.80	18.30	17.43	13.80	16.04	13.69	11.28
13	Duke Energy	17.15	16.50	16.50	19.60	18.90	17.10	17.70	17.00	19.90	21.30	18.20	17.90	17.40	17.50	13.80	12.70	13.30	17.30	16.10	N/A	N/A	N/A	N/A	N/A
14	Edison Int'l	16.96	14.30	14.30	40.60	29.70	34.90	16.70	N/A	17.20	17.90	14.80	13.00	12.70	9.70	11.80	10.30	9.70	12.40	16.00	12.99	11.74	37.59	6.97	7.78
15	El Paso Electric	17.68	N/A	N/A	N/A	N/A	N/A	N/A	26.85	21.78	18.66	18.33	16.38	15.88	14.47	12.60	10.72	10.79	11.89	15.26	16.92	26.72	22.03	18.26	22.99
16	Entergy Corp.	14.70	20.60	20.60	21.10	15.00	15.30	16.50	13.80	15.00	10.90	12.50	12.90	13.20	11.20	9.10	11.60	12.00	16.60	19.30	14.28	16.28	15.09	13.77	11.53
17	Eversource Energy	18.04	13.10	13.10	20.90	22.20	23.70	22.10	18.70	19.50	18.70	18.10	17.90	16.90	19.90	15.40	13.40	12.00	13.70	18.70	27.07	19.76	20.77	13.35	16.07
18	Evergy, Inc.	18.84	14.80	14.80	19.90	16.20	21.70	21.80	22.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	14.43	15.40	15.40	19.90	16.60	12.40	14.70	13.30	13.40	12.50	12.60	16.00	13.40	19.10	11.30	11.00	11.50	18.00	18.20	16.53	15.37	12.99	11.77	10.46
20	FirstEnergy Corp.	15.15	14.40	14.40	17.00	14.10	15.70	17.10	13.60	11.40	12.70	12.60	13.20	13.10	21.10	22.40	11.70	13.00	15.60	15.60	14.23	16.07	14.13	22.47	12.95
21	Fortis Inc.	19.14	17.00	17.00	21.10	21.20	20.60	19.20	17.10	16.80	21.60	18.00	24.30	20.00	20.10	18.80	18.20	16.40	17.50	21.10	17.68	N/A	N/A	N/A	N/A
22	Great Plains Energy	15.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NMF	17.98	19.37	16.47	14.19	15.53	16.11	12.10	16.03	20.55	16.35	18.30	13.96	12.59	12.23	11.09
23	Hawaiian Elec.	17.12	6.00	6.00	18.50	18.20	21.50	21.30	18.90	20.70	13.60	20.40	15.90	16.20	15.80	17.10	18.60	19.80	23.20	21..6	20.33	18.27	19.18	13.76	13.47
24	IDACORP, Inc.	17.19	18.10	18.10	21.00	20.80	19.90	22.30	20.50	20.60	19.10	16.20	14.70	13.40	12.40	11.50	11.80	10.20	13.90	18.20	15.07	16.70	15.49	26.51	18.88
25	MGE Energy	20.14	21.10	21.10	24.70	25.50	26.40	28.40	25.10	29.40	24.90	20.30	17.20	17.00	17.20	15.80	15.00	15.10	14.20	15.00	15.88	22.40	17.98	17.55	15.96
26	NextEra Energy, Inc.	18.80	19.80	19.80	27.80	31.30	28.90	26.80	24.80	21.60	20.70	16.90	17.30	16.60	14.40	11.50	10.80	13.40	14.50	18.90	13.65	17.88	13.65	17.88	13.60
27	NorthWestern Corp	16.76	13.70	13.70	17.30	17.40	18.60	19.90	16.80	17.80	17.20	18.40	16.20	16.90	15.70	12.60	12.90	11.50	13.90	21.70	25.95	17.09	N/A	N/A	N/A
28	OGE Energy	15.46	17.00	17.00	17.20	14.30	16.20	19.00	16.50	18.30	17.70	17.70	18.30	17.70	15.20	14.40	13.30	10.80	12.40	13.80	13.68	14.95	14.13	11.84	14.12
29	Otter Tail Corp.	20.37	14.30	14.30	9.50	12.30	18.30	23.50	22.20	22.10	20.20	18.20	18.80	21.10	21.70	47.50	NMF	31.20	30.10	19.00	17.35	15.40	17.34	17.77	16.01
30	Pinnacle West Capital	15.88	15.80	15.80	17.10	14.10	16.70	19.40	17.80	19.30	18.70	16.00	15.90	15.30	14.30	14.60	12.60	13.70	16.10	14.90	13.69	19.24	15.80	13.96	14.43
31	PNM Resources	18.10	14.20	14.20	17.40	19.90	19.60	22.20	19.40	20.40	22.40	18.70	18.70	16.10	15.00	14.50	14.00	18.10	N/A	35.60	15.57	17.38	15.02	14.73	15.08
32	Portland General	16.59	14.30	14.30	18.20	17.70	16.60	22.30	18.40	20.00	19.10	17.70	15.30	16.90	14.00	12.40	12.00	14.40	16.30	11.90	23.35	N/A	N/A	N/A	N/A
33	PPL Corp.	16.24	16.20	16.20	20.00	54.10	13.90	13.30	11.30	17.60	12.80	13.90	14.10	12.80	10.90	10.50	11.90	25.70	17.60	17.30	14.10	15.12	12.51	10.59	11.06
34	Public Serv. Enterprise	14.70	18.80	18.80	18.50	16.80	15.70	18.00	16.60	16.30	15.30	14.10	12.60	13.50	12.80	10.40	10.40	10.00	13.60	16.50	17.81	16.74	14.26	10.58	10.00
35	SCANA Corp.	13.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14.46	16.80	14.67	13.68	14.43	14.80	13.67	12.93	11.63	12.67	14.96	15.42	14.44	13.57	13.05	12.17
36	Sempra Energy	15.52	15.00	15.00	16.80	15.40	17.50	22.50	20.40	24.30	24.40	19.70	21.90	19.70	14.90	11.80	12.60	10.10	11.80	14.00	11.50	11.79	8.65	8.96	8.19
37	Southern Co.	16.38	18.60	18.60	19.60	18.40	17.90	17.60	15.10	15.50	17.80	15.80	16.00	16.20	17.00	15.80	14.90	13.50	16.10	16.00	16.19	15.92	14.68	14.83	14.63
38	Vectren Corp.	17.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23.54	19.18	17.92	19.98	20.66	15.02	15.83	15.10	12.89	16.79	15.33	18.92	15.11	17.57	14.80	14.16
39	WEC Energy Group	17.39	16.50	16.50	21.90	22.30	24.90	23.50	19.60	20.00	19.90	21.30	17.70	16.50	15.80	14.20	14.00	13.30	14.80	16.50	15.97	14.46	17.51	12.43	10.46
40	Westar Energy	15.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23.40	21.59	18.45	15.36	14.04	13.43	14.78	12.96	14.95	16.96	14.10	12.18	14.79	17.44	10.78	14.02
41	Xcel Energy Inc.	17.76	15.30	15.30	22.20	22.50	23.90	22.30	18.90	20.20	18.50	16.50	15.40	15.00	14.80	14.20	14.10	12.70	13.70	16.70	14.80	15.36	13.65	11.62	40.80
42	Average	17.00	16.18	16.18	20.29	20.91	19.95	20.51	19.43	19.85	18.75	17.58	16.77	16.19	15.56	15.30	13.16	13.57	15.27	17.66	16.51	16.56	16.65	13.83	14.31
43	Median	16.25	16.25	16.25	19.90	19.70	19.30	21.20	18.55	20.00	18.80	17.81	16.47	16.20	15.02	14.20	12.80	12.70	14.20	16.32	15.92	15.99	15.49	13.69	13.47

Sources:

The current year P/E ratio is based on the forward P/E (price over expected earnings per share). All historical year P/E ratios are based on annual average share price over achieved earnings per share.

[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.

Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.

[2] The Value Line Investment Survey, April 19, May 10, and June 7, 2024.

Liberty Utilities (Missouri Water) LLC

Electric Utilities
(Valuation Metrics)

Market Price to Cash Flow (MP/CF) Ratio [1]

Line	Company	23-Year Average (1)	2024 [2] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)	2005 (21)	2004 (22)	2003 (23)	2002 (24)
1	ALLETE	9.09	7.34	6.69	7.56	8.61	8.14	11.38	10.16	10.95	8.26	7.49	8.80	9.15	8.18	7.91	8.04	8.51	9.29	10.30	11.06	11.54	11.46	N/A	N/A
2	Alliant Energy	8.27	8.78	9.43	10.43	10.31	10.66	10.74	9.71	13.21	10.67	8.86	8.40	7.52	7.50	7.21	6.59	6.23	7.49	7.92	8.00	5.09	5.52	4.76	5.20
3	Ameren Corp.	7.38	6.78	8.05	9.54	9.03	9.63	9.45	7.95	8.38	7.44	6.87	6.95	6.61	5.48	5.02	4.23	4.25	6.35	7.69	8.57	8.57	8.24	6.74	7.96
4	American Electric Power	6.75	7.24	7.68	8.67	7.57	8.41	9.34	8.03	8.81	7.57	7.09	7.00	6.57	5.93	5.46	5.54	4.71	5.71	6.84	5.54	6.07	5.50	4.69	5.19
5	Avangrid, Inc.	9.21	6.32	7.12	8.69	11.19	9.39	9.11	10.24	10.14	8.56	11.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Avista Corp.	6.92	5.85	6.73	9.39	8.03	7.80	7.34	10.14	9.35	7.63	6.76	7.30	6.21	6.88	6.40	5.80	4.06	5.12	7.58	5.30	6.58	7.58	5.36	5.90
7	Black Hills	7.86	6.63	7.76	8.92	8.84	8.56	10.65	8.83	9.20	9.33	8.06	8.81	8.03	6.04	7.85	6.16	4.25	11.26	7.62	6.92	7.57	6.69	6.89	5.92
8	CenterPoint Energy	5.65	7.54	7.75	8.01	7.95	5.94	7.03	8.45	6.97	5.96	5.75	6.25	6.56	5.15	5.39	4.70	4.05	4.29	5.17	3.94	4.70	4.26	2.08	2.16
9	CMS Energy Corp.	6.56	7.47	8.28	9.43	9.27	9.87	9.85	8.40	8.75	8.50	7.53	7.13	6.68	6.03	5.41	4.48	3.64	3.45	5.57	4.40	4.04	3.20	2.88	NMF
10	Consol. Edison	8.21	7.47	8.26	8.70	7.26	8.35	9.46	8.73	9.64	9.39	7.96	7.89	7.77	8.31	8.15	7.39	6.72	6.89	8.31	8.65	8.59	9.31	7.90	7.64
11	Dominion Resources	9.78	7.30	9.24	9.35	11.15	14.59	13.47	10.94	11.35	11.59	11.84	12.27	10.88	9.92	9.45	8.12	6.98	8.27	8.65	7.81	10.09	7.68	7.51	6.53
12	DTE Energy	6.78	7.22	7.27	7.96	10.62	7.85	9.67	8.54	9.05	8.64	8.52	6.42	6.65	5.91	5.18	4.69	3.59	4.90	5.73	5.21	5.54	6.00	5.62	5.20
13	Duke Energy	7.58	7.01	7.17	7.75	7.89	8.06	7.40	7.65	8.40	8.57	7.95	8.12	8.11	9.53	6.56	6.01	5.96	7.13	7.16	N/A	N/A	N/A	N/A	N/A
14	Edison Int'l	5.99	5.31	5.67	6.83	7.14	7.57	7.25	13.46	7.05	6.77	5.92	5.68	5.46	4.59	4.22	4.11	3.95	5.63	7.01	5.87	5.61	6.84	2.82	2.96
15	El Paso Electric	5.93	N/A	N/A	N/A	N/A	N/A	N/A	9.43	8.54	7.46	6.47	6.33	6.19	5.78	5.16	4.31	3.98	4.95	6.44	6.25	6.67	4.65	3.90	4.39
16	Entergy Corp.	5.76	6.17	4.62	7.15	5.61	5.78	6.05	4.92	4.66	4.01	4.11	4.21	4.03	4.23	3.90	4.66	5.68	7.96	9.21	7.16	8.76	7.12	6.84	5.57
17	Eversource Energy	7.59	6.21	10.39	9.39	11.41	12.53	11.47	9.16	10.36	10.14	10.12	10.14	8.08	9.30	6.99	4.97	4.61	4.12	6.18	6.02	3.55	3.78	2.85	2.75
18	Evergy, Inc.	7.34	6.56	6.74	8.66	7.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	6.04	5.70	6.41	7.69	5.08	4.44	5.29	5.05	4.45	4.80	4.70	5.09	4.61	5.54	5.86	5.10	5.98	9.65	9.89	8.62	7.97	6.29	5.71	4.97
20	FirstEnergy Corp.	6.93	7.51	7.90	8.93	6.60	9.23	11.09	8.84	4.76	5.12	5.38	7.43	6.15	7.42	7.33	4.49	4.91	7.58	7.89	7.53	6.04	5.15	6.90	5.10
21	Fortis Inc.	8.43	7.69	8.34	9.10	9.57	9.50	9.46	7.97	8.23	10.46	7.29	9.25	7.93	8.09	8.38	7.40	6.76	7.58	9.18	7.89	N/A	N/A	N/A	N/A
22	Great Plains Energy	6.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14.62	8.63	6.66	6.45	5.73	6.09	5.74	4.49	5.06	7.71	7.13	7.68	6.70	6.52	5.92	5.14
23	Hawaiian Elec.	7.73	2.78	5.70	7.95	8.23	8.69	9.30	8.34	9.21	7.44	9.25	7.64	8.15	8.05	7.73	7.81	6.95	9.10	7.95	8.47	8.29	8.44	6.12	6.20
24	IDACORP, Inc.	9.01	9.80	11.04	12.42	11.84	11.38	12.75	11.72	11.56	10.95	9.37	8.59	7.78	7.05	6.64	6.52	5.31	7.10	8.23	7.73	7.55	7.15	7.27	7.53
25	MGE Energy	11.64	10.70	12.31	13.63	N/A	14.90	15.58	15.04	17.33	15.66	12.53	11.42	11.20	10.77	9.48	9.05	8.40	8.42	9.23	9.30	11.73	11.04	10.20	8.09
26	NextEra Energy, Inc.	9.21	9.44	10.89	15.17	20.40	15.48	12.33	10.77	11.61	9.24	7.93	7.98	7.60	7.58	5.98	5.33	6.09	7.34	9.02	6.51	6.71	6.71	5.97	5.77
27	NorthWestern Corp	7.85	6.90	8.01	8.65	8.83	8.88	9.93	8.19	8.82	8.65	8.99	9.01	7.61	6.85	5.89	5.79	5.05	5.57	8.45	9.39	7.31	8.13	N/A	N/A
28	OGE Energy	7.91	7.38	7.78	8.36	7.64	8.38	10.58	9.36	10.52	9.03	9.25	10.65	9.93	7.35	7.48	6.61	5.37	6.43	7.58	7.50	7.04	6.73	5.62	5.39
29	Otter Tail Corp.	9.31	10.26	8.02	7.70	8.61	9.99	12.42	11.58	11.09	9.38	9.04	9.45	9.58	8.43	9.04	8.07	8.01	11.65	9.53	8.66	8.18	9.01	8.13	8.33
30	Pinnacle West Capital	6.18	5.62	6.47	5.19	6.19	7.49	8.30	7.09	8.73	7.89	6.91	7.03	6.85	6.34	5.80	5.65	3.84	4.19	4.76	4.48	7.48	5.88	4.80	5.21
31	PNM Resources	6.84	5.46	6.87	6.95	7.81	7.87	7.92	7.57	7.40	7.64	6.95	7.48	6.47	5.80	4.94	4.58	4.53	7.10	10.67	7.50	7.62	6.84	5.55	5.72
32	Portland General	5.96	5.24	6.56	6.65	6.48	6.72	7.65	6.56	7.45	7.12	6.73	5.49	6.06	5.08	4.86	4.13	4.63	4.81	5.34	5.74	N/A	N/A	N/A	N/A
33	PPL Corp.	7.83	7.51	7.83	8.82	13.74	7.46	7.99	7.02	10.11	8.37	8.73	7.32	6.59	5.87	5.98	7.46	8.82	9.17	8.90	7.58	7.57	6.49	5.41	5.30
34	Public Serv. Enterprise	8.02	9.67	9.68	10.53	11.32	8.22	8.72	9.48	8.67	8.56	6.66	6.48	6.40	6.40	6.03	6.04	6.20	8.46	9.83	8.41	8.59	7.17	6.79	6.24
35	SCANA Corp.	7.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.26	9.59	8.33	7.50	7.49	7.40	6.75	6.52	5.88	6.38	7.15	7.03	5.40	6.86	6.59	6.36
36	Sempra Energy	8.47	8.71	8.93	9.75	13.23	10.40	12.05	10.10	10.65	10.88	9.99	10.77	9.37	7.26	6.13	6.53	6.07	7.07	8.61	7.22	6.96	5.16	4.85	4.00
37	Southern Co.	8.31	8.79	8.64	9.63	8.72	8.34	8.80	7.05	7.49	8.83	8.23	8.42	8.30	8.75	8.22	7.79	7.08	8.18	8.62	8.47	8.41	8.28	8.28	7.83
38	Vectren Corp.	7.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.32	8.60	7.82	7.57	6.82	5.79	5.81	5.58	5.24	6.90	6.53	7.37	7.06	7.63	7.27	6.92
39	WEC Energy Group	9.21	8.66	10.12	11.81	11.99	13.67	12.88	10.82	11.04	10.95	12.90	10.27	9.58	9.24	8.43	8.15	6.87	7.57	7.84	7.27	6.40	6.27	4.91	4.27
40	Westar Energy	6.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.87	10.86	9.05	7.93	7.23	6.71	6.67	5.51	5.32	7.09	6.88	5.81	7.00	6.54	4.24	2.94
41	Xcel Energy Inc.	7.03	6.45	7.96	8.62	9.19	10.07	9.44	7.90	8.50	8.10	7.62	7.31	7.00	6.85	6.47	6.28	5.43	5.71	6.51	5.54	5.62	5.31	4.27	5.46
42	Average	7.63	7.26	8.01	9.00	9.28	9.26	9.78	9.03	9.41	8.68	8.07	7.90	7.41	7.01	6.56	6.02	5.61	7.01	7.77	7.17	7.18	6.82	5.75	5.58
43	Median	7.44	7.27	7.87	8.69	8.72	8.56	9.46	8.78	9.13	8.58	7.94	7.57	7.23	6.85	6.40	5.80	5.37	7.10	7.84	7.44	7.05	6.72	5.66	5.46

Sources:
The current year P/E ratio is based on the forward P/E (price over expected earnings per share). All historical year P/E ratios are based on annual average share price over achieved earnings per share.
[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.
Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.
[2] The Value Line Investment Survey, April 19, May 10, and June 7, 2024.

Note:
[a] Based on the average of the high and low price and the projected Cash Flow per share.

Liberty Utilities (Missouri Water) LLC

Electric Utilities
(Valuation Metrics)

Market Price to Book Value (MP/BV) Ratio [1]

Line	Company	20-Year Average	2024 [2]	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1	ALLETE	1.53	1.19	1.19	1.24	1.43	1.39	1.91	1.79	1.78	1.53	1.37	1.42	1.51	1.34	1.35	1.28	1.15	1.55	1.89	2.09	2.22
2	Alliant Energy	1.81	1.79	1.92	2.25	2.26	2.30	2.32	2.16	2.38	2.17	1.86	1.86	1.70	1.57	1.46	1.31	1.04	1.33	1.67	1.52	1.33
3	Ameren Corp.	1.60	1.67	2.00	2.15	2.13	2.21	2.26	1.95	1.93	1.67	1.46	1.45	1.29	1.18	0.90	0.83	0.78	1.25	1.60	1.62	1.68
4	American Electric Power	1.64	1.53	1.73	1.99	1.87	2.09	2.20	1.82	1.88	1.81	1.55	1.54	1.40	1.31	1.23	1.23	1.08	1.48	1.85	1.56	1.57
5	Avangrid, Inc.	0.88	0.65	0.71	0.89	1.01	0.97	1.02	1.02	0.93	0.83	0.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Avista Corp.	1.31	1.04	1.19	1.33	1.42	1.37	1.54	1.88	1.73	1.57	1.36	1.33	1.25	1.21	1.19	1.07	0.94	1.11	1.29	1.30	1.13
7	Black Hills	1.48	1.08	1.28	1.54	1.52	1.55	1.95	1.61	2.06	1.94	1.59	1.79	1.62	1.21	1.14	1.07	0.83	1.22	1.57	1.47	1.63
8	CenterPoint Energy	2.25	1.75	1.86	1.99	1.74	1.90	2.21	2.18	2.59	2.73	2.43	2.27	2.30	1.99	1.87	1.96	1.77	2.49	3.13	2.75	3.06
9	CMS Energy Corp.	2.18	2.27	2.33	2.71	2.69	3.24	3.28	2.81	2.93	2.72	2.43	2.26	2.09	1.91	1.66	1.48	1.10	1.23	1.82	1.42	1.32
10	Consol. Edison	1.42	1.42	1.48	1.55	1.34	1.44	1.59	1.49	1.63	1.58	1.42	1.34	1.38	1.47	1.38	1.22	1.08	1.17	1.47	1.47	1.52
11	Dominion Resources	2.49	1.53	1.68	2.34	2.37	2.72	2.18	2.40	2.94	3.15	3.34	3.55	2.97	2.84	2.37	2.01	1.80	2.42	2.69	2.07	2.50
12	DTE Energy	1.66	1.96	1.97	2.41	2.82	1.80	2.07	1.91	2.01	1.82	1.65	1.62	1.51	1.35	1.20	1.16	0.89	1.10	1.35	1.29	1.39
13	Duke Energy	1.29	1.43	1.49	1.63	1.58	1.47	1.47	1.33	1.41	1.35	1.29	1.28	1.19	1.12	1.11	1.00	0.91	1.06	1.15	N/A	N/A
14	Edison Int'l	1.71	1.80	1.86	2.08	1.67	1.62	1.80	1.97	2.17	1.92	1.76	1.68	1.57	1.53	1.24	1.07	1.04	1.56	2.05	1.80	1.93
15	El Paso Electric	1.56	N/A	N/A	N/A	N/A	N/A	N/A	1.94	1.87	1.68	1.48	1.52	1.49	1.59	1.64	1.17	0.98	1.33	1.69	1.71	1.76
16	Entergy Corp.	1.72	1.49	1.45	1.81	1.75	1.93	2.03	1.74	1.76	1.67	1.40	1.33	1.21	1.31	1.35	1.62	1.66	2.44	2.65	1.89	2.01
17	Eversource Energy	1.54	1.38	1.71	1.86	2.00	2.11	1.99	1.68	1.73	1.64	1.53	1.47	1.38	1.28	1.50	1.31	1.12	1.31	1.60	1.22	1.05
18	Evergy, Inc.	1.39	1.18	1.33	1.52	1.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	2.04	1.35	1.52	1.88	1.37	1.20	1.43	1.31	1.20	1.20	1.14	1.28	1.17	1.46	1.95	2.07	2.57	4.39	4.79	3.89	3.60
20	FirstEnergy Corp.	2.05	1.96	2.08	2.37	2.33	2.81	3.39	2.67	3.53	2.37	1.16	1.15	1.28	1.44	1.33	1.36	1.54	2.52	2.23	1.92	1.64
21	Fortis Inc.	1.46	1.30	1.43	1.56	1.48	1.47	1.41	1.24	1.41	1.26	1.33	1.35	1.45	1.59	1.59	1.56	1.33	1.48	1.63	1.96	N/A
22	Great Plains Energy	1.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.33	1.17	1.12	1.11	1.02	0.96	0.93	0.87	0.80	1.11	1.66	1.77	1.86
23	Hawaiian Elec.	1.60	0.58	1.24	1.94	1.81	1.82	2.02	1.76	1.76	1.63	1.71	1.49	1.54	1.62	1.54	1.44	1.16	1.61	1.57	2.01	1.78
24	IDACORP, Inc.	1.52	1.57	1.75	1.91	1.88	1.84	2.10	1.96	1.94	1.76	1.54	1.45	1.33	1.19	1.17	1.13	0.92	1.09	1.26	1.37	1.22
25	MGE Energy	2.15	2.17	2.35	2.47	N/A	2.54	2.88	2.59	2.88	2.60	2.10	2.10	2.06	1.92	1.75	1.65	1.54	1.62	1.75	1.83	2.09
26	NextEra Energy, Inc.	2.39	2.48	2.89	4.07	4.27	3.58	2.75	2.32	2.35	2.30	2.09	2.15	1.93	1.74	1.55	1.49	1.70	2.06	2.34	1.80	1.93
27	NorthWestern Corp	1.42	1.06	1.18	1.25	1.43	1.45	1.74	1.48	1.64	1.68	1.60	1.54	1.56	1.42	1.35	1.22	1.07	1.15	1.48	1.65	1.42
28	OGE Energy	1.81	1.50	1.62	1.74	1.67	1.86	2.06	1.75	1.82	1.73	1.79	2.22	2.24	1.94	1.90	1.70	1.37	1.52	1.98	1.91	1.80
29	Otter Tail Corp.	1.98	2.88	2.55	2.30	2.33	2.04	2.62	2.49	2.33	1.90	1.78	1.90	1.96	1.58	1.35	1.19	1.18	1.71	1.93	1.76	1.74
30	Pinnacle West Capital	1.41	1.17	1.42	1.31	1.45	1.63	1.91	1.74	1.91	1.72	1.52	1.44	1.47	1.39	1.25	1.14	0.95	1.00	1.26	1.26	1.25
31	PNM Resources	1.37	1.36	1.75	1.81	1.86	1.87	2.28	1.83	1.84	1.56	1.33	1.21	1.09	0.98	0.80	0.69	0.56	0.66	1.23	1.21	1.45
32	Portland General	1.36	1.23	1.37	1.58	1.55	1.57	1.84	1.56	1.69	1.56	1.42	1.37	1.28	1.14	1.09	0.94	0.92	1.05	1.32	1.36	N/A
33	PPL Corp.	1.96	1.34	1.43	1.44	1.52	1.63	1.86	1.81	2.40	2.46	2.24	1.64	1.55	1.58	1.47	1.61	2.10	3.19	3.05	2.43	2.50
34	Public Serv. Enterprise	1.93	1.94	1.92	2.32	2.11	1.70	1.97	1.81	1.68	1.67	1.58	1.57	1.44	1.46	1.59	1.67	1.78	2.58	2.99	2.46	2.45
35	SCANA Corp.	1.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.65	1.74	1.47	1.48	1.48	1.48	1.36	1.33	1.20	1.45	1.62	1.64	1.72
36	Sempra Energy	1.78	1.55	1.65	1.84	1.64	1.84	2.22	2.06	2.24	2.00	2.17	2.20	1.84	1.53	1.28	1.35	1.32	1.60	1.87	1.70	1.73
37	Southern Co.	2.13	2.35	2.34	2.53	2.39	2.20	2.13	1.89	2.07	2.01	1.99	2.02	2.04	2.15	1.99	1.83	1.73	2.12	2.24	2.23	2.35
38	Vectren Corp.	1.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.75	2.29	2.11	2.08	1.82	1.57	1.53	1.41	1.34	1.64	1.74	1.77	1.82
39	WEC Energy Group	2.07	2.14	2.35	2.57	2.61	2.84	2.62	2.11	2.10	2.09	1.82	2.34	2.21	2.05	1.81	1.65	1.40	1.57	1.77	1.71	1.62
40	Westar Energy	1.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.94	1.95	1.49	1.44	1.33	1.26	1.20	1.10	0.93	1.10	1.36	1.30	1.41
41	Xcel Energy Inc.	1.73	1.67	2.00	2.22	2.27	2.46	2.34	1.97	2.06	1.88	1.66	1.55	1.50	1.51	1.41	1.32	1.19	1.30	1.53	1.40	1.38
42	Average	1.73	1.58	1.72	1.96	1.92	1.96	2.10	1.89	2.01	1.86	1.67	1.69	1.60	1.52	1.43	1.35	1.25	1.63	1.90	1.78	1.80
43	Median	1.69	1.52	1.69	1.89	1.75	1.84	2.06	1.86	1.92	1.75	1.57	1.54	1.50	1.47	1.36	1.31	1.15	1.48	1.69	1.71	1.73

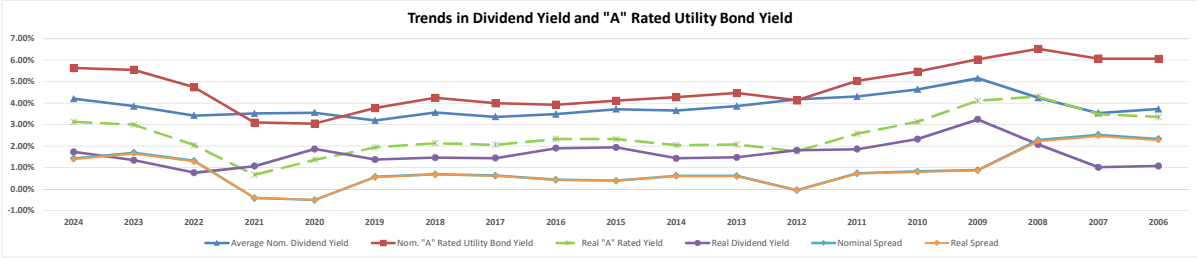
Sources:
The current year P/E ratio is based on the forward P/E (price over expected earnings per share). All historical year P/E ratios are based on annual average share price over achieved earnings per share.
[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.
Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.
[2] The Value Line Investment Survey, April 19, May 10, and June 7, 2024.

Notes:
[b] Based on the average of the high and low price and the projected Book Value per share.

Liberty Utilities (Missouri Water) LLC

Electric Utilities
(Valuation Metrics)

Line	Company	Dividend Yield[1] 19-Year Average (1)	2024 [2][a] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)
1	ALLETE	4.05%	4.63%	4.67%	4.47%	3.88%	4.03%	2.85%	2.99%	2.97%	3.56%	3.97%	3.92%	3.89%	4.49%	4.58%	5.03%	5.79%	4.37%	3.60%	3.16%
2	Alliant Energy	3.62%	3.87%	3.57%	3.04%	2.97%	2.90%	2.88%	3.20%	3.07%	3.21%	3.60%	3.53%	3.74%	4.07%	4.28%	4.61%	5.73%	4.10%	3.13%	3.32%
3	Ameren Corp.	4.09%	3.75%	3.13%	2.74%	2.74%	2.57%	2.59%	3.04%	3.12%	3.50%	3.96%	4.02%	4.61%	4.97%	5.28%	5.76%	5.98%	6.21%	4.88%	4.93%
4	American Electric Power	3.98%	4.27%	4.02%	3.41%	3.61%	3.28%	3.10%	3.60%	3.42%	3.54%	3.80%	3.83%	4.23%	4.58%	4.96%	4.90%	5.50%	4.20%	3.40%	4.06%
5	Avangrid, Inc.	4.04%	5.25%	4.87%	3.94%	3.53%	3.69%	3.52%	3.49%	3.79%	4.26%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Avista Corp.	3.95%	5.61%	4.85%	4.26%	3.94%	4.03%	3.48%	2.93%	3.14%	3.39%	3.97%	3.99%	4.51%	4.55%	4.54%	4.76%	4.49%	3.39%	2.68%	2.52%
7	Black Hills	3.79%	4.93%	4.15%	3.44%	3.50%	3.42%	2.74%	3.31%	2.75%	2.87%	3.55%	2.84%	3.19%	4.39%	4.64%	4.79%	6.17%	4.21%	3.40%	3.79%
8	CenterPoint Energy	4.08%	2.90%	2.71%	2.46%	2.77%	4.38%	2.98%	4.09%	4.79%	4.70%	5.06%	3.94%	3.57%	4.04%	4.27%	5.29%	6.37%	4.98%	3.87%	4.39%
9	CMS Energy Corp.	3.21%	3.50%	3.37%	2.92%	2.92%	2.65%	2.64%	3.03%	2.88%	2.99%	3.36%	3.59%	3.76%	4.16%	4.25%	3.98%	3.97%	2.69%	1.16%	N/A
10	Consol. Edison	4.25%	3.67%	3.57%	3.51%	4.10%	3.87%	3.44%	3.68%	3.40%	3.62%	4.12%	4.38%	4.25%	4.07%	4.46%	5.16%	5.99%	5.67%	4.84%	5.04%
11	Dominion Resources	4.14%	5.63%	5.18%	3.66%	3.38%	4.31%	4.76%	4.72%	3.88%	3.82%	3.66%	3.43%	3.78%	4.06%	4.13%	4.41%	5.20%	3.77%	3.32%	3.60%
12	DTE Energy	3.97%	3.72%	3.67%	3.17%	3.06%	3.57%	3.07%	3.34%	3.15%	3.34%	3.53%	3.54%	3.84%	4.19%	4.68%	4.75%	6.29%	5.24%	4.36%	4.86%
13	Duke Energy	4.59%	4.36%	4.28%	3.98%	4.02%	4.35%	4.17%	4.54%	4.15%	4.26%	4.34%	4.26%	4.45%	4.68%	5.21%	5.71%	6.25%	5.16%	4.44%	N/A
14	Edison Int'l	3.43%	4.60%	4.47%	4.45%	4.39%	4.29%	3.73%	3.84%	2.87%	2.81%	2.83%	2.62%	2.85%	2.97%	3.37%	3.66%	3.95%	2.69%	2.21%	2.58%
15	El Paso Electric	2.74%	N/A	N/A	N/A	N/A	N/A	N/A	2.55%	2.49%	2.75%	3.13%	2.97%	2.99%	2.97%	2.11%	N/A	N/A	N/A	N/A	N/A
16	Entergy Corp.	4.05%	4.33%	4.36%	3.70%	3.84%	3.55%	3.52%	4.41%	4.49%	4.55%	4.59%	4.47%	5.07%	4.91%	4.85%	4.20%	3.97%	2.92%	2.39%	2.82%
17	Eversource Energy	3.35%	4.90%	3.89%	3.09%	2.85%	2.63%	2.81%	3.32%	3.14%	3.22%	3.34%	3.40%	3.48%	3.52%	3.23%	3.64%	4.16%	3.25%	2.60%	3.27%
18	Evergy, Inc.	4.17%	5.00%	4.42%	3.66%	3.59%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	3.77%	4.26%	3.67%	2.89%	3.17%	3.82%	3.06%	3.32%	3.51%	3.75%	3.88%	3.69%	4.69%	5.73%	4.96%	4.95%	4.26%	2.78%	2.48%	2.83%
20	FirstEnergy Corp.	4.32%	4.58%	4.24%	3.71%	4.39%	4.17%	3.50%	5.17%	4.62%	4.31%	4.23%	4.26%	4.26%	4.90%	5.23%	5.76%	5.09%	3.21%	3.12%	3.40%
21	Fortis Inc.	3.75%	4.42%	4.09%	3.82%	3.77%	3.66%	3.60%	4.07%	3.69%	3.80%	3.76%	3.88%	3.84%	3.64%	3.58%	3.80%	4.21%	3.76%	3.01%	2.79%
22	Great Plains Energy	4.52%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.58%	3.64%	3.76%	3.62%	3.84%	4.08%	4.15%	4.49%	5.03%	6.96%	5.49%	5.60%
23	Hawaiian Elec.	4.40%		4.09%	3.59%	3.44%	3.40%	3.02%	3.54%	3.65%	3.99%	4.05%	4.76%	4.72%	4.70%	5.04%	5.51%	6.89%	5.00%	5.18%	4.59%
24	IDACORP, Inc.	3.18%	3.59%	3.18%	2.86%	2.89%	2.92%	2.49%	2.61%	2.58%	2.77%	3.06%	3.12%	3.21%	3.28%	3.10%	3.44%	4.46%	3.95%	3.55%	3.39%
25	MGE Energy	2.97%	2.40%	2.25%	2.15%	N/A	2.10%	1.94%	2.16%	1.95%	2.23%	2.78%	2.78%	2.91%	3.25%	3.63%	3.98%	4.36%	4.24%	4.14%	4.25%
26	NextEra Energy, Inc.	2.93%	3.38%	2.80%	2.11%	1.90%	2.10%	2.41%	2.68%	2.79%	2.91%	3.01%	3.02%	3.30%	3.65%	3.96%	3.90%	N/A	N/A	N/A	N/A
27	NorthWestern Corp	4.20%	5.31%	4.78%	4.51%	4.00%	4.02%	3.28%	3.86%	3.52%	3.43%	3.61%	3.30%	3.66%	4.17%	4.51%	4.93%	5.75%	5.38%	4.09%	3.65%
28	OGE Energy	3.89%	4.87%	4.63%	4.30%	4.81%	4.68%	3.54%	3.98%	3.61%	3.87%	3.51%	2.63%	2.48%	2.94%	3.06%	3.68%	4.96%	4.52%	3.77%	3.99%
29	Otter Tail Corp.	3.75%	2.08%	2.33%	2.44%	2.81%	3.45%	2.74%	2.92%	3.12%	3.87%	4.33%	4.14%	4.11%	5.21%	5.57%	5.68%	5.38%	3.63%	3.46%	3.92%
30	Pinnacle West Capital	4.54%	5.06%	4.51%	4.90%	4.44%	3.97%	3.29%	3.55%	3.16%	3.46%	3.88%	4.09%	3.98%	5.32%	4.81%	5.43%	6.76%	6.17%	4.75%	4.67%
31	PNM Resources	3.21%	4.23%	3.27%	3.04%	2.09%	2.80%	2.45%	2.79%	2.53%	2.69%	2.90%	2.79%	2.99%	2.96%	3.19%	4.09%	4.76%	4.85%	3.36%	3.21%
32	Portland General	3.75%	4.72%	4.20%	3.63%	3.62%	3.47%	2.85%	3.27%	2.92%	3.06%	3.27%	3.34%	3.67%	4.11%	4.37%	5.20%	5.36%	4.28%	3.34%	2.54%
33	PPL Corp.	4.44%	3.86%	3.53%	3.23%	5.83%	5.84%	5.24%	5.61%	4.24%	4.25%	4.55%	4.45%	4.81%	5.07%	5.10%	5.12%	4.51%	3.10%	2.69%	3.41%
34	Public Serv. Enterprise	3.75%	3.82%	3.83%	3.37%	3.37%	3.64%	3.19%	3.49%	3.74%	3.78%	3.81%	3.92%	4.35%	4.55%	4.24%	4.30%	4.30%	3.26%	2.73%	3.47%
35	SCANA Corp.	4.37%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.03%	3.29%	3.90%	4.05%	4.15%	4.25%	4.78%	4.93%	5.67%	4.92%	4.29%	4.21%
36	Sempra Energy	3.02%	3.41%	3.27%	2.99%	3.39%	3.24%	2.88%	3.20%	2.92%	2.92%	2.71%	2.61%	3.03%	3.71%	3.65%	3.08%	3.23%	2.62%	2.08%	2.47%
37	Southern Co.	4.55%	4.07%	4.13%	3.82%	4.17%	4.36%	4.41%	5.27%	4.63%	4.42%	4.78%	4.69%	4.61%	4.29%	4.63%	5.13%	5.52%	4.58%	4.39%	4.52%
38	Vectren Corp.	4.38%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.79%	3.31%	3.60%	3.62%	4.15%	4.82%	5.06%	5.53%	5.85%	4.79%	4.53%	4.52%
39	WEC Energy Group	3.11%	4.12%	3.57%	3.08%	3.00%	2.68%	2.81%	3.38%	3.31%	3.35%	3.49%	3.40%	3.49%	3.24%	3.35%	2.97%	3.16%	2.41%	2.14%	2.18%
40	Westar Energy	4.37%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.00%	2.90%	3.73%	3.88%	4.27%	4.57%	4.84%	5.32%	6.27%	5.22%	4.16%	4.28%
41	Xcel Energy Inc.	3.70%	3.95%	3.28%	2.90%	2.81%	2.58%	2.75%	3.25%	3.10%	3.33%	3.69%	3.83%	3.86%	3.90%	4.20%	4.54%	5.14%	4.70%	4.05%	4.40%
42	**Average**	**3.85%**	**4.20%**	**3.86%**	**3.42%**	**3.52%**	**3.56%**	**3.19%**	**3.56%**	**3.36%**	**3.49%**	**3.72%**	**3.66%**	**3.86%**	**4.18%**	**4.30%**	**4.64%**	**5.16%**	**4.25%**	**3.54%**	**3.73%**
43	Median	3.69%	4.26%	3.95%	3.43%	3.50%	3.57%	3.06%	3.36%	3.16%	3.45%	3.73%	3.69%	3.84%	4.17%	4.46%	4.78%	5.20%	4.24%	3.46%	3.65%
44	20-Yr Treasury Yields[3]	3.32%	4.56%	4.25%	3.30%	1.98%	1.35%	2.40%	3.02%	2.65%	2.23%	2.55%	3.07%	3.12%	2.54%	3.62%	4.03%	4.11%	4.36%	4.91%	4.99%
45	20-Yr TIPS[3]	1.12%	2.09%	1.73%	0.64%	-0.43%	-0.30%	0.60%	0.94%	0.75%	0.66%	0.78%	0.87%	0.75%	0.21%	1.19%	1.73%	2.21%	2.19%	2.36%	2.31%
46	Implied Inflation[b]	2.17%	2.43%	2.48%	2.64%	2.42%	1.66%	1.79%	2.06%	1.89%	1.56%	1.75%	2.19%	2.35%	2.33%	2.40%	2.26%	1.85%	2.13%	2.49%	2.62%
47	**Real Dividend Yield[c]**	**1.64%**	**1.73%**	**1.34%**	**0.77%**	**1.07%**	**1.86%**	**1.37%**	**1.47%**	**1.44%**	**1.91%**	**1.94%**	**1.43%**	**1.48%**	**1.81%**	**1.86%**	**2.33%**	**3.24%**	**2.07%**	**1.02%**	**1.08%**
	A-Rated Utility																				
48	**Nominal "A" Rated Yield[4]**	**4.75%**	**5.63%**	**5.55%**	**4.74%**	**3.10%**	**3.05%**	**3.77%**	**4.25%**	**4.00%**	**3.93%**	**4.12%**	**4.28%**	**4.48%**	**4.13%**	**5.04%**	**5.46%**	**6.04%**	**6.53%**	**6.07%**	**6.07%**
49	**Real "A" Rated Yield**	**2.52%**	**3.13%**	**2.99%**	**2.05%**	**0.67%**	**1.37%**	**1.94%**	**2.14%**	**2.07%**	**2.34%**	**2.33%**	**2.04%**	**2.08%**	**1.76%**	**2.58%**	**3.13%**	**4.11%**	**4.31%**	**3.49%**	**3.36%**
	Baa-Rated Utility																				
50	**Nominal "Baa" Rated Yield**	**5.24%**	**5.86%**	**5.85%**	**5.05%**	**3.36%**	**3.44%**	**4.19%**	**4.67%**	**4.38%**	**4.67%**	**5.03%**	**4.80%**	**4.98%**	**4.83%**	**5.57%**	**5.96%**	**7.06%**	**7.25%**	**6.33%**	**6.32%**
51	**Real "Baa" Rated Yield**	**3.00%**	**3.35%**	**3.29%**	**2.35%**	**0.91%**	**1.74%**	**2.36%**	**2.55%**	**2.44%**	**3.07%**	**3.22%**	**2.55%**	**2.57%**	**2.44%**	**3.09%**	**3.62%**	**5.11%**	**5.01%**	**3.74%**	**3.60%**
	Spreads (A-Rated Utility Bond - Stock)																				
52	**Nominal Spread[d]**	**0.90%**	**1.43%**	**1.69%**	**1.32%**	**-0.41%**	**-0.50%**	**0.58%**	**0.69%**	**0.64%**	**0.44%**	**0.40%**	**0.62%**	**0.61%**	**-0.05%**	**0.74%**	**0.82%**	**0.88%**	**2.28%**	**2.53%**	**2.34%**
53	**Real Spread[e]**	**0.88%**	**1.39%**	**1.65%**	**1.28%**	**-0.40%**	**-0.49%**	**0.57%**	**0.68%**	**0.62%**	**0.43%**	**0.39%**	**0.61%**	**0.60%**	**-0.05%**	**0.72%**	**0.80%**	**0.87%**	**2.23%**	**2.47%**	**2.28%**
	Spreads (Baa-Rated Utility Bond - Stock)																				
54	**Nominal Spread[b]**	**1.39%**	**1.66%**	**1.99%**	**1.63%**	**-0.16%**	**-0.12%**	**1.00%**	**1.11%**	**1.01%**	**1.18%**	**1.31%**	**1.14%**	**1.12%**	**0.65%**	**1.26%**	**1.32%**	**1.90%**	**3.00%**	**2.79%**	**2.58%**
55	**Real Spread[c]**	**1.36%**	**1.62%**	**1.94%**	**1.58%**	**-0.16%**	**-0.12%**	**0.98%**	**1.09%**	**1.00%**	**1.16%**	**1.29%**	**1.12%**	**1.09%**	**0.63%**	**1.23%**	**1.29%**	**1.87%**	**2.93%**	**2.72%**	**2.52%**
	Spreads (Treasury Bond - Stock)																				
56	**Nominal[f]**	**-0.53%**	**0.36%**	**0.40%**	**-0.12%**	**-1.54%**	**-2.20%**	**-0.79%**	**-0.54%**	**-0.71%**	**-1.27%**	**-1.17%**	**-0.58%**	**-0.74%**	**-1.63%**	**-0.68%**	**-0.61%**	**-1.05%**	**0.11%**	**1.37%**	**1.26%**
57	**Real[g]**	**-0.52%**	**0.35%**	**0.39%**	**-0.12%**	**-1.50%**	**-2.17%**	**-0.77%**	**-0.53%**	**-0.70%**	**-1.25%**	**-1.15%**	**-0.57%**	**-0.73%**	**-1.60%**	**-0.67%**	**-0.60%**	**-1.03%**	**0.11%**	**1.33%**	**1.23%**



Sources:
[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.
Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.
[2] The Value Line Investment Survey, April 19, May 10, and June 7, 2024.
[3] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.
[4] www.moodys.com, Bond Yields and Key Indicators, through December 31, 2023.

Notes:
[a] Based on the average of the high and low price and the projected Dividends Declared per share, published in the Value Line Investment Survey.
[b] Line 47 = (1 + Line 45) / (1 + Line 46) - 1.
[c] Line 48 = (1 + Line 43) / (1 +Line 47) - 1.
[d] The spread being measured here is the nominal A-rated utility bond yield over the average nominal utility dividend yield; (Line 49 - Line 43).
[e] The spread being measured here is the real A-rated utility bond yield over the average real utility dividend yield; Line 50 - Line 48)
[f] The spread being measured here is the nominal 20-Year Treasury yield over the average nominal utility dividend yield; (Line 45 - Line 43).
[g] The spread being measured here is the real 20-Year TIPS yield over the average real utility dividend yield; Line 48 - Line 46)

Liberty Utilities (Missouri Water) LLC

Electric Utilities
(Valuation Metrics)

		Dividend per Share[1]																			
Line	Company	19-Year Average (1)	2024[2] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)
1	ALLETE	2.09	2.82	2.71	2.60	2.52	2.47	2.35	2.24	2.14	2.08	2.02	1.96	1.90	1.84	1.78	1.76	1.76	1.72	1.64	1.45
2	Alliant Energy	1.16	1.92	1.81	1.71	1.61	1.52	1.42	1.34	1.26	1.18	1.10	1.02	0.94	0.90	0.85	0.79	0.75	0.70	0.64	0.58
3	Ameren Corp.	1.99	2.68	2.52	2.36	2.20	2.00	1.92	1.85	1.78	1.72	1.66	1.61	1.60	1.60	1.56	1.54	1.54	2.54	2.54	2.54
4	American Electric Power	2.31	3.60	3.37	3.17	3.00	2.84	2.71	2.53	2.39	2.27	2.15	2.03	1.95	1.88	1.85	1.71	1.64	1.64	1.58	1.50
5	Avangrid, Inc.	1.75	1.76	1.76	1.76	1.76	1.76	1.76	1.74	1.73	1.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Avista Corp.	1.28	1.92	1.84	1.76	1.69	1.62	1.55	1.49	1.43	1.37	1.32	1.27	1.22	1.16	1.10	1.00	0.81	0.69	0.60	0.57
7	Black Hills	1.79	2.60	2.50	2.41	2.29	2.17	2.05	1.93	1.81	1.68	1.62	1.56	1.52	1.48	1.46	1.44	1.42	1.40	1.37	1.32
8	CenterPoint Energy	0.85	0.83	0.77	0.72	0.66	0.90	0.86	1.12	1.35	1.03	0.99	0.95	0.83	0.81	0.79	0.78	0.76	0.73	0.68	0.60
9	CMS Energy Corp.	1.20	2.08	1.95	1.84	1.74	1.63	1.53	1.43	1.33	1.24	1.16	1.08	1.02	0.96	0.84	0.66	0.50	0.36	0.20	N/A
10	Consol. Edison	2.70	3.32	3.24	3.16	3.10	3.06	2.96	2.86	2.76	2.68	2.60	2.52	2.46	2.42	2.40	2.38	2.36	2.34	2.32	2.30
11	Dominion Resources	2.43	2.67	2.67	2.67	2.52	3.45	3.67	3.34	3.04	2.80	2.59	2.40	2.25	2.11	1.97	1.83	1.75	1.58	1.46	1.38
12	DTE Energy	2.99	4.08	3.88	3.54	3.88	4.12	3.85	3.59	3.36	3.06	2.84	2.69	2.59	2.42	2.32	2.18	2.12	2.12	2.12	2.08
13	Duke Energy	3.37	4.14	4.06	3.98	3.90	3.82	3.75	3.64	3.49	3.36	3.24	3.15	3.09	3.03	2.97	2.91	2.82	2.70	2.58	N/A
14	Edison Int'l	1.92	3.14	2.99	2.84	2.69	2.58	2.48	2.43	2.23	1.98	1.73	1.48	1.37	1.31	1.29	1.27	1.25	1.23	1.18	1.10
15	El Paso Electric	1.11	N/A	N/A	N/A	N/A	N/A	N/A	1.42	1.32	1.23	1.17	1.11	1.05	0.97	0.66	N/A	N/A	N/A	N/A	N/A
16	Entergy Corp.	3.44	4.56	4.34	4.10	3.86	3.74	3.66	3.58	3.50	3.42	3.34	3.32	3.32	3.32	3.32	3.24	3.00	3.00	2.58	2.16
17	Eversource Energy	1.69	2.86	2.70	2.55	2.41	2.27	2.14	2.02	1.90	1.78	1.67	1.57	1.47	1.32	1.10	1.03	0.95	0.83	0.78	0.73
18	Evergy, Inc.	2.40	2.61	2.48	2.33	2.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	1.61	1.52	1.44	1.35	1.53	1.53	1.45	1.38	1.31	1.26	1.24	1.24	1.46	2.10	2.10	2.10	2.10	2.05	1.82	1.64
20	FirstEnergy Corp.	1.77	1.70	1.60	1.56	1.56	1.56	1.53	1.82	1.44	1.44	1.44	1.44	1.65	2.20	2.20	2.20	2.20	2.20	2.05	1.85
21	Fortis Inc.	1.51	2.38	2.29	2.17	2.08	1.97	1.86	1.75	1.65	1.55	1.43	1.30	1.25	1.21	1.17	1.12	1.04	1.00	0.82	0.67
22	Great Plains Energy	1.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.10	1.06	1.00	0.94	0.88	0.86	0.84	0.83	0.83	1.66	1.66	1.66
23	Hawaiian Elec.	1.25	N/A	1.08	1.40	1.36	1.32	1.28	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
24	IDACORP, Inc.	2.01	3.34	3.20	3.04	2.88	2.72	2.56	2.40	2.24	2.08	1.92	1.76	1.57	1.37	1.20	1.20	1.20	1.20	1.20	1.20
25	MGE Energy	1.21	1.73	1.67	1.59	N/A	1.45	1.38	1.32	1.26	1.21	1.16	1.11	1.07	1.04	1.01	0.99	0.97	0.96	0.94	0.93
26	NextEra Energy, Inc.	0.96	2.06	1.87	1.70	1.54	1.40	1.25	1.11	0.98	0.87	0.77	0.73	0.66	0.60	0.55	0.50	0.47	0.45	0.41	0.38
27	NorthWestern Corp	1.88	2.60	2.56	2.52	2.48	2.40	2.30	2.20	2.10	2.00	1.92	1.60	1.52	1.48	1.44	1.36	1.34	1.32	1.28	1.24
28	OGE Energy	1.13	1.69	1.66	1.64	1.63	1.58	1.51	1.40	1.27	1.16	1.05	0.95	0.85	0.80	0.76	0.73	0.71	0.70	0.68	0.67
29	Otter Tail Corp.	1.34	1.87	1.75	1.65	1.56	1.48	1.40	1.34	1.28	1.25	1.23	1.21	1.19	1.19	1.19	1.19	1.19	1.19	1.17	1.15
30	Pinnacle West Capital	2.65	3.55	3.49	3.42	3.36	3.23	3.04	2.87	2.70	2.56	2.44	2.33	2.23	2.67	2.10	2.10	2.10	2.10	2.10	2.03
31	PNM Resources	0.92	1.57	1.49	1.41	0.98	1.25	1.18	1.09	0.99	0.88	0.80	0.76	0.68	0.58	0.50	0.50	0.50	0.61	0.91	0.86
32	Portland General	1.30	1.98	1.88	1.79	1.70	1.59	1.52	1.43	1.34	1.26	1.18	1.12	1.10	1.08	1.06	1.04	1.01	0.97	0.93	0.68
33	PPL Corp.	1.38	1.03	0.95	0.88	1.66	1.66	1.65	1.64	1.58	1.52	1.50	1.49	1.47	1.44	1.40	1.40	1.38	1.34	1.22	1.10
34	Public Serv. Enterprise	1.66	2.40	2.28	2.16	2.04	1.96	1.88	1.80	1.72	1.64	1.56	1.48	1.44	1.42	1.37	1.37	1.33	1.29	1.17	1.14
35	SCANA Corp.	2.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.45	2.30	2.18	2.10	2.03	1.98	1.94	1.90	1.88	1.84	1.76	1.68
36	Sempra Energy	2.68	2.48	2.38	4.58	4.40	4.18	3.87	3.58	3.29	3.02	2.80	2.64	2.52	2.40	1.92	1.56	1.56	1.37	1.24	1.20
37	Southern Co.	2.17	2.86	2.78	2.70	2.62	2.54	2.46	2.38	2.30	2.22	2.15	2.08	2.01	1.94	1.87	1.80	1.73	1.66	1.60	1.54
38	Vectren Corp.	1.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.71	1.62	1.54	1.46	1.43	1.41	1.39	1.37	1.35	1.31	1.27	1.23
39	WEC Energy Group	1.75	3.34	3.12	2.91	2.71	2.53	2.36	2.21	2.08	1.98	1.74	1.56	1.45	1.20	1.04	0.80	0.68	0.54	0.50	0.46
40	Westar Energy	1.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.60	1.52	1.44	1.40	1.36	1.32	1.28	1.24	1.20	1.16	1.08	0.98
41	Xcel Energy Inc.	1.37	2.19	2.08	1.95	1.83	1.72	1.62	1.52	1.44	1.36	1.28	1.20	1.11	1.07	1.03	1.00	0.97	0.94	0.91	0.88
42	**Average**	**1.80**	**2.51**	**2.37**	**2.33**	**2.28**	**2.23**	**2.14**	**2.03**	**1.90**	**1.79**	**1.70**	**1.61**	**1.56**	**1.54**	**1.46**	**1.42**	**1.38**	**1.39**	**1.32**	**1.24**
43	**Industry Average Growth**	**4.01%**	**6.14%**	**1.48%**	**2.08%**	**2.47%**	**4.36%**	**5.29%**	**6.91%**	**5.99%**	**5.44%**	**5.35%**	**3.49%**	**1.01%**	**5.77%**	**2.46%**	**3.13%**	**-0.48%**	**4.89%**	**6.45%**	

Sources:

[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.
Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.

[2] The Value Line Investment Survey, April 19, May 10, and June 7, 2024.

Liberty Utilities (Missouri Water) LLC

Electric Utilities
(Valuation Metrics)

		Earnings per Share[1]																			
Line	Company	19-Year Average (1)	2024[2] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)
1	ALLETE	3.05	3.75	4.30	3.38	3.23	3.35	3.33	3.38	3.13	3.14	3.38	2.90	2.63	2.58	2.65	2.19	1.89	2.82	3.08	2.77
2	Alliant Energy	1.88	3.05	2.78	2.73	2.63	2.47	2.33	2.19	1.99	1.65	1.69	1.74	1.65	1.53	1.38	1.38	0.95	1.27	1.35	1.03
3	Ameren Corp.	3.07	4.60	4.37	4.14	3.84	3.50	3.35	3.32	2.77	2.68	2.38	2.40	2.10	2.41	2.47	2.77	2.78	2.88	2.98	2.66
4	American Electric Power	3.77	5.60	5.24	5.09	4.96	4.42	4.08	3.90	3.62	4.23	3.59	3.34	3.18	2.98	3.13	2.60	2.97	2.99	2.86	2.86
5	Avangrid, Inc.	1.92	2.25	2.09	2.32	1.97	1.88	2.26	1.92	1.67	1.98	0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Avista Corp.	1.86	2.40	2.24	2.12	2.10	1.90	2.97	2.07	1.95	2.15	1.89	1.84	1.85	1.32	1.72	1.65	1.58	1.36	0.72	1.47
7	Black Hills	2.77	3.90	3.91	3.97	3.74	3.73	3.53	3.47	3.38	2.63	2.83	2.89	2.61	1.97	1.01	1.66	2.32	0.18	2.68	2.21
8	CenterPoint Energy	1.25	1.45	1.37	1.59	0.94	1.29	1.49	0.74	1.57	1.00	1.08	1.42	1.24	1.35	1.27	1.07	1.01	1.30	1.17	1.33
9	CMS Energy Corp.	1.91	3.30	3.01	2.84	2.58	2.64	2.39	2.32	2.17	1.98	1.89	1.74	1.66	1.53	1.45	1.33	0.93	1.23	0.64	0.64
10	Consol. Edison	3.98	5.30	5.04	4.55	4.74	3.94	4.08	4.55	4.10	3.94	4.05	3.62	3.93	3.86	3.57	3.47	3.14	3.36	3.48	2.95
11	Dominion Resources	2.86	2.80	1.99	4.11	3.19	1.82	2.19	3.25	3.53	3.44	3.20	3.05	3.09	2.75	2.76	2.89	2.64	3.04	2.13	2.40
12	DTE Energy	4.68	6.70	6.76	5.52	4.10	7.08	6.31	6.17	5.73	4.83	4.44	5.10	3.76	3.88	3.67	3.74	3.24	2.73	2.66	2.45
13	Duke Energy	4.19	6.00	5.56	5.27	4.93	3.92	5.07	4.13	4.22	3.71	4.10	4.13	3.98	3.71	4.14	4.02	3.39	3.03	3.60	2.73
14	Edison Int'l	3.32	4.95	4.76	1.60	2.00	1.72	3.98	-1.26	4.51	3.94	4.15	4.33	3.78	4.55	3.23	3.35	3.24	3.68	3.32	3.28
15	El Paso Electric	2.02	N/A	N/A	N/A	N/A	N/A	N/A	2.07	2.42	2.39	2.03	2.27	2.20	2.26	2.48	2.07	1.50	1.73	1.63	1.27
16	Entergy Corp.	6.32	5.30	11.10	5.37	6.87	6.90	6.30	5.88	5.19	6.88	5.81	5.77	4.96	6.02	7.55	6.66	6.30	6.20	5.60	5.36
17	Eversource Energy	2.80	4.60	4.34	4.09	3.54	3.55	3.45	3.25	3.11	2.96	2.76	2.58	2.49	1.89	2.22	2.10	1.91	1.86	1.59	0.82
18	Evergy, Inc.	3.47	3.60	3.17	3.26	3.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	2.82	2.45	2.38	2.26	1.74	2.60	3.01	2.07	2.78	1.80	2.54	2.10	2.31	1.92	3.75	3.87	4.29	4.10	4.03	3.50
20	FirstEnergy Corp.	2.58	2.70	2.56	2.41	2.69	1.85	1.84	1.33	2.73	2.10	2.00	0.85	2.97	2.13	1.88	3.25	3.32	4.38	4.22	3.82
21	Fortis Inc.	2.10	3.20	3.10	2.78	2.61	2.60	2.68	2.52	2.66	1.89	2.11	1.38	1.63	1.65	1.74	1.62	1.51	1.52	1.29	1.36
22	Great Plains Energy	1.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.06	1.61	1.37	1.57	1.62	1.35	1.25	1.53	1.03	1.16	1.85	1.62
23	Hawaiian Elec.	1.64	1.90	1.81	2.20	2.25	1.81	1.99	1.85	1.64	2.29	1.50	1.64	1.62	1.67	1.44	1.21	0.91	1.07	1.11	1.33
24	IDACORP, Inc.	3.82	5.40	5.14	5.11	4.85	4.69	4.61	4.49	4.21	3.94	3.87	3.85	3.64	3.37	3.36	2.95	2.64	2.18	1.86	2.35
25	MGE Energy	2.21	3.70	3.25	3.07	N/A	2.60	2.51	2.43	2.20	2.18	2.06	2.32	2.16	1.86	1.76	1.67	1.47	1.59	1.51	1.37
26	NextEra Energy, Inc.	1.65	3.40	3.17	2.90	1.81	2.10	1.94	1.67	1.63	1.45	1.52	1.40	1.21	1.14	1.21	1.19	0.99	1.02	0.82	0.81
27	NorthWestern Corp	2.74	3.50	3.22	3.29	3.60	3.06	3.53	3.40	3.34	3.39	2.90	2.99	2.46	2.26	2.53	2.14	2.02	1.77	1.44	1.31
28	OGE Energy	1.82	2.10	2.07	2.25	2.36	2.08	2.24	2.12	1.92	1.69	1.69	1.98	1.94	1.79	1.73	1.50	1.33	1.25	1.32	1.23
29	Otter Tail Corp.	2.42	6.35	7.00	6.78	4.23	2.34	2.17	2.06	1.86	1.60	1.56	1.55	1.37	1.05	0.45	0.38	0.71	1.09	1.78	1.69
30	Pinnacle West Capital	3.82	4.70	4.41	4.26	5.47	4.87	4.77	4.54	4.43	3.95	3.92	3.58	3.66	3.50	2.99	3.08	2.26	2.12	2.96	3.17
31	PNM Resources	1.64	2.70	2.82	2.69	2.27	2.15	2.28	1.66	1.92	1.65	1.64	1.45	1.41	1.31	1.08	0.87	0.58	0.11	0.76	1.72
32	Portland General	2.08	3.05	2.38	2.74	2.72	1.72	2.39	2.37	2.29	2.16	2.04	2.18	1.77	1.87	1.95	1.66	1.31	1.39	2.33	1.14
33	PPL Corp.	2.12	1.70	1.60	1.41	0.53	2.04	2.37	2.58	2.11	2.79	2.37	2.38	2.38	2.61	2.61	2.29	1.19	2.45	2.63	2.29
34	Public Serv. Enterprise	2.99	3.65	3.48	3.47	2.55	3.61	3.90	2.76	2.82	2.83	3.30	2.99	2.45	2.44	3.11	3.07	3.08	2.90	2.59	1.85
35	SCANA Corp.	3.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.20	4.16	3.81	3.79	3.39	3.15	2.97	2.98	2.85	2.95	2.74	2.59
36	Sempra Energy	4.96	4.80	4.61	9.21	4.01	6.58	5.97	5.48	4.63	4.24	5.23	4.63	4.22	4.35	4.47	4.02	4.78	4.43	4.26	4.23
37	Southern Co.	2.89	4.00	3.64	3.61	3.42	3.25	3.17	3.00	3.21	2.83	2.84	2.77	2.70	2.67	2.55	2.36	2.32	2.25	2.28	2.10
38	Vectren Corp.	1.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.60	2.55	2.39	2.02	1.66	1.94	1.73	1.64	1.79	1.63	1.83	1.44
39	WEC Energy Group	2.88	4.90	4.63	4.46	4.11	3.79	3.58	3.34	3.14	2.96	2.34	2.59	2.51	2.35	2.18	1.92	1.60	1.52	1.42	1.32
40	Westar Energy	1.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.27	2.43	2.09	2.35	2.27	2.15	1.79	1.80	1.28	1.31	1.84	1.88
41	Xcel Energy Inc.	2.22	3.55	3.35	3.17	2.96	2.79	2.64	2.47	2.30	2.21	2.10	2.03	1.91	1.85	1.72	1.56	1.49	1.46	1.35	1.35
42	**Average**	**2.80**	**3.81**	**3.80**	**3.61**	**3.24**	**3.16**	**3.28**	**2.87**	**2.90**	**2.81**	**2.68**	**2.65**	**2.52**	**2.44**	**2.43**	**2.35**	**2.17**	**2.19**	**2.25**	**2.09**
43	**Industry Average Growth**	**3.48%**	**0.48%**	**5.10%**	**11.50%**	**2.47%**	**-3.54%**	**14.00%**	**-0.78%**	**3.26%**	**4.58%**	**1.09%**	**5.23%**	**3.58%**	**0.03%**	**3.76%**	**8.23%**	**-0.89%**	**-2.75%**	**7.36%**	

Sources:
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[2] The Value Line Investment Survey, April 19, May 10, and June 7, 2024.

Liberty Utilities (Missouri Water) LLC

Electric Utilities
(Valuation Metrics)

Line	Company	Cash Flow / Capital Spending[1] 2020 (1)	2021 (2)	2022 (3)	2023 (4)	2024 (5)	2025[2] (6)	3 - 5 yr[2] Projection (7)
1	ALLETE	0.74x	0.80x	2.26x	1.42x	2.21x	1.42x	1.33x
2	Alliant Energy	0.82x	0.97x	0.94x	0.95x	0.97x	1.04x	1.20x
3	Ameren Corp.	0.51x	0.59x	0.72x	0.74x	0.84x	0.87x	0.95x
4	American Electric Power	0.74x	0.69x	0.73x	0.72x	0.82x	0.88x	1.09x
5	Avangrid, Inc.	0.56x	0.62x	0.61x	0.57x	0.71x	0.74x	0.78x
6	Avista Corp.	0.85x	0.87x	0.83x	0.78x	0.84x	0.86x	0.87x
7	Black Hills	0.72x	0.76x	0.85x	0.82x	0.68x	0.75x	0.86x
8	CenterPoint Energy	0.88x	0.62x	0.62x	0.57x	0.55x	0.67x	0.69x
9	CMS Energy Corp.	0.82x	0.77x	0.78x	0.92x	0.80x	0.88x	0.95x
10	Consol. Edison	0.82x	0.89x	0.83x	0.72x	0.84x	0.88x	0.94x
11	Dominion Resources	1.00x	0.89x	0.74x	0.63x	0.51x	0.58x	0.88x
12	DTE Energy	0.67x	0.70x	0.75x	0.82x	0.87x	0.90x	0.96x
13	Duke Energy	0.86x	0.93x	0.81x	0.79x	0.77x	0.78x	0.90x
14	Edison Int'l	0.67x	0.74x	0.67x	0.75x	0.82x	0.84x	0.88x
15	El Paso Electric	1.00x	0.83x	N/A	N/A	N/A	N/A	N/A
16	Entergy Corp.	0.81x	1.05x	0.98x	0.85x	0.81x	0.82x	1.08x
17	Eversource Energy	0.95x	0.74x	0.72x	0.86x	0.76x	0.79x	0.80x
18	Evergy, Inc.	1.06x	0.96x	0.94x	0.86x	0.86x	0.91x	0.97x
19	Exelon Corp.	1.30x	1.32x	0.96x	0.99x	0.80x	0.84x	0.94x
20	FirstEnergy Corp.	0.96x	0.91x	0.86x	0.80x	0.82x	0.84x	0.95x
21	Fortis Inc.	0.60x	0.74x	0.75x	0.82x	0.85x	0.88x	0.97x
22	Hawaiian Elec.	1.10x	1.42x	1.30x	1.51x	1.20x	1.00x	1.09x
23	IDACORP, Inc.	1.25x	1.16x	0.83x	0.63x	0.56x	0.72x	0.95x
24	MGE Energy	0.73x	0.87x	N/A	1.26x	1.10x	1.18x	1.18x
25	NextEra Energy, Inc.	0.58x	0.69x	0.54x	0.59x	0.59x	0.61x	0.65x
26	NorthWestern Corp	0.98x	0.82x	0.66x	0.75x	0.87x	0.91x	1.04x
27	OGE Energy	1.43x	1.13x	0.99x	0.97x	0.99x	1.06x	1.23x
28	Otter Tail Corp.	0.45x	1.42x	1.45x	1.08x	1.46x	1.18x	1.09x
29	Pinnacle West Capital	0.98x	0.85x	0.78x	0.95x	0.74x	0.78x	0.89x
30	PNM Resources	0.59x	0.51x	0.63x	0.63x	0.53x	0.52x	0.64x
31	Portland General	0.75x	0.97x	1.01x	0.58x	0.62x	0.73x	0.93x
32	PPL Corp.	1.06x	1.12x	1.35x	0.98x	0.97x	0.99x	1.03x
33	Public Serv. Enterprise	1.00x	1.05x	0.82x	0.87x	0.90x	0.95x	0.90x
34	Sempra Energy	0.92x	0.78x	0.92x	0.96x	0.63x	0.64x	0.68x
35	Southern Co.	1.01x	0.93x	0.97x	0.97x	0.90x	0.95x	1.09x
36	WEC Energy Group	0.70x	0.75x	0.87x	0.92x	1.01x	1.09x	1.29x
37	Xcel Energy Inc.	0.99x	0.86x	0.80x	0.92x	0.65x	0.56x	0.97x
38	Average	0.86x	0.88x	0.89x	0.86x	0.86x	0.86x	0.96x
39	Median	0.85x	0.86x	0.83x	0.84x	0.82x	0.87x	0.95x

Source:
[1] Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.
[2] The Value Line Investment Survey, April 19, May 10, and June 7, 2024.
Notes:
Based on the projected Cash Flow per share and Capital Spending per share.

Liberty Utilities (Missouri Water) LLC

Electric Utilities
(Valuation Metrics)

Percent Dividends to Book Value[1]

Line	Company	18-Year Average (1)	2024 [2/a] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)
1	ALLETE	5.88%	5.50%	5.56%	5.52%	5.56%	5.61%	5.44%	5.35%	5.29%	5.45%	5.45%	5.59%	5.86%	6.04%	6.18%	6.46%	6.67%	6.78%	6.80%	6.62%
2	Alliant Energy	6.42%	6.94%	6.84%	6.84%	6.73%	6.68%	6.68%	6.90%	7.32%	6.96%	6.70%	6.56%	6.36%	6.37%	6.26%	6.06%	5.98%	5.48%	5.23%	5.04%
3	Ameren Corp.	6.04%	6.25%	6.26%	5.88%	5.84%	5.67%	5.87%	5.92%	6.01%	5.86%	5.78%	5.82%	5.93%	5.87%	4.76%	4.79%	4.66%	7.74%	7.84%	7.97%
4	American Electric Power	6.36%	6.54%	6.95%	6.80%	6.74%	6.86%	6.82%	6.56%	6.43%	6.42%	5.90%	5.91%	5.91%	5.99%	6.10%	6.04%	5.97%	6.23%	6.28%	6.32%
5	Avangrid, Inc.	3.18%	3.43%	3.46%	3.51%	3.57%	3.58%	3.57%	3.57%	3.54%	3.53%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Avista Corp.	5.11%	5.84%	5.78%	5.65%	5.61%	5.53%	5.37%	5.52%	5.41%	5.33%	5.38%	5.33%	5.65%	5.51%	5.42%	5.07%	4.23%	3.77%	3.44%	3.26%
7	Black Hills	5.33%	5.33%	5.30%	5.32%	5.32%	5.32%	5.34%	5.31%	5.67%	5.55%	5.66%	5.06%	5.17%	5.31%	5.30%	5.14%	5.10%	5.15%	5.34%	5.58%
8	CenterPoint Energy	9.09%	5.08%	5.03%	4.90%	4.82%	8.35%	6.59%	8.94%	12.39%	12.82%	12.30%	8.96%	8.23%	8.05%	7.97%	10.36%	11.28%	12.40%	12.12%	12.09%
9	CMS Energy Corp.	6.77%	7.95%	7.84%	7.89%	7.87%	8.57%	8.66%	8.52%	8.43%	8.14%	8.16%	8.10%	7.86%	7.94%	7.05%	5.90%	4.38%	3.31%	2.11%	0.00%
10	Consol. Edison	5.94%	5.23%	5.29%	5.42%	5.48%	5.56%	5.46%	5.49%	5.55%	5.72%	5.84%	5.87%	5.88%	5.97%	6.15%	6.27%	6.47%	6.60%	7.12%	7.40%
11	Dominion Resources	10.07%	8.61%	8.69%	8.54%	8.00%	11.72%	10.39%	11.31%	11.41%	12.04%	12.20%	12.16%	11.24%	11.50%	9.81%	8.86%	9.38%	9.14%	8.95%	7.46%
12	DTE Energy	6.32%	7.29%	7.25%	7.64%	8.64%	6.43%	6.34%	6.38%	6.34%	6.09%	5.81%	5.72%	5.79%	5.66%	5.60%	5.49%	5.59%	5.76%	5.91%	6.28%
13	Duke Energy	5.52%	6.25%	6.37%	6.47%	6.34%	6.39%	6.12%	6.04%	5.85%	5.73%	5.61%	5.45%	5.28%	5.22%	5.81%	5.72%	5.66%	5.45%	5.12%	0.00%
14	Edison Int'l	5.79%	8.26%	8.30%	9.24%	7.36%	6.96%	6.73%	7.56%	6.23%	5.39%	4.97%	4.41%	4.48%	4.54%	4.16%	3.90%	4.12%	4.19%	4.53%	4.65%
15	El Paso Electric	2.94%	N/A	N/A	N/A	N/A	5.13%	N/A	4.94%	4.67%	4.62%	4.63%	4.53%	4.46%	4.72%	3.47%	0.00%	0.00%	0.00%	0.00%	0.00%
16	Entergy Corp.	6.68%	6.45%	6.32%	6.68%	6.72%	6.85%	7.13%	7.65%	7.90%	7.58%	6.44%	5.95%	6.15%	6.42%	6.53%	6.82%	6.59%	7.13%	6.34%	5.34%
17	Eversource Energy	5.17%	6.75%	6.66%	5.74%	5.69%	5.54%	5.59%	5.57%	5.43%	5.27%	5.12%	4.99%	4.82%	4.49%	4.86%	4.75%	4.66%	4.26%	4.16%	4.00%
18	Evergy, Inc.	5.62%	5.92%	5.90%	5.57%	5.41%	5.32%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	6.96%	5.77%	5.59%	5.42%	4.36%	4.62%	4.38%	4.34%	4.23%	4.51%	4.42%	4.72%	5.49%	8.38%	9.68%	10.25%	10.96%	12.21%	11.87%	11.02%
20	FirstEnergy Corp.	8.80%	8.97%	8.81%	8.78%	10.26%	11.70%	11.86%	13.82%	16.34%	10.21%	4.91%	4.88%	5.44%	7.03%	6.93%	7.85%	7.84%	8.10%	6.96%	6.54%
21	Fortis Inc.	5.44%	5.75%	5.84%	5.95%	5.59%	5.39%	5.08%	5.03%	5.19%	4.80%	5.00%	5.22%	5.58%	5.81%	5.70%	5.91%	5.60%	5.55%	4.90%	5.47%
22	Great Plains Energy	5.31%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.78%	4.27%	4.21%	4.02%	3.91%	3.93%	3.84%	3.90%	4.03%	7.76%	9.13%	9.94%
23	Hawaiian Elec.	7.09%		5.07%	6.96%	6.22%	6.17%	6.12%	6.24%	6.43%	6.51%	6.91%	7.10%	7.27%	7.62%	7.77%	7.91%	7.96%	8.08%	8.11%	9.22%
24	IDACORP, Inc.	4.75%	5.63%	5.57%	5.48%	5.45%	5.36%	5.24%	5.11%	5.02%	4.87%	4.70%	4.53%	4.26%	3.91%	3.62%	3.87%	4.11%	4.32%	4.48%	4.66%
25	MGE Energy	6.06%	5.21%	5.30%	5.32%	N/A	5.22%	5.59%	5.60%	5.61%	5.79%	5.82%	5.84%	6.01%	6.22%	6.36%	6.56%	6.72%	6.87%	7.24%	7.77%
26	NextEra Energy, Inc.	6.79%	8.39%	8.08%	8.61%	8.13%	7.51%	6.61%	6.22%	6.55%	6.69%	6.29%	6.49%	6.36%	6.34%	6.12%	5.82%	5.99%	6.30%	6.22%	6.21%
27	NorthWestern Corp	5.81%	5.60%	5.63%	5.65%	5.73%	5.84%	5.69%	5.70%	5.76%	5.77%	5.78%	5.08%	5.71%	5.90%	6.08%	6.01%	6.13%	6.21%	6.06%	6.00%
28	OGE Energy	6.88%	7.32%	7.49%	7.47%	8.04%	8.71%	7.28%	6.96%	6.59%	6.70%	6.30%	5.84%	5.56%	5.70%	5.81%	6.24%	6.79%	6.89%	7.47%	7.61%
29	Otter Tail Corp.	6.98%	6.00%	5.95%	5.61%	6.54%	7.05%	7.19%	7.29%	7.27%	7.34%	7.70%	7.86%	8.07%	8.25%	7.52%	6.77%	6.33%	6.22%	6.67%	6.90%
30	Pinnacle West Capital	6.19%	5.93%	6.41%	6.40%	6.43%	6.47%	6.29%	6.16%	6.03%	5.93%	5.91%	5.89%	5.84%	7.38%	6.00%	6.20%	6.42%	6.15%	5.98%	5.87%
31	PNM Resources	4.12%	5.73%	5.72%	5.52%	3.88%	5.23%	5.59%	5.12%	4.67%	4.18%	3.85%	3.37%	3.26%	2.89%	2.55%	2.84%	2.65%	3.20%	4.13%	3.89%
32	Portland General	4.95%	5.82%	5.73%	5.75%	5.61%	5.45%	5.24%	5.09%	4.94%	4.78%	4.64%	4.56%	4.70%	4.70%	4.78%	4.90%	4.93%	4.48%	4.42%	3.45%
33	PPL Corp.	8.33%	5.19%	5.03%	4.66%	8.89%	9.55%	9.74%	10.13%	10.18%	10.44%	10.19%	7.28%	7.43%	8.00%	7.48%	8.24%	9.47%	9.89%	8.20%	8.27%
34	Public Serv. Enterprise	6.99%	7.41%	7.34%	7.82%	7.12%	6.18%	6.28%	6.31%	6.27%	6.31%	6.03%	6.14%	6.28%	6.66%	6.75%	7.20%	7.66%	8.40%	8.15%	8.54%
35	SCANA Corp.	6.44%	N/A	N/A	N/A		N/A	N/A	N/A	6.67%	5.74%	5.72%	6.01%	6.14%	6.29%	6.48%	6.54%	6.80%	7.12%	6.94%	6.89%
36	Sempra Energy	5.33%	5.29%	5.41%	5.49%	5.56%	5.96%	6.39%	6.59%	6.53%	5.83%	5.89%	5.74%	5.60%	5.66%	4.68%	4.16%	4.27%	4.18%	3.89%	4.19%
37	Southern Co.	9.56%	9.57%	9.65%	9.67%	9.96%	9.59%	9.42%	9.95%	9.59%	8.89%	9.53%	9.48%	9.39%	9.22%	9.22%	9.38%	9.55%	9.74%	9.83%	10.07%
38	Vectren Corp.	7.71%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.67%	7.60%	7.57%	7.51%	7.55%	7.57%	7.74%	7.78%	7.84%	7.85%	7.86%	7.97%
39	WEC Energy Group	6.54%	8.81%	8.38%	7.92%	7.83%	7.62%	7.36%	7.12%	6.94%	7.00%	6.35%	7.96%	7.71%	6.65%	6.05%	4.92%	4.42%	3.78%	3.77%	3.72%
40	Westar Energy	5.71%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.82%	5.66%	5.57%	5.60%	5.70%	5.77%	5.81%	5.84%	5.83%	5.75%	5.64%	5.56%
41	Xcel Energy Inc.	6.21%	6.58%	6.55%	6.43%	6.38%	6.34%	6.42%	6.39%	6.38%	6.26%	6.13%	5.94%	5.78%	5.88%	5.91%	5.97%	6.09%	6.13%	6.19%	6.16%
42	Average	6.35%	6.47%	6.43%	6.46%	6.50%	6.65%	6.57%	6.69%	6.73%	6.46%	6.13%	6.09%	6.11%	6.29%	6.11%	6.07%	6.13%	6.37%	6.29%	6.10%
43	Median	6.08%	6.00%	6.10%	5.92%	6.34%	6.18%	6.29%	6.23%	6.25%	5.85%	5.82%	5.84%	5.84%	5.99%	6.08%	6.01%	5.99%	6.22%	6.22%	6.21%

Sources:

[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.
Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.

[2] The Value Line Investment Survey, April 19, May 10, and June 7, 2024.

[a] Based on the projected 2023 Dividend Declared per share and Book Value per share,
published in The Value Line Investment Survey, April 19, May 10, and June 7, 2024.

Liberty Utilities (Missouri Water) LLC

Electric Utilities
(Valuation Metrics)

		Dividends to Earnings Ratio[1]																			
Line	Company	18-Year Average	2024 [2/a]	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1	ALLETE	0.69	0.75	0.63	0.77	0.78	0.74	0.71	0.66	0.68	0.66	0.60	0.68	0.72	0.71	0.67	0.80	0.93	0.61	0.53	0.52
2	Alliant Energy	0.61	0.63	0.65	0.63	0.61	0.62	0.61	0.61	0.63	0.72	0.65	0.59	0.57	0.59	0.62	0.57	0.79	0.55	0.47	0.56
3	Ameren Corp.	0.66	0.58	0.58	0.57	0.57	0.57	0.57	0.56	0.64	0.64	0.70	0.67	0.76	0.66	0.63	0.56	0.55	0.88	0.85	0.95
4	American Electric Power	0.61	0.64	0.64	0.62	0.60	0.64	0.66	0.65	0.66	0.54	0.60	0.61	0.61	0.63	0.59	0.66	0.55	0.55	0.55	0.52
5	Avangrid, Inc.	0.87	0.78	0.84	0.76	0.89	0.94	0.78	0.91	1.03	0.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Avista Corp.	0.69	0.80	0.82	0.83	0.80	0.85	0.52	0.72	0.73	0.64	0.70	0.69	0.66	0.88	0.64	0.61	0.51	0.51	0.83	0.39
7	Black Hills	1.04	0.67	0.64	0.61	0.61	0.58	0.58	0.56	0.54	0.64	0.57	0.54	0.58	0.75	1.45	0.87	0.61	7.78	0.51	0.60
8	CenterPoint Energy	0.71	0.57	0.56	0.45	0.70	0.70	0.58	1.51	0.86	1.03	0.92	0.67	0.67	0.60	0.62	0.73	0.75	0.56	0.58	0.45
9	CMS Energy Corp.	0.58	0.63	0.65	0.65	0.67	0.62	0.64	0.62	0.61	0.63	0.61	0.62	0.61	0.63	0.58	0.50	0.54	0.29	0.31	N/A
10	Consol. Edison	0.68	0.63	0.64	0.69	0.65	0.78	0.73	0.63	0.67	0.68	0.64	0.70	0.63	0.63	0.67	0.69	0.75	0.70	0.67	0.78
11	Dominion Resources	0.89	0.95	1.34	0.65	0.79	1.90	1.68	1.03	0.86	0.81	0.81	0.79	0.73	0.77	0.71	0.63	0.66	0.52	0.69	0.58
12	DTE Energy	0.66	0.61	0.57	0.64	0.95	0.58	0.61	0.58	0.59	0.63	0.64	0.53	0.69	0.62	0.63	0.58	0.65	0.78	0.80	0.85
13	Duke Energy	0.80	0.69	0.73	0.76	0.79	0.97	0.74	0.88	0.83	0.91	0.79	0.76	0.78	0.82	0.72	0.72	0.83	0.89	0.72	N/A
14	Edison Int'l	0.48	0.63	0.63	1.78	1.35	1.50	0.62	- 1.93	0.50	0.50	0.42	0.34	0.36	0.29	0.40	0.38	0.38	0.33	0.35	0.34
15	El Paso Electric	0.50	N/A	N/A	N/A	N/A	N/A	N/A	0.68	0.54	0.51	0.57	0.49	0.48	0.43	0.27	N/A	N/A	N/A	N/A	N/A
16	Entergy Corp.	0.56	0.86	0.39	0.76	0.56	0.54	0.58	0.61	0.67	0.50	0.57	0.58	0.67	0.55	0.44	0.49	0.48	0.48	0.46	0.40
17	Eversource Energy	0.60	0.62	0.62	0.62	0.68	0.64	0.62	0.62	0.61	0.60	0.61	0.61	0.59	0.70	0.50	0.49	0.50	0.44	0.49	0.88
18	Evergy, Inc.	0.70	0.73	0.78	0.71	0.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	0.60	0.62	0.61	0.60	0.88	0.59	0.48	0.67	0.47	0.70	0.49	0.59	0.63	1.09	0.56	0.54	0.49	0.50	0.45	0.47
20	FirstEnergy Corp.	0.77	0.63	0.63	0.65	0.58	0.84	0.83	1.37	0.53	0.69	0.72	1.69	0.56	1.03	1.17	0.68	0.66	0.50	0.49	0.48
21	Fortis Inc.	0.72	0.74	0.74	0.78	0.80	0.76	0.69	0.69	0.62	0.82	0.68	0.94	0.77	0.73	0.67	0.69	0.69	0.66	0.64	0.49
22	Great Plains Energy	- 0.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-18.33	0.66	0.73	0.60	0.54	0.63	0.67	0.54	0.81	1.43	0.90	1.02
23	Hawaiian Elec.	0.82		0.60	0.64	0.60	0.73	0.64	0.67	0.76	0.54	0.83	0.76	0.77	0.74	0.86	1.02	1.36	1.16	1.12	0.93
24	IDACORP, Inc.	0.52	0.62	0.62	0.59	0.59	0.58	0.56	0.53	0.53	0.53	0.50	0.46	0.43	0.41	0.36	0.41	0.45	0.55	0.65	0.51
25	MGE Energy	0.56	0.47	0.51	0.52	N/A	0.56	0.55	0.54	0.57	0.56	0.56	0.48	0.50	0.56	0.57	0.60	0.66	0.60	0.62	0.68
26	NextEra Energy, Inc.	0.56	0.61	0.59	0.59	0.85	0.67	0.64	0.66	0.60	0.60	0.51	0.52	0.55	0.53	0.45	0.42	0.47	0.44	0.50	0.47
27	NorthWestern Corp	0.70	0.74	0.80	0.77	0.69	0.78	0.65	0.65	0.63	0.59	0.66	0.54	0.62	0.65	0.57	0.64	0.66	0.75	0.89	0.95
28	OGE Energy	0.61	0.80	0.80	0.73	0.69	0.76	0.67	0.66	0.66	0.68	0.62	0.48	0.44	0.45	0.44	0.49	0.54	0.56	0.52	0.55
29	Otter Tail Corp.	0.95	0.29	0.25	0.24	0.37	0.63	0.65	0.65	0.69	0.78	0.79	0.78	0.87	1.13	2.64	3.13	1.68	1.09	0.66	0.68
30	Pinnacle West Capital	0.71	0.76	0.79	0.80	0.61	0.66	0.64	0.63	0.61	0.65	0.62	0.65	0.61	0.76	0.70	0.68	0.93	0.99	0.71	0.64
31	PNM Resources	0.84	0.58	0.53	0.52	0.43	0.58	0.52	0.65	0.52	0.53	0.49	0.52	0.48	0.44	0.46	0.57	0.86	5.50	1.20	0.50
32	Portland General	0.63	0.65	0.79	0.65	0.63	0.92	0.64	0.60	0.59	0.58	0.58	0.51	0.62	0.57	0.54	0.62	0.77	0.70	0.40	0.59
33	PPL Corp.	0.77	0.61	0.59	0.62	3.13	0.81	0.70	0.64	0.75	0.54	0.63	0.63	0.62	0.55	0.54	0.61	1.16	0.55	0.46	0.48
34	Public Serv. Enterprise	0.56	0.66	0.66	0.62	0.80	0.54	0.48	0.65	0.61	0.58	0.47	0.49	0.59	0.58	0.44	0.45	0.43	0.44	0.45	0.62
35	SCANA Corp.	0.61	N/A	N/A	N/A		N/A	N/A	N/A	0.58	0.55	0.57	0.55	0.60	0.63	0.65	0.64	0.66	0.62	0.64	0.65
36	Sempra Energy	0.54	0.52	0.52	0.50	1.10	0.64	0.65	0.65	0.71	0.71	0.54	0.57	0.60	0.55	0.43	0.39	0.33	0.31	0.29	0.28
37	Southern Co.	0.75	0.72	0.76	0.75	0.77	0.78	0.78	0.79	0.72	0.79	0.76	0.75	0.75	0.73	0.73	0.76	0.75	0.74	0.70	0.73
38	Vectren Corp.	0.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.66	0.64	0.64	0.72	0.86	0.72	0.80	0.84	0.75	0.80	0.69	0.85
39	WEC Energy Group	0.57	0.68	0.67	0.65	0.66	0.67	0.66	0.66	0.66	0.67	0.74	0.60	0.58	0.51	0.48	0.42	0.42	0.36	0.35	0.35
40	Westar Energy	0.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.70	0.63	0.69	0.60	0.60	0.61	0.72	0.69	0.94	0.89	0.59	0.52
41	Xcel Energy Inc.	0.62	0.62	0.62	0.62	0.62	0.62	0.61	0.62	0.63	0.62	0.61	0.59	0.58	0.58	0.60	0.64	0.65	0.64	0.67	0.65
42	Average	0.66	0.66	0.66	0.68	0.78	0.75	0.66	0.64	0.18	0.65	0.64	0.64	0.62	0.65	0.67	0.68	0.70	0.96	0.62	0.61
43	Median	0.63	0.63	0.63	0.64	0.68	0.67	0.64	0.65	0.63	0.64	0.62	0.60	0.61	0.63	0.62	0.62	0.66	0.61	0.60	0.57

Sources:
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Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.
[2] The Value Line Investment Survey, April 19, May 10, and June 7, 2024.
Note:
[b] Based on the projected 2023 Dividends Declared per share and Earnings per share,
published in The Value Line Investment Survey, April 19, May 10, and June 7, 2024.

Liberty Utilities (Missouri Water) LLC

Electric Utilities
(Valuation Metrics)

Line	Company	18-Year Average	2024 [2/a]	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
		Cash Flow to Capital Spending Ratio [1]																			
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1	ALLETE	0.95	1.39	1.76	2.12	0.55	0.55	0.63	1.22	1.61	1.32	1.16	0.45	0.67	0.49	0.77	0.63	0.39	0.46	0.65	1.23
2	Alliant Energy	0.81	0.97	0.74	0.91	0.95	N/A	N/A	N/A	0.49	N/A	0.81	0.91	1.01	0.57	0.91	0.67	0.39	0.57	1.04	1.27
3	Ameren Corp.	0.86	0.84	0.78	0.71	0.62	0.62	0.79	0.80	0.75	0.75	0.75	0.75	0.89	1.07	1.31	1.36	0.81	0.66	0.97	1.21
4	American Electric Power	0.86	0.82	0.79	0.81	0.81	0.81	0.75	0.68	0.67	0.85	0.85	0.87	0.91	1.07	1.19	1.24	1.02	0.70	0.77	0.75
5	Avangrid, Inc.	0.71	0.71	0.66	0.79	0.56	0.56	0.62	0.85	0.57	0.86	0.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Avista Corp.	0.89	0.84	0.88	0.73	0.88	0.88	0.92	0.78	0.77	0.84	0.76	0.80	0.86	0.80	0.90	0.99	1.15	0.97	0.73	1.36
7	Black Hills	0.68	0.68	0.95	0.86	0.61	0.61	0.53	0.87	1.17	0.71	0.64	0.70	0.74	0.71	0.40	0.41	0.61	0.35	0.76	0.55
8	CenterPoint Energy	0.95	0.55	0.53	0.52	0.73	0.73	0.83	0.98	1.22	1.12	0.92	1.20	1.18	1.37	1.12	0.88	0.99	1.16	0.98	1.08
9	CMS Energy Corp.	0.86	0.80	0.85	0.82	0.78	0.78	0.79	0.77	0.89	0.81	0.81	0.74	0.82	0.82	1.05	1.13	0.97	1.11	0.55	1.07
10	Consol. Edison	0.83	0.84	0.84	0.88	0.83	0.83	0.87	0.82	0.76	0.65	0.76	0.88	0.86	1.01	0.98	0.90	0.75	0.70	0.81	0.74
11	Dominion Resources	0.76	0.51	0.46	0.86	0.73	0.73	0.96	1.04	0.81	0.65	0.64	0.63	0.77	0.73	0.79	0.87	0.75	0.83	0.74	0.85
12	DTE Energy	0.97	0.87	0.85	0.86	0.74	0.74	0.83	0.84	0.94	0.93	0.84	1.02	0.96	0.93	1.09	1.51	1.50	0.98	1.07	1.03
13	Duke Energy	0.88	0.77	0.81	0.87	0.85	0.85	0.80	0.81	0.87	0.82	0.96	1.20	1.09	0.87	0.89	0.78	0.77	0.71	1.09	0.97
14	Edison Int'l	0.75	0.82	0.83	0.62	0.55	0.55	0.68	0.34	0.94	0.91	0.80	0.83	0.80	0.76	0.61	0.60	0.79	0.93	0.88	0.93
15	El Paso Electric	0.87	N/A	N/A	N/A	0.83	N/A	N/A	0.86	1.04	0.85	0.67	0.69	0.79	0.85	1.03	0.98	0.68	0.78	0.84	1.26
16	Entergy Corp.	0.95	0.81	1.03	0.62	0.74	0.74	0.79	0.73	0.76	1.08	1.05	1.19	1.03	0.88	1.15	1.24	1.02	0.93	1.14	1.13
17	Eversource Energy	0.83	0.76	0.54	0.89	0.80	0.80	0.75	0.83	0.79	0.87	0.91	0.90	1.13	0.86	0.80	1.05	0.96	0.77	0.68	0.67
18	Evergy, Inc.	0.89	0.86	0.90	0.78	1.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	1.18	0.80	0.82	0.84	1.09	1.09	1.20	1.05	1.06	0.76	0.82	0.93	1.07	0.98	1.19	1.66	1.66	1.61	1.84	1.86
20	FirstEnergy Corp.	0.99	0.82	0.82	0.98	0.83	0.83	0.80	0.76	1.03	0.94	0.93	0.54	0.91	0.85	1.05	1.32	1.22	0.95	1.56	1.75
21	Fortis Inc.	0.71	0.85	0.93	0.89	0.65	0.65	0.68	0.72	0.76	0.76	0.65	0.60	0.77	0.72	0.66	0.68	0.63	0.66	0.57	0.63
22	Great Plains Energy	0.79	N/A	N/A	N/A		N/A	N/A	N/A	0.78	1.17	0.90	0.79	0.91	0.86	1.03	0.86	0.50	0.35	0.69	0.64
23	Hawaiian Elec.	1.12	1.20	1.14	1.56	1.27	1.27	1.08	0.85	0.81	1.37	0.98	1.03	0.92	0.99	1.30	1.50	0.79	0.87	1.15	1.23
24	IDACORP, Inc.	1.07	0.56	0.75	1.00	1.33	1.33	1.46	1.42	1.33	1.16	1.15	1.21	1.34	1.24	0.86	0.78	0.96	0.82	0.64	0.89
25	MGE Energy	1.08	1.10	0.98	1.12	0.82	0.82	0.97	0.66	1.19	1.44	1.60	1.31	0.96	1.05	1.56	1.57	1.13	0.87	0.59	0.80
26	NextEra Energy, Inc.	0.61	0.59	0.50	0.55	0.58	0.58	0.67	0.56	0.53	0.63	0.71	0.77	0.68	0.39	0.58	0.69	0.60	0.63	0.56	0.73
27	NorthWestern Corp	1.00	0.87	0.72	0.75	0.84	0.84	1.13	1.23	1.21	1.13	1.01	0.93	0.92	0.88	1.04	0.76	0.88	1.27	1.23	1.29
28	OGE Energy	0.92	0.99	1.03	0.87	1.24	1.24	1.27	1.30	0.81	1.00	1.18	1.19	0.69	0.63	0.51	0.69	0.61	0.60	0.79	0.84
29	Otter Tail Corp.	1.00	1.46	1.98	2.13	0.48	0.48	0.80	1.49	1.10	0.84	0.74	0.70	0.67	0.85	1.16	1.09	0.56	0.37	0.65	1.44
30	Pinnacle West Capital	0.93	0.74	0.73	0.89	0.91	0.91	1.03	1.06	0.76	0.81	0.92	0.97	0.87	0.96	0.91	0.97	1.06	0.86	0.99	1.28
31	PNM Resources	0.69	0.53	0.55	0.63	0.72	0.72	0.78	0.82	0.84	0.57	0.57	0.63	0.80	0.87	0.77	0.82	0.70	0.44	0.43	0.89
32	Portland General	0.81	0.62	0.51	0.86	0.78	0.78	1.03	1.00	1.07	0.88	0.80	0.47	0.59	1.28	1.25	0.81	0.44	0.77	0.72	0.78
33	PPL Corp.	0.97	0.97	1.06	1.05	0.90	0.90	0.98	0.93	0.82	1.00	0.72	0.75	0.69	0.91	1.07	1.11	1.07	1.25	1.13	1.18
34	Public Serv. Enterprise	1.09	0.90	0.92	1.05	1.13	1.13	1.08	0.70	0.64	0.61	0.80	1.04	0.93	0.96	1.30	1.23	1.41	1.34	1.64	1.94
35	SCANA Corp.	0.86	N/A	N/A	N/A		N/A	N/A	N/A	0.86	0.66	0.83	0.90	0.83	0.77	0.88	0.86	0.76	0.76	0.92	1.26
36	Sempra Energy	0.79	0.63	0.61	0.92	0.77	0.77	0.88	0.80	0.67	0.56	0.81	0.74	0.84	0.73	0.72	0.90	1.02	0.87	0.90	0.93
37	Southern Co.	0.90	0.90	0.88	0.97	0.99	0.99	0.88	0.83	0.90	0.77	0.88	0.80	0.86	0.93	0.94	0.93	0.78	0.87	0.91	1.00
38	Vectren Corp.	1.00	N/A	N/A	N/A		N/A	N/A	N/A	0.82	0.87	0.95	0.98	1.05	1.13	1.20	1.31	0.83	0.82	0.98	1.00
39	WEC Energy Group	0.98	1.01	0.95	1.09	0.97	0.97	0.91	0.90	0.92	1.20	0.97	1.37	1.42	1.30	1.02	0.97	0.89	0.61	0.56	0.69
40	Westar Energy	0.72	N/A	N/A	N/A		N/A	N/A	N/A	0.91	0.63	0.86	0.70	0.72	0.67	0.71	0.88	0.68	0.36	0.48	1.00
41	Xcel Energy Inc.	0.75	0.65	0.75	0.93	0.66	0.66	0.78	0.77	0.84	0.79	0.63	0.68	0.60	0.76	0.83	0.76	0.89	0.75	0.71	0.90
42	Average	0.89	0.83	0.86	0.94	0.83	0.82	0.88	0.89	0.89	0.89	0.87	0.87	0.89	0.88	0.96	0.98	0.86	0.80	0.88	1.05
43	Median	0.83	0.82	0.83	0.87	0.81	0.79	0.83	0.83	0.84	0.85	0.83	0.83	0.86	0.87	0.98	0.90	0.81	0.78	0.81	1.00

Sources:
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[2] The Value Line Investment Survey, April 19, May 10, and June 7, 2024.
Notes:
[c] Based on the projected Cash Flow per share and Capital Spending per share
published in The Value Line Investment Survey, April 19, May 10, and June 7, 2024.

Liberty Utilities (Missouri Water) LLC

Natural Gas Utilities
(Valuation Metrics)

Price to Earnings (P/E) Ratio [1]

Line	Company	19-Year Average (1)	2024 [2] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)
1	Atmos Energy	17.38	16.80	16.80	19.30	18.80	22.30	23.20	21.70	22.00	20.80	17.50	16.10	15.90	15.90	14.40	13.20	12.50	13.60	15.90	13.52
2	Chesapeake Utilities	19.50	21.60	21.60	25.80	25.60	21.60	24.70	22.90	27.80	22.30	19.10	17.70	15.60	14.80	14.20	12.20	14.20	14.20	16.70	17.85
3	New Jersey Resources	17.02	14.90	14.90	17.00	17.50	17.70	24.30	15.60	22.40	21.30	16.60	11.70	16.00	16.80	16.80	15.00	14.90	12.30	21.60	16.13
4	NiSource Inc.	21.80	16.90	16.90	19.60	18.00	18.70	21.30	19.30	64.40	23.20	37.30	22.70	18.90	17.90	19.40	15.30	14.30	12.10	18.80	19.16
5	Northwest Nat. Gas	20.34	15.40	15.40	19.60	19.50	25.00	30.90	26.60	NMF	26.90	23.70	20.70	19.40	21.10	19.00	17.00	15.20	18.10	16.70	15.85
6	ONE Gas Inc.	20.43	16.00	16.00	19.90	18.90	21.70	25.30	23.10	23.50	22.70	19.80	17.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	Southwest Gas	18.13	23.00	23.00	NMF	14.30	16.80	21.30	20.60	22.20	21.60	19.40	17.90	15.80	15.00	15.70	14.00	12.20	20.30	17.30	15.94
8	Spire Inc.	18.13	14.50	14.50	17.50	13.60	51.10	22.80	16.70	19.80	19.60	16.50	19.80	21.30	14.50	13.00	13.70	13.40	14.30	14.20	13.60
9	UGI Corp.	14.94	8.40	8.40	14.10	13.90	13.80	23.40	17.80	20.80	19.30	17.70	15.80	15.40	16.40	15.00	10.90	10.30	13.30	15.10	13.97
10	Average	18.45	16.39	16.39	19.10	17.79	23.19	24.13	20.48	27.86	21.97	20.84	17.80	17.29	16.55	15.94	13.91	13.38	14.78	17.04	15.75
11	Median	16.70	16.00	16.00	19.45	18.00	21.60	23.40	20.60	22.30	21.60	19.10	17.80	15.95	16.15	15.35	13.85	13.80	13.90	16.70	15.89

Market Price to Cash Flow (MP/CF) Ratio [1]

Line	Company	19-Year Average (1)	2024 [2] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)
12	Atmos Energy	9.39	10.59	11.27	11.87	10.99	13.11	13.35	12.02	11.99	11.36	9.30	8.79	7.72	7.02	6.87	6.15	5.76	6.48	7.44	6.36
13	Chesapeake Utilities	10.83	12.98	15.77	14.21	14.20	12.31	14.17	12.24	13.78	12.06	10.16	9.25	8.12	7.46	7.35	6.36	9.48	7.88	8.58	9.40
14	New Jersey Resources	11.80	9.36	11.22	11.55	11.56	11.10	15.98	11.44	14.45	13.94	11.71	8.95	11.29	12.29	12.71	11.32	11.34	9.15	13.76	11.01
15	NiSource Inc.	7.81	7.11	7.13	8.13	7.89	7.83	8.81	8.91	12.11	8.56	10.38	10.56	8.71	7.81	6.81	5.09	4.06	4.87	6.69	6.87
16	Northwest Nat. Gas	11.86	6.43	7.56	8.76	8.57	10.10	13.13	11.75	59.72	11.57	9.46	8.84	8.61	9.48	9.08	8.94	8.26	8.75	8.54	7.83
17	ONE Gas Inc.	9.93	6.44	7.73	9.91	9.32	10.85	12.75	11.85	11.89	11.10	9.19	8.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	Southwest Gas	7.22	7.06	7.35	19.83	6.87	7.05	8.92	9.32	9.10	7.41	6.56	6.35	5.94	5.55	5.60	4.91	3.84	4.89	5.42	5.28
19	Spire Inc.	9.45	6.88	7.53	8.34	7.55	14.01	11.27	9.60	10.39	10.32	8.47	12.03	13.76	8.80	8.08	8.12	8.58	8.95	8.46	8.46
20	UGI Corp.	7.68	4.28	5.84	7.20	9.56	7.39	12.95	9.01	10.09	9.02	8.47	7.49	6.55	6.30	7.51	6.02	5.74	7.11	7.92	7.48
21	Average	9.45	7.90	9.04	11.09	9.61	10.42	12.37	10.68	17.06	10.59	9.30	8.94	8.84	8.09	8.00	7.11	7.13	7.26	8.35	7.84
22	Median	8.37	7.06	7.56	9.91	9.32	10.85	12.95	11.44	11.99	11.10	9.30	8.84	8.37	7.64	7.43	6.26	7.01	7.50	8.19	7.65

Market Price to Book Value (MP/BV) Ratio [1]

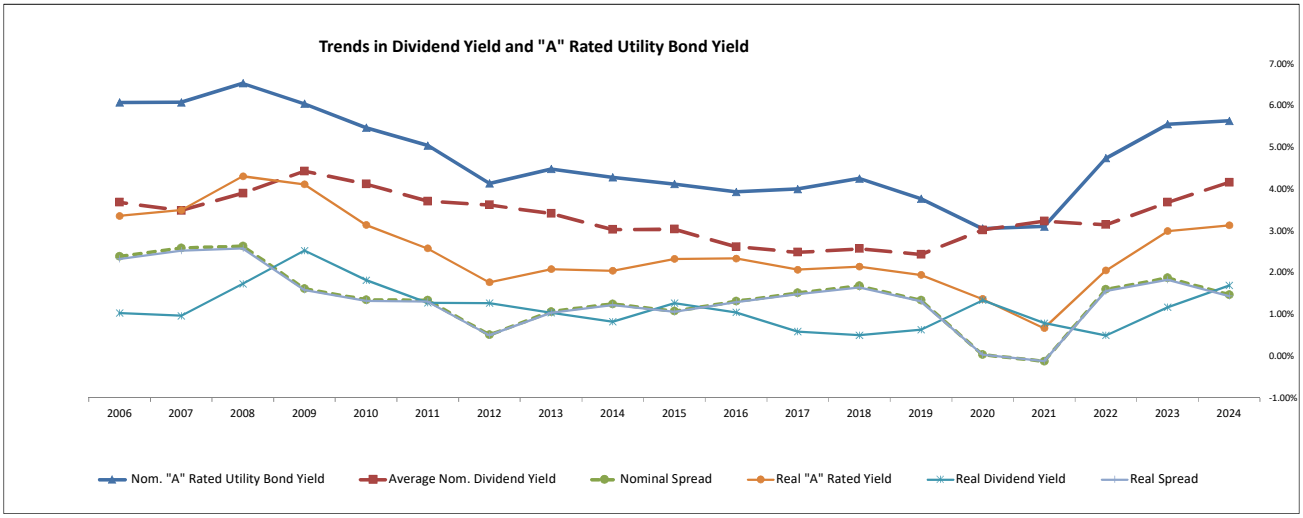
Line	Company	19-Year Average (1)	2024 [2] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)
23	Atmos Energy	1.58	1.54	1.55	1.65	1.59	1.95	2.10	2.03	2.16	2.11	1.72	1.55	1.39	1.28	1.30	1.18	1.05	1.20	1.40	1.34
24	Chesapeake Utilities	2.05	1.78	1.93	2.69	2.77	2.27	2.69	2.50	2.51	2.28	2.19	2.12	1.83	1.66	1.61	1.40	1.37	1.64	1.84	1.85
25	New Jersey Resources	2.25	1.91	2.32	2.35	2.26	1.90	2.75	2.63	2.70	2.52	2.28	2.13	2.05	2.33	2.31	2.09	2.16	1.92	2.17	2.01
26	NiSource Inc.	1.52	1.16	1.14	2.15	1.86	1.95	2.09	1.92	1.96	1.84	1.95	1.94	1.58	1.37	1.15	0.92	0.69	0.94	1.16	1.19
27	Northwest Nat. Gas	1.77	1.03	1.29	1.51	1.45	1.98	2.38	2.35	2.41	1.92	1.63	1.59	1.56	1.72	1.70	1.78	1.73	1.96	2.05	1.69
28	ONE Gas Inc.	1.63	1.24	1.43	1.73	1.57	1.90	2.20	1.93	1.89	1.67	1.26	1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29	Southwest Gas	1.52	1.25	1.28	1.62	1.32	1.49	1.84	1.79	2.13	1.96	1.68	1.68	1.61	1.51	1.43	1.24	0.97	1.20	1.46	1.46
30	Spire Inc.	1.52	1.15	1.29	1.43	1.47	1.67	1.78	1.63	1.65	1.64	1.44	1.33	1.34	1.51	1.46	1.39	1.68	1.71	1.66	1.71
31	UGI Corp.	1.93	1.13	1.59	1.39	1.64	1.87	2.92	2.30	2.62	2.41	2.29	1.97	1.69	1.45	1.75	1.55	1.66	2.01	2.16	2.21
32	Average	1.75	1.35	1.53	1.83	1.77	1.89	2.30	2.12	2.23	2.04	1.83	1.71	1.63	1.60	1.59	1.44	1.41	1.57	1.74	1.68
33	Median	1.67	1.24	1.43	1.65	1.59	1.90	2.20	2.03	2.16	1.96	1.72	1.68	1.59	1.51	1.54	1.40	1.51	1.67	1.75	1.70

Sources:
The current year P/E ratio is based on the forward P/E (price over expected earnings per share). All historical year P/E ratios are based on annual average share price over achieved earnings per share.
[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.
Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.
[2] The Value Line Investment Survey, May 24, 2024.
Notes:
[a] Based on the average of the high and low price for year and the projected Cash Flow per share, published in The Value Line Investment Survey.
[b] Based on the average of the high and low price for the year and the projected Book Value per share, published in The Value Line Investment Survey.

Liberty Utilities (Missouri Water) LLC

Natural Gas Utilities
(Valuation Metrics)

Line	Company	Dividend Yield[1] 18-Year Average (1)	2024 [2/a] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)
1	Atmos Energy	3.32%	2.78%	2.62%	2.46%	2.63%	2.19%	2.08%	2.23%	2.27%	2.39%	2.88%	3.11%	3.53%	4.13%	4.19%	4.70%	5.34%	4.78%	4.16%	4.66%
2	Chesapeake Utilities	2.63%	2.33%	2.08%	1.61%	1.50%	1.86%	1.68%	1.76%	1.69%	1.91%	2.18%	2.44%	2.87%	3.25%	3.36%	3.91%	4.09%	4.10%	3.62%	3.76%
3	New Jersey Resources	3.26%	3.94%	3.29%	3.25%	3.50%	3.47%	2.50%	2.61%	2.69%	2.86%	3.14%	3.50%	3.71%	3.38%	3.33%	3.69%	3.46%	3.35%	3.02%	3.19%
4	NiSource Inc.	3.95%	3.93%	3.85%	3.33%	3.60%	3.41%	2.86%	3.10%	2.79%	2.76%	3.53%	2.69%	3.30%	3.84%	4.53%	5.66%	7.64%	5.69%	4.29%	4.21%
5	Northwest Nat. Gas	3.70%	5.19%	4.40%	3.86%	3.90%	3.33%	2.81%	3.05%	3.02%	3.28%	4.01%	4.14%	4.22%	3.83%	3.85%	3.63%	3.73%	3.27%	3.12%	3.73%
6	ONE Gas Inc.	2.85%	4.25%	3.72%	3.08%	3.21%	2.70%	2.25%	2.46%	2.37%	2.32%	2.71%	2.28%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	Southwest Gas	3.03%	3.68%	4.07%	3.20%	3.65%	3.28%	2.60%	2.74%	2.46%	2.62%	2.87%	2.72%	2.69%	2.75%	2.78%	3.15%	4.01%	3.19%	2.56%	2.60%
8	Spire Inc.	3.88%	4.99%	4.44%	3.89%	3.79%	3.38%	2.95%	3.10%	3.09%	3.08%	3.53%	3.78%	3.96%	4.11%	4.31%	4.70%	3.91%	3.94%	4.43%	4.34%
9	UGI Corp.	3.17%	6.35%	4.64%	3.61%	3.25%	3.56%	2.16%	2.09%	2.01%	2.35%	2.50%	2.61%	3.01%	3.68%	3.30%	3.48%	3.23%	2.85%	2.69%	2.96%
10	**Average**	**3.36%**	**4.16%**	**3.68%**	**3.14%**	**3.23%**	**3.02%**	**2.43%**	**2.57%**	**2.49%**	**2.62%**	**3.04%**	**3.03%**	**3.41%**	**3.62%**	**3.71%**	**4.12%**	**4.43%**	**3.90%**	**3.48%**	**3.68%**
11	Median	3.42%	3.94%	3.85%	3.25%	3.50%	3.33%	2.50%	2.61%	2.46%	2.62%	2.88%	2.72%	3.42%	3.75%	3.60%	3.80%	3.96%	3.65%	3.37%	3.75%
12	20-Yr Treasury Yields[3]	3.32%	4.56%	4.25%	3.30%	1.98%	1.35%	2.40%	3.02%	2.65%	2.23%	2.55%	3.07%	3.12%	2.54%	3.62%	4.03%	4.11%	4.36%	4.91%	4.99%
13	20-Yr TIPS[3]	1.12%	2.09%	1.73%	0.64%	-0.43%	-0.30%	0.60%	0.94%	0.75%	0.66%	0.78%	0.87%	0.75%	0.21%	1.19%	1.73%	2.21%	2.19%	2.36%	2.31%
14	Implied Inflation[b]	2.17%	2.43%	2.48%	2.64%	2.42%	1.66%	1.79%	2.06%	1.89%	1.56%	1.75%	2.19%	2.35%	2.33%	2.40%	2.26%	1.85%	2.13%	2.49%	2.62%
15	**Real Dividend Yield[c]**	**1.16%**	**1.69%**	**1.17%**	**0.49%**	**0.79%**	**1.33%**	**0.63%**	**0.50%**	**0.58%**	**1.05%**	**1.27%**	**0.82%**	**1.04%**	**1.27%**	**1.27%**	**1.82%**	**2.53%**	**1.73%**	**0.97%**	**1.03%**
	Utility																				
16	**Nominal "A" Rated Yield[4]**	**4.75%**	**5.63%**	**5.55%**	**4.74%**	**3.10%**	**3.05%**	**3.77%**	**4.25%**	**4.00%**	**3.93%**	**4.12%**	**4.28%**	**4.48%**	**4.13%**	**5.04%**	**5.46%**	**6.04%**	**6.53%**	**6.07%**	**6.07%**
17	**Real "A" Rated Yield**	**2.52%**	**3.13%**	**2.99%**	**2.05%**	**0.67%**	**1.37%**	**1.94%**	**2.14%**	**2.07%**	**2.34%**	**2.33%**	**2.04%**	**2.08%**	**1.76%**	**2.58%**	**3.13%**	**4.11%**	**4.31%**	**3.49%**	**3.36%**
	Spreads (Utility Bond - Stock)																				
18	**Nominal[d]**	**1.39%**	**1.47%**	**1.87%**	**1.60%**	**-0.12%**	**0.03%**	**1.33%**	**1.68%**	**1.51%**	**1.31%**	**1.08%**	**1.25%**	**1.06%**	**0.51%**	**1.33%**	**1.35%**	**1.61%**	**2.63%**	**2.59%**	**2.39%**
19	**Real[e]**	**1.36%**	**1.44%**	**1.82%**	**1.56%**	**-0.12%**	**0.03%**	**1.31%**	**1.64%**	**1.48%**	**1.29%**	**1.06%**	**1.22%**	**1.04%**	**0.50%**	**1.30%**	**1.32%**	**1.58%**	**2.58%**	**2.53%**	**2.33%**
	Spreads (Treasury Bond - Stock)																				
20	**Nominal[f]**	**-0.04%**	**0.41%**	**0.57%**	**0.16%**	**-1.25%**	**-1.67%**	**-0.03%**	**0.45%**	**0.17%**	**-0.39%**	**-0.49%**	**0.05%**	**-0.29%**	**-1.08%**	**-0.09%**	**-0.09%**	**-0.32%**	**0.46%**	**1.42%**	**1.31%**
21	**Real[g]**	**-0.04%**	**0.40%**	**0.56%**	**0.15%**	**-1.22%**	**-1.64%**	**-0.03%**	**0.44%**	**0.16%**	**-0.39%**	**-0.48%**	**0.04%**	**-0.29%**	**-1.05%**	**-0.08%**	**-0.08%**	**-0.31%**	**0.46%**	**1.39%**	**1.28%**



Sources:
[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.
Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.
[2] The Value Line Investment Survey, May 24, 2024.
[3] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.
[4] www.moodys.com, Bond Yields and Key Indicators, through December 31, 2023.

Notes:
[a] Based on the average of the high and low price for the year and the projected Dividends Declared per share published in the Value Line Investment Survey.
[b] Line 16 = (1 + Line 14) / (1 + Line 15) - 1.
[c] Line 17 = (1 + Line 12) / (1 +Line 16) - 1.
[d] The spread being measured here is the nominal A-rated utility bond yield over the average nominal utility dividend yield; (Line 18 - Line 12).
[e] The spread being measured here is the real A-rated utility bond yield over the average real utility dividend yield; Line 19 - Line 17)
[f] The spread being measured here is the nominal 20-Year Treasury yield over the average nominal utility dividend yield; (Line 14 - Line 12).
[g] The spread being measured here is the real 20-Year TIPS yield over the average real utility dividend yield; Line 15 - Line 17)

Liberty Utilities (Missouri Water) LLC

Natural Gas Utilities
(Valuation Metrics)

		Dividend per Share[1]																					
Line	Company	19-Year Average (1)	2024 [2] (2)	2023 (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)	2018 CAGR (21)	2017 CAGR (22)
1	Atmos Energy	1.84	3.22	2.96	2.72	2.50	2.30	2.10	1.94	1.80	1.68	1.56	1.48	1.40	1.38	1.36	1.34	1.32	1.30	1.28	1.26	2.08%	2.15%
2	Chesapeake Utilities	1.30	2.46	2.25	2.03	1.84	1.69	1.55	1.39	1.26	1.19	1.12	1.07	1.01	0.96	0.91	0.87	0.83	0.81	0.78	0.77	2.89%	3.02%
3	New Jersey Resources	0.98	1.68	1.56	1.45	1.36	1.27	1.19	1.11	1.04	0.98	0.93	0.86	0.81	0.77	0.72	0.68	0.62	0.56	0.51	0.48	3.97%	4.59%
4	NiSource Inc.	0.89	1.06	1.00	0.94	0.88	0.84	0.80	0.78	0.70	0.64	0.83	1.02	0.98	0.94	0.92	0.92	0.92	0.92	0.92	0.92	-0.82%	-1.69%
5	Northwest Nat. Gas	1.78	1.95	1.94	1.93	1.92	1.91	1.90	1.89	1.88	1.87	1.86	1.85	1.83	1.79	1.75	1.68	1.60	1.52	1.44	1.39	1.36%	1.68%
6	ONE Gas Inc.	1.92	2.64	2.60	2.48	2.32	2.16	2.00	1.84	1.68	1.40	1.20	0.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.58%	4.30%
7	Southwest Gas	1.65	2.48	2.48	2.48	2.38	2.28	2.18	2.08	1.98	1.80	1.62	1.46	1.32	1.18	1.06	1.00	0.95	0.90	0.86	0.82	4.48%	5.35%
8	Spire Inc.	2.02	3.02	2.88	2.74	2.60	2.49	2.37	2.25	2.10	1.96	1.84	1.76	1.70	1.66	1.61	1.57	1.53	1.49	1.45	1.40	2.20%	2.34%
9	UGI Corp.	0.92	1.52	1.47	1.41	1.35	1.31	1.15	1.02	0.96	0.93	0.89	0.79	0.74	0.71	0.68	0.60	0.52	0.50	0.48	0.46	3.80%	4.41%
10	**Average**	**1.44**	**2.23**	**2.13**	**2.02**	**1.91**	**1.81**	**1.69**	**1.59**	**1.49**	**1.38**	**1.32**	**1.24**	**1.22**	**1.17**	**1.13**	**1.08**	**1.04**	**1.00**	**0.97**	**0.94**	**2.62%**	**2.91%**
11	**Industry Average Growth**	**4.94%**	**4.65%**	**5.28%**	**6.01%**	**5.54%**	**6.63%**	**6.56%**	**6.73%**	**7.63%**	**5.06%**	**6.54%**	**0.96%**	**4.33%**	**4.18%**	**4.04%**	**4.39%**	**3.76%**	**3.55%**	**3.02%**			

Sources:
[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.
Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.
[2] The Value Line Investment Survey, May 24, 2024.

Liberty Utilities (Missouri Water) LLC

Natural Gas Utilities
(Valuation Metrics)

Line	Company	Earnings per Share[1] 19-Year Average (1)	2024 [2] (2)	2023 [2] (3)	2022 (4)	2021 (5)	2020 (6)	2019 (7)	2018 (8)	2017 (9)	2016 (10)	2015 (11)	2014 (12)	2013 (13)	2012 (14)	2011 (15)	2010 (16)	2009 (17)	2008 (18)	2007 (19)	2006 (20)
1	Atmos Energy	3.51	6.75	6.10	5.60	5.12	4.72	4.35	4.00	3.60	3.38	3.09	2.96	2.50	2.10	2.26	2.16	1.97	2.00	1.94	2.00
2	Chesapeake Utilities	2.89	5.10	4.73	4.97	4.70	4.21	3.72	3.45	2.68	2.86	2.68	2.47	2.26	1.99	1.91	1.82	1.43	1.39	1.29	1.15
3	New Jersey Resources	1.78	2.95	2.70	2.50	2.16	2.07	1.96	2.72	1.73	1.61	1.78	2.08	1.37	1.36	1.29	1.23	1.20	1.35	0.78	0.93
4	NiSource Inc.	1.22	1.70	1.60	1.47	1.35	1.32	1.31	1.30	0.39	1.00	0.63	1.67	1.57	1.37	1.05	1.06	0.84	1.34	1.14	1.14
5	Northwest Nat. Gas	2.18	2.50	2.59	2.54	2.50	2.30	2.19	2.33	-1.94	2.12	1.96	2.16	2.24	2.22	2.39	2.73	2.83	2.57	2.76	2.35
6	ONE Gas Inc.	3.32	4.00	4.14	4.08	3.85	3.68	3.51	3.25	3.02	2.65	2.24	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	Southwest Gas	2.88	3.30	2.13	3.10	3.80	4.14	3.94	3.68	3.62	3.18	2.92	3.01	3.11	2.86	2.43	2.27	1.94	1.39	1.95	1.98
8	Spire Inc.	3.10	4.30	3.85	3.95	4.96	1.44	3.52	4.33	3.43	3.24	3.16	2.35	2.02	2.79	2.86	2.43	2.92	2.64	2.31	2.37
9	UGI Corp.	2.02	2.90	2.84	2.90	2.96	2.67	2.28	2.74	2.29	2.05	2.01	1.92	1.59	1.17	1.37	1.59	1.57	1.33	1.18	1.10
10	**Average**	**2.47**	**3.72**	**3.41**	**3.46**	**3.49**	**2.95**	**2.98**	**3.09**	**2.09**	**2.45**	**2.27**	**2.30**	**2.08**	**1.98**	**1.95**	**1.91**	**1.84**	**1.75**	**1.67**	**1.63**
11	**Industry Average Growth**	**5.33%**	**9.19%**	**-1.38%**	**-0.92%**	**18.27%**	**-0.86%**	**-3.67%**	**47.72%**	**-14.80%**	**7.91%**	**-1.06%**	**10.40%**	**5.02%**	**1.90%**	**1.83%**	**3.95%**	**4.98%**	**4.94%**	**2.53%**	

Sources:
[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.
Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.
[2] The Value Line Investment Survey, May 24, 2024.

Liberty Utilities (Missouri Water) LLC

Natural Gas Utilities
(Valuation Metrics)

Line	Company	Cash Flow / Capital Spending[1] 2019 (1)	2020 (2)	2021 (3)	2022 (4)	2023 (5)	2024 (6)	2025[2] (7)	3 - 5 yr[2] Projection (8)
1	Atmos Energy	0.53x	0.53x	0.53x	0.54x	0.54x	0.55x	0.58x	0.68x
2	Chesapeake Utilities	0.66x	0.64x	0.82x	1.23x	0.84x	0.61x	0.61x	0.68x
3	New Jersey Resources	1.41x	0.65x	0.72x	0.59x	0.68x	1.03x	0.84x	0.84x
4	NiSource Inc.	0.66x	0.65x	0.69x	0.55x	0.43x	0.54x	0.74x	0.65x
5	Northwest Nat. Gas	0.77x	0.75x	0.61x	0.60x	0.68x	0.63x	0.70x	0.72x
6	ONE Gas Inc.	0.78x	0.88x	0.86x	0.74x	0.83x	0.81x	0.88x	1.11x
7	Southwest Gas	0.62x	0.53x	0.61x	0.31x	0.84x	0.76x	0.81x	0.76x
8	Spire Inc.	0.65x	0.65x	0.70x	0.80x	0.71x	0.64x	0.67x	0.76x
9	UGI Corp.	1.33x	1.54x	1.66x	1.42x	1.33x	1.24x	1.24x	1.20x
10	Average	0.82x	0.76x	0.80x	0.75x	0.76x	0.76x	0.78x	0.82x
11	Median	0.66x	0.65x	0.70x	0.60x	0.71x	0.64x	0.74x	0.76x

Sources:
[1] The Value Line Investment Survey, various report dates.
[2] The Value Line Investment Survey, May 24, 2024.
Notes:
Based on the projected Cash Flow per share and Capital Spending per share.

Liberty Utilities (Missouri Water) LLC

Natural Gas Utilities
(Valuation Metrics)

Percent Dividends to Book Value[1]

Line	Company	19-Year Average	2024 [2/a]	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1	Atmos Energy	4.95%	4.28%	4.04%	4.07%	4.19%	4.26%	4.36%	4.53%	4.90%	5.04%	4.96%	4.81%	4.92%	5.28%	5.44%	5.55%	5.61%	5.75%	5.82%	6.25%
2	Chesapeake Utilities	5.04%	4.13%	4.01%	4.32%	4.15%	4.23%	4.53%	4.39%	4.23%	4.35%	4.78%	5.18%	5.25%	5.39%	5.42%	5.49%	5.60%	6.71%	6.66%	6.95%
3	New Jersey Resources	7.25%	7.53%	7.65%	7.63%	7.92%	6.60%	6.85%	6.87%	7.26%	7.21%	7.16%	7.45%	7.60%	7.86%	7.69%	7.72%	7.48%	6.42%	6.54%	6.40%
4	NiSource Inc.	5.55%	4.57%	4.40%	7.15%	6.69%	6.64%	5.99%	5.96%	5.46%	5.08%	6.89%	5.22%	5.22%	5.25%	5.19%	5.22%	5.25%	5.34%	4.97%	5.02%
5	Northwest Nat. Gas	6.38%	5.34%	5.69%	5.83%	5.66%	6.57%	6.69%	7.16%	7.27%	6.30%	6.53%	6.58%	6.59%	6.57%	6.55%	6.44%	6.43%	6.41%	6.39%	6.32%
6	ONE Gas Inc.	4.54%	5.26%	5.32%	5.31%	5.04%	5.14%	4.96%	4.73%	4.48%	3.88%	3.41%	2.44%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	Southwest Gas	4.51%	4.60%	5.20%	5.17%	4.80%	4.87%	4.79%	4.90%	5.25%	5.14%	4.82%	4.57%	4.33%	4.16%	3.98%	3.90%	3.89%	3.83%	3.74%	3.80%
8	Spire Inc.	5.85%	5.74%	5.73%	5.58%	5.56%	5.63%	5.25%	5.06%	5.09%	5.06%	5.07%	5.04%	5.31%	6.22%	6.30%	6.53%	6.56%	6.74%	7.33%	7.43%
9	UGI Corp.	5.76%	7.15%	7.35%	5.02%	5.34%	6.65%	6.30%	4.82%	5.28%	5.65%	5.72%	5.14%	5.07%	5.35%	5.77%	5.41%	5.35%	5.72%	5.82%	6.54%
10	Average	5.60%	5.40%	5.49%	5.57%	5.48%	5.62%	5.52%	5.38%	5.47%	5.30%	5.48%	5.16%	5.54%	5.76%	5.79%	5.78%	5.77%	5.86%	5.91%	6.09%
11	Median	5.32%	5.26%	5.32%	5.31%	5.34%	5.63%	5.25%	4.90%	5.25%	5.08%	5.07%	5.14%	5.24%	5.37%	5.61%	5.52%	5.60%	6.08%	6.11%	6.36%

Dividends to Earnings Ratio[1]

Line	Company	19-Year Average	2024 [2/a]	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
12	Atmos Energy	0.55	0.48	0.49	0.49	0.49	0.49	0.48	0.49	0.50	0.50	0.50	0.50	0.56	0.66	0.60	0.62	0.67	0.65	0.66	0.63
13	Chesapeake Utilities	0.48	0.48	0.48	0.41	0.39	0.40	0.42	0.40	0.47	0.42	0.42	0.43	0.45	0.48	0.48	0.48	0.58	0.58	0.61	0.67
14	New Jersey Resources	0.55	0.57	0.58	0.58	0.63	0.61	0.61	0.41	0.60	0.61	0.52	0.41	0.59	0.57	0.56	0.55	0.52	0.41	0.65	0.51
15	NiSource Inc.	0.80	0.62	0.63	0.64	0.65	0.64	0.61	0.60	1.79	0.64	1.32	0.61	0.62	0.69	0.88	0.87	1.10	0.69	0.81	0.81
16	Northwest Nat. Gas	0.66	0.78	0.75	0.76	0.77	0.83	0.87	0.81	- 0.97	0.88	0.95	0.86	0.82	0.81	0.73	0.62	0.57	0.59	0.52	0.59
17	ONE Gas Inc.	0.57	0.66	0.63	0.61	0.60	0.59	0.57	0.57	0.56	0.53	0.54	0.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	Southwest Gas	0.57	0.75	1.16	0.80	0.63	0.55	0.55	0.57	0.55	0.57	0.55	0.49	0.42	0.41	0.44	0.44	0.49	0.65	0.44	0.41
19	Spire Inc.	0.69	0.70	0.75	0.69	0.52	1.73	0.67	0.52	0.61	0.60	0.58	0.75	0.84	0.59	0.56	0.65	0.52	0.56	0.63	0.59
20	UGI Corp.	0.45	0.52	0.52	0.49	0.46	0.49	0.50	0.37	0.42	0.45	0.44	0.41	0.46	0.60	0.50	0.38	0.33	0.38	0.41	0.41
21	Average	0.59	0.62	0.66	0.61	0.57	0.70	0.59	0.53	0.50	0.58	0.65	0.54	0.60	0.60	0.59	0.57	0.60	0.56	0.59	0.58
22	Median	0.58	0.62	0.63	0.61	0.60	0.59	0.57	0.52	0.55	0.57	0.54	0.49	0.58	0.60	0.56	0.58	0.54	0.59	0.62	0.59

Cash Flow to Capital Spending Ratio[1]

Line	Company	19-Year Average	2024 [2/a]	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
23	Atmos Energy	0.64	0.55	0.53	0.54	0.58	0.52	0.53	0.55	0.62	0.59	0.60	0.65	0.55	0.59	0.68	0.77	0.78	0.81	0.94	0.82
24	Chesapeake Utilities	0.76	0.61	0.81	1.23	0.81	0.78	0.62	0.39	0.50	0.50	0.53	0.71	0.65	0.79	1.12	1.10	1.14	0.83	0.82	0.45
25	New Jersey Resources	1.19	1.03	0.82	0.59	0.62	0.71	0.51	0.85	0.70	0.59	0.67	1.79	1.46	1.48	1.51	1.55	1.75	2.11	1.67	2.14
26	NiSource Inc.	0.73	0.54	0.61	0.55	0.68	0.66	0.61	0.58	0.41	0.59	0.53	0.56	0.57	0.65	0.75	1.11	1.06	0.94	1.11	1.37
27	Northwest Nat. Gas	0.89	0.63	0.67	0.60	0.68	0.66	0.69	0.71	0.14	1.01	1.12	1.15	0.98	1.01	1.33	0.55	1.02	1.35	1.21	1.34
28	ONE Gas Inc.	0.83	0.81	0.77	0.74	0.86	0.83	0.89	0.84	0.87	0.92	0.86	0.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29	Southwest Gas	0.82	0.76	0.68	0.31	0.86	0.69	0.53	0.56	0.68	0.83	0.84	0.99	1.05	0.90	0.82	1.37	1.28	0.85	0.78	0.72
30	Spire Inc.	1.01	0.64	0.69	0.80	0.75	0.42	0.44	0.77	0.72	0.96	0.92	0.98	0.78	0.95	1.53	1.61	1.93	1.64	1.42	1.28
31	UGI Corp.	1.44	1.24	1.18	1.42	1.32	1.59	1.22	1.64	1.29	1.35	1.48	1.53	1.32	1.52	1.28	1.36	1.52	1.72	1.62	1.69
32	Average	0.94	0.76	0.75	0.75	0.80	0.76	0.67	0.77	0.66	0.82	0.84	1.02	0.92	0.98	1.13	1.18	1.31	1.28	1.20	1.23
33	Median	0.84	0.64	0.69	0.60	0.75	0.69	0.61	0.71	0.68	0.83	0.84	0.98	0.88	0.93	1.20	1.23	1.21	1.15	1.16	1.31

Sources:
[1] Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.
Data for the years 2020 - 2023 was retrieved from Value Line Investment Surveys.
[2] The Value Line Investment Survey, May 24, 2024.

Notes:
[a] Based on the projected Dividends Declared per share and Book Value per share, published in The Value Line Investment Survey.
[b] Based on the projected Dividends Declared per share and Earnings per share, published in The Value Line Investment Survey.
[c] Based on the projected Cash Flow per share and Capital Spending per share, published in The Value Line Investment Survey.

Liberty Utilities (Missouri Water) LLC

Proxy Group

Line	Company	Credit Ratings[1] S&P (1)	Credit Ratings[1] Moody's (2)	Common Equity Ratios MI[1] (3)	Common Equity Ratios Value Line[2] (4)
1	American Water Works Company, Inc.	A	Baa1	44.4%	45.5%
2	American States Water Company	A	N/A	45.8%	47.2%
3	California Water Service Group	A+	N/A	53.6%	57.5%
4	Middlesex Water Company	A	N/A	50.5%	54.0%
5	SJW Group	A-	N/A	41.4%	44.7%
6	Essential Utilities, Inc.	A-	Baa2	45.6%	46.3%
7	Eversource Energy	A-	Baa2	34.4%	37.0%
8	Atmos Energy Corporation	A-	A1	60.4%	62.1%
9	Northwest Natural Holding Company	A	N/A	42.4%	47.4%
10	ONE Gas, Inc.	A-	A3	47.4%	56.2%
11	Spire Inc.	BBB+	Baa2	34.8%	41.3%
12	Southwest Gas Holdings, Inc.	BBB-	Baa2	37.4%	42.6%
13	**Average**	**A-**	**Baa1**	**44.8%**	**48.5%**
14	**Median**			**45.0%**	**46.8%**
15	**Liberty Utilities Corp.[3,4]**	**BBB**	**Baa2**		**52.61%**

Sources:

Note: If credit rating/common equity ratio unavailable for utility, subsidiary data used.

[1] S&P Global Market Intelligence, Downloaded on June 21, 2024.

[2] *The Value Line Investment Survey* , April 5, May 10, and May 24, 2024.

[3] *S&P Capital IQ* , Used rating of parent company, Liberty Utilities Co.

[4] Cochrane Direct, page 29.

Liberty Utilities (Missouri Water) LLC

Consensus Analysts' Growth Rates

Line	Company	Zacks Estimated Growth %[1] (1)	Zacks Number of Estimates (2)	MI Estimated Growth %[2] (3)	MI Number of Estimates (4)	Yahoo! Finance Estimated Growth %[3] (5)	Yahoo! Finance Number of Estimates (6)	Average of Growth Rates (7)
1	American Water Works Company, Inc.	8.00%	N/A	7.33%	3	7.50%	N/A	7.61%
2	American States Water Company	6.30%	N/A	8.00%	1	4.40%	N/A	6.23%
3	California Water Service Group	N/A	N/A	9.00%	1	10.80%	N/A	9.90%
4	Middlesex Water Company	N/A	N/A	NA	NA	2.70%	N/A	2.70%
5	SJW Group	7.50%	N/A	NA	NA	7.50%	N/A	7.50%
6	Essential Utilities, Inc.	5.75%	N/A	6.40%	3	5.20%	N/A	5.78%
7	Eversource Energy	5.41%	N/A	5.86%	4	4.20%	N/A	5.16%
8	Atmos Energy Corporation	7.00%	N/A	7.00%	1	7.40%	N/A	7.13%
9	Northwest Natural Holding Company	N/A	N/A	4.40%	5	2.80%	N/A	3.60%
10	ONE Gas, Inc.	5.00%	N/A	3.00%	2	5.00%	N/A	4.33%
11	Spire Inc.	5.00%	N/A	6.50%	2	6.36%	N/A	5.95%
12	Southwest Gas Holdings, Inc.	6.00%	N/A	8.65%	2	4.00%	N/A	6.22%
13	**Average**	**6.22%**	**N/A**	**6.61%**	**2**	**5.66%**	**N/A**	**6.01%**
14	**Median**							**6.09%**

Sources:

[1] Zacks, http://www.zacks.com/, downloaded on June 21, 2024.

[2] S&P Global Market Intelligence, https://platform.mi.spglobal.com, downloaded on June 21, 2024.

[3] Yahoo! Finance, http://www.finance.yahoo.com/, downloaded on June 21, 2024.

Liberty Utilities (Missouri Water) LLC

Constant Growth DCF Model
(Consensus Analysts' Growth Rates)

Line	Company	13-Week AVG Stock Price[1] (1)	Analysts' Growth[2] (2)	Annualized Dividend[3] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	American Water Works Company, Inc.	$125.68	7.61%	$2.83	2.42%	10.03%
2	American States Water Company	$72.09	6.23%	$1.72	2.53%	8.77%
3	California Water Service Group	$48.39	9.90%	$1.12	2.54%	12.44%
4	Middlesex Water Company	$51.91	2.70%	$1.30	2.57%	5.27%
5	SJW Group	$54.84	7.50%	$1.60	3.14%	10.64%
6	Essential Utilities, Inc.	$37.01	5.78%	$1.23	3.51%	9.29%
7	Eversource Energy	$59.35	5.16%	$2.86	5.07%	10.22%
8	Atmos Energy Corporation	$116.45	7.13%	$3.22	2.96%	10.10%
9	Northwest Natural Holding Company	$37.01	3.60%	$1.95	5.46%	9.06%
10	ONE Gas, Inc.	$62.75	4.33%	$2.64	4.39%	8.72%
11	Spire Inc.	$60.47	5.95%	$3.02	5.29%	11.25%
12	Southwest Gas Holdings, Inc.	$74.75	6.22%	$2.48	3.52%	9.74%
13	**Average**	**$66.72**	**6.01%**	**$2.16**	**3.62%**	**9.63%**
14	**Median**					**9.89%**

Sources:
[1] S&P Global Market Intelligence, Downloaded on June 21, 2024.
[2] Exhibit CCW-3
[3] *The Value Line Investment Survey* , April 5, May 10, and May 24, 2024.

Liberty Utilities (Missouri Water) LLC

Payout Ratios

Line	Company	Dividends Per Share		Earnings Per Share		Payout Ratio	
		2023	Projected	2023	Projected	2023	Projected
		(1)	(2)	(3)	(4)	(5)	(6)
1	American Water Works Company, Inc.	$2.78	$4.10	$4.90	$7.00	56.73%	58.57%
2	American States Water Company	$1.66	$2.50	$3.37	$3.90	49.26%	64.10%
3	California Water Service Group	$1.04	$1.40	$0.91	$2.75	114.29%	50.91%
4	Middlesex Water Company	$1.26	$1.60	$1.76	$3.00	71.59%	53.33%
5	SJW Group	$1.52	$1.85	$2.68	$3.45	56.72%	53.62%
6	Essential Utilities, Inc.	$1.19	$1.75	$1.86	$2.65	63.98%	66.04%
7	Eversource Energy	$2.70	$3.60	$4.34	$5.80	62.21%	62.07%
8	Atmos Energy Corporation	$2.96	$4.25	$6.10	$8.35	48.52%	50.90%
9	Northwest Natural Holding Company	$1.94	$1.98	$2.59	$3.20	74.90%	61.88%
10	ONE Gas, Inc.	$2.60	$2.85	$4.14	$5.00	62.80%	57.00%
11	Spire Inc.	$2.88	$3.60	$3.85	$5.50	74.81%	65.45%
12	Southwest Gas Holdings, Inc.	$2.48	$2.60	$2.13	$4.20	116.43%	61.90%
13	**Average**	**$2.08**	**$2.67**	**$3.22**	**$4.57**	**71.02%**	**58.81%**

Source:
The Value Line Investment Survey, April 5, May 10, and May 24, 2024.

Liberty Utilities (Missouri Water) LLC

Sustainable Growth Rate

Line	Company	3 to 5 Year Projections: Dividends Per Share (1)	Earnings Per Share (2)	Book Value Per Share (3)	Book Value Growth (4)	ROE (5)	Adjustment Factor (6)	Adjusted ROE (7)	Payout Ratio (8)	Retention Rate (9)	Internal Growth Rate (10)	Sustainable Growth Rate (11)
1	American Water Works Company, Inc.	$4.10	$7.00	$62.75	4.52%	11.16%	1.02	11.40%	58.57%	41.43%	4.72%	5.83%
2	American States Water Company	$2.50	$3.90	$31.75	8.63%	12.28%	1.04	12.79%	64.10%	35.90%	4.59%	5.27%
3	California Water Service Group	$1.40	$2.75	$30.90	4.56%	8.90%	1.02	9.10%	50.91%	49.09%	4.47%	4.47%
4	Middlesex Water Company	$1.60	$3.00	$23.70	- 0.03%	12.66%	1.00	12.66%	53.33%	46.67%	5.91%	6.14%
5	SJW Group	$1.85	$3.45	$44.15	2.77%	7.81%	1.01	7.92%	53.62%	46.38%	3.67%	3.67%
6	Essential Utilities, Inc.	$1.75	$2.65	$27.25	4.79%	9.72%	1.02	9.95%	66.04%	33.96%	3.38%	4.13%
7	Eversource Energy	$3.60	$5.80	$51.75	5.00%	11.21%	1.02	11.48%	62.07%	37.93%	4.35%	4.76%
8	Atmos Energy Corporation	$4.25	$8.35	$83.50	2.67%	10.00%	1.01	10.13%	50.90%	49.10%	4.97%	6.95%
9	Northwest Natural Holding Company	$1.98	$3.20	$36.10	1.13%	8.86%	1.01	8.91%	61.88%	38.13%	3.40%	3.71%
10	ONE Gas, Inc.	$2.85	$5.00	$60.20	4.24%	8.31%	1.02	8.48%	57.00%	43.00%	3.65%	3.69%
11	Spire Inc.	$3.60	$5.50	$66.05	5.60%	8.33%	1.03	8.55%	65.45%	34.55%	2.96%	3.58%
12	Southwest Gas Holdings, Inc.	$2.60	$4.20	$57.35	3.74%	7.32%	1.02	7.46%	61.90%	38.10%	2.84%	3.38%
13	**Average**	**$2.67**	**$4.57**	**$47.95**	**3.97%**	**9.71%**	**1.02**	**9.90%**	**58.81%**	**41.19%**	**4.08%**	**4.63%**
14	**Median**											**4.30%**

Sources and Notes:
Cols. (1), (2) and (3): *The Value Line Investment Survey* , April 5, May 10, and May 24, 2024.
Col. (4): [Col. (3) / Page 2 Col. (2)] ^ (1/number of years projected) - 1.
Col. (5): Col. (2) / Col. (3).
Col. (6): [2 * (1 + Col. (4))] / (2 + Col. (4)).
Col. (7): Col. (6) * Col. (5).
Col. (8): Col. (1) / Col. (2).
Col. (9): 1 - Col. (8).
Col. (10): Col. (9) * Col. (7).
Col. (11): Col. (10) + Page 2 Col. (9).

Liberty Utilities (Missouri Water) LLC

Sustainable Growth Rate

Line	Company	13-Week Average Stock Price[1] (1)	2023 Book Value Per Share[2] (2)	Market to Book Ratio (3)	Common Shares Outstanding (in Millions)[2] 2023 (4)	Common Shares Outstanding (in Millions)[2] 3-5 Years (5)	Growth (6)	S Factor[3] (7)	V Factor[4] (8)	S * V (9)
1	American Water Works Company, Inc.	$125.68	$50.31	2.50	194.73	202.00	0.74%	1.84%	59.97%	1.10%
2	American States Water Company	$72.09	$20.99	3.43	36.98	37.50	0.28%	0.96%	70.88%	0.68%
3	California Water Service Group	$48.39	$24.72	1.96	57.72	50.00	- 2.83%	- 5.54%	48.91%	- 2.71%
4	Middlesex Water Company	$51.91	$23.74	2.19	17.82	18.00	0.20%	0.44%	54.27%	0.24%
5	SJW Group	$54.84	$38.52	1.42	32.02	30.00	- 1.29%	- 1.84%	29.76%	- 0.55%
6	Essential Utilities, Inc.	$37.01	$21.57	1.72	273.30	288.00	1.05%	1.81%	41.71%	0.75%
7	Eversource Energy	$59.35	$40.55	1.46	349.54	365.00	0.87%	1.27%	31.67%	0.40%
8	Atmos Energy Corporation	$116.45	$73.20	1.59	148.49	175.00	3.34%	5.31%	37.14%	1.97%
9	Northwest Natural Holding Company	$37.01	$34.12	1.08	37.63	45.00	3.64%	3.95%	7.80%	0.31%
10	ONE Gas, Inc.	$62.75	$48.91	1.28	56.55	57.00	0.16%	0.20%	22.05%	0.04%
11	Spire Inc.	$60.47	$50.29	1.20	53.20	62.00	3.11%	3.74%	16.83%	0.63%
12	Southwest Gas Holdings, Inc.	$74.75	$47.72	1.57	71.56	75.00	0.94%	1.48%	36.16%	0.53%
	Average	**$66.72**	**$39.55**	**1.78**	**110.80**	**117.04**	**0.85%**	**1.13%**	**38.10%**	**0.28%**

Sources and Notes:
[1] S&P Global Market Intelligence, Downloaded on June 21, 2024.
[2] *The Value Line Investment Survey* , April 5, May 10, and May 24, 2024.
[3] Expected Growth in the Number of Shares, Column (3) * Column (6).
[4] Expected Profit of Stock Investment, [1 - 1 / Column (3)].

Liberty Utilities (Missouri Water) LLC

Constant Growth DCF Model
(Sustainable Growth Rate)

Line	Company	13-Week AVG Stock Price[1] (1)	Sustainable Growth[2] (2)	Annualized Dividend[3] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	American Water Works Company, Inc.	$125.68	5.83%	$2.83	2.38%	8.21%
2	American States Water Company	$72.09	5.27%	$1.72	2.51%	7.78%
3	California Water Service Group	$48.39	4.47%	$1.12	2.42%	6.88%
4	Middlesex Water Company	$51.91	6.14%	$1.30	2.66%	8.80%
5	SJW Group	$54.84	3.67%	$1.60	3.02%	6.70%
6	Essential Utilities, Inc.	$37.01	4.13%	$1.23	3.46%	7.59%
7	Eversource Energy	$59.35	4.76%	$2.86	5.05%	9.81%
8	Atmos Energy Corporation	$116.45	6.95%	$3.22	2.96%	9.91%
9	Northwest Natural Holding Company	$37.01	3.71%	$1.95	5.47%	9.18%
10	ONE Gas, Inc.	$62.75	3.69%	$2.64	4.36%	8.05%
11	Spire Inc.	$60.47	3.58%	$3.02	5.17%	8.76%
12	Southwest Gas Holdings, Inc.	$74.75	3.38%	$2.48	3.43%	6.81%
13	**Average**	**$66.72**	**4.63%**	**$2.16**	**3.57%**	**8.21%**
14	**Median**					**8.13%**

Sources:
[1] S&P Global Market Intelligence, Downloaded on June 21, 2024.
[2] Exhibit CCW-6, page 1.
[3] *The Value Line Investment Survey*, April 5, May 10, and May 24, 2024.

Liberty Utilities (Missouri Water) LLC

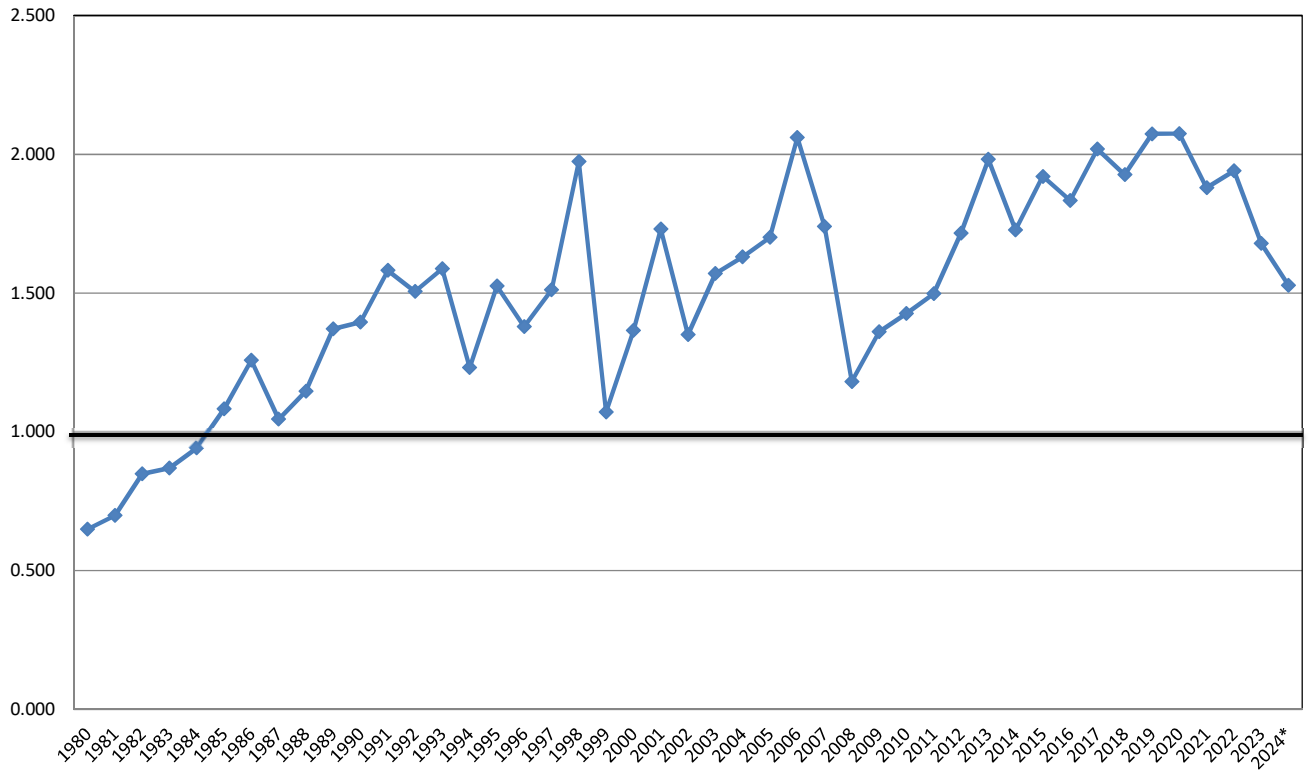
Multi-Stage Growth DCF Model

Line	Company	13-Week AVG Stock Price[1] (1)	Annualized Dividend[2] (2)	First Stage Growth[3] (3)	Second Stage Growth Year 6 (4)	Year 7 (5)	Year 8 (6)	Year 9 (7)	Year 10 (8)	Third Stage Growth[4] (9)	Multi-Stage Growth DCF (10)
1	American Water Works Company, Inc.	$125.68	$2.83	7.61%	7.05%	6.49%	5.93%	5.36%	4.80%	4.24%	7.15%
2	American States Water Company	$72.09	$1.72	6.23%	5.90%	5.57%	5.24%	4.90%	4.57%	4.24%	7.06%
3	California Water Service Group	$48.39	$1.12	9.90%	8.96%	8.01%	7.07%	6.13%	5.18%	4.24%	7.69%
4	Middlesex Water Company	$51.91	$1.30	2.70%	2.96%	3.21%	3.47%	3.73%	3.98%	4.24%	6.57%
5	SJW Group	$54.84	$1.60	7.50%	6.96%	6.41%	5.87%	5.33%	4.78%	4.24%	7.98%
6	Essential Utilities, Inc.	$37.01	$1.23	5.78%	5.53%	5.27%	5.01%	4.75%	4.50%	4.24%	8.05%
7	Eversource Energy	$59.35	$2.86	5.16%	5.00%	4.85%	4.70%	4.55%	4.39%	4.24%	9.55%
8	Atmos Energy Corporation	$116.45	$3.22	7.13%	6.65%	6.17%	5.69%	5.20%	4.72%	4.24%	7.70%
9	Northwest Natural Holding Company	$37.01	$1.95	3.60%	3.71%	3.81%	3.92%	4.03%	4.13%	4.24%	9.53%
10	ONE Gas, Inc.	$62.75	$2.64	4.33%	4.32%	4.30%	4.29%	4.27%	4.26%	4.24%	8.65%
11	Spire Inc.	$60.47	$3.02	5.95%	5.67%	5.38%	5.10%	4.81%	4.53%	4.24%	10.01%
12	Southwest Gas Holdings, Inc.	$74.75	$2.48	6.22%	5.89%	5.56%	5.23%	4.90%	4.57%	4.24%	8.16%
13	**Average**	**$66.72**	**$2.16**	**6.01%**	**5.72%**	**5.42%**	**5.13%**	**4.83%**	**4.54%**	**4.24%**	**8.18%**
14	**Median**										**8.02%**

Sources:
[1] S&P Global Market Intelligence, Downloaded on June 21, 2024.
[2] *The Value Line Investment Survey*, April 5, May 10, and May 24, 2024.
[3] Exhibit CCW-3
[4] *Blue Chip Financial Forecast, May 31, 2024 at page 14.*

Liberty Utilities (Missouri Water) LLC

Common Stock Market/Book Ratio



Source:
1980 - 2000: Mergent Public Utility Manual.
2001 - 2015: AUS Utility Reports, multiple dates.
2016 - 2022: Value Line Investment Survey, multiple dates.
* Value Line Investment Survey Reports, April 19, May 10, May 24, and June 7, 2024.

Liberty Utilities (Missouri Water) LLC

Equity Risk Premium - Treasury Bond

Line	Year	Authorized Gas Returns[1] (1)	30 yr. Treasury Bond Yield[2] (2)	Indicated Risk Premium (3)	Rolling 5 - Year Average (4)	Rolling 10 - Year Average (5)
1	1986	13.46%	7.80%	5.66%		
2	1987	12.74%	8.58%	4.16%		
3	1988	12.85%	8.96%	3.89%		
4	1989	12.88%	8.45%	4.43%		
5	1990	12.67%	8.61%	4.06%	4.44%	
6	1991	12.46%	8.14%	4.32%	4.17%	
7	1992	12.01%	7.67%	4.34%	4.21%	
8	1993	11.35%	6.60%	4.75%	4.38%	
9	1994	11.35%	7.37%	3.98%	4.29%	
10	1995	11.43%	6.88%	4.55%	4.39%	4.42%
11	1996	11.19%	6.70%	4.49%	4.42%	4.30%
12	1997	11.29%	6.61%	4.68%	4.49%	4.35%
13	1998	11.51%	5.58%	5.93%	4.73%	4.55%
14	1999	10.66%	5.87%	4.79%	4.89%	4.59%
15	2000	11.39%	5.94%	5.45%	5.07%	4.73%
16	2001	10.95%	5.49%	5.46%	5.26%	4.84%
17	2002	11.03%	5.43%	5.60%	5.45%	4.97%
18	2003	10.99%	4.96%	6.03%	5.47%	5.10%
19	2004	10.59%	5.05%	5.54%	5.62%	5.25%
20	2005	10.46%	4.65%	5.81%	5.69%	5.38%
21	2006	10.40%	4.87%	5.53%	5.70%	5.48%
22	2007	10.22%	4.83%	5.39%	5.66%	5.55%
23	2008	10.39%	4.28%	6.11%	5.68%	5.57%
24	2009	10.22%	4.07%	6.15%	5.80%	5.71%
25	2010	10.15%	4.25%	5.90%	5.81%	5.75%
26	2011	9.92%	3.91%	6.01%	5.91%	5.81%
27	2012	9.94%	2.92%	7.02%	6.24%	5.95%
28	2013	9.68%	3.45%	6.23%	6.26%	5.97%
29	2014	9.78%	3.34%	6.44%	6.32%	6.06%
30	2015	9.60%	2.84%	6.76%	6.49%	6.15%
31	2016	9.54%	2.60%	6.94%	6.68%	6.29%
32	2017	9.72%	2.90%	6.83%	6.64%	6.44%
33	2018	9.59%	3.11%	6.48%	6.69%	6.48%
34	2019	9.71%	2.58%	7.13%	6.83%	6.57%
35	2020	9.46%	1.56%	7.90%	7.05%	6.77%
36	2021	9.56%	2.05%	7.51%	7.17%	6.92%
37	2022	9.53%	3.12%	6.42%	7.08%	6.86%
38	2023	9.60%	4.09%	5.51%	6.89%	6.79%
39	2024 [3]	9.78%	4.33%	5.45%	6.55%	6.69%
40	**Average**	**10.77%**	**5.14%**	**5.63%**	**5.67%**	**5.68%**
41	**Minimum**				**4.17%**	**4.30%**
42	**Maximum**				**7.17%**	**6.92%**

Sources:

[1] *Regulatory Research Associates, Inc*., Regulatory Focus, Major Rate Case Decisions, Jan. 1997 p. 5, and Jan. 2011 p. 3. S&P Global Market Intelligence, RRA Regulatory Focus, Major Rate Case Decisions, January - March 2024, April 19, 2024 at page 3.

[2] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

[3] Data represents January - March, 2024.

Liberty Utilities (Missouri Water) LLC

Equity Risk Premium - Utility Bond

Line	Year	Authorized Gas Returns[1] (1)	Average "A" Rated Utility Bond Yield[2] (2)	Indicated Risk Premium (3)	Rolling 5 - Year Average (4)	Rolling 10 - Year Average (5)
1	1986	13.46%	9.58%	3.88%		
2	1987	12.74%	10.10%	2.64%		
3	1988	12.85%	10.49%	2.36%		
4	1989	12.88%	9.77%	3.11%		
5	1990	12.67%	9.86%	2.81%	2.96%	
6	1991	12.46%	9.36%	3.10%	2.80%	
7	1992	12.01%	8.69%	3.32%	2.94%	
8	1993	11.35%	7.59%	3.76%	3.22%	
9	1994	11.35%	8.31%	3.04%	3.21%	
10	1995	11.43%	7.89%	3.54%	3.35%	3.16%
11	1996	11.19%	7.75%	3.44%	3.42%	3.11%
12	1997	11.29%	7.60%	3.69%	3.49%	3.22%
13	1998	11.51%	7.04%	4.47%	3.64%	3.43%
14	1999	10.66%	7.62%	3.04%	3.64%	3.42%
15	2000	11.39%	8.24%	3.15%	3.56%	3.45%
16	2001	10.95%	7.76%	3.19%	3.51%	3.46%
17	2002	11.03%	7.37%	3.66%	3.50%	3.50%
18	2003	10.99%	6.58%	4.41%	3.49%	3.56%
19	2004	10.59%	6.16%	4.43%	3.77%	3.70%
20	2005	10.46%	5.65%	4.81%	4.10%	3.83%
21	2006	10.40%	6.07%	4.33%	4.33%	3.92%
22	2007	10.22%	6.07%	4.15%	4.43%	3.96%
23	2008	10.39%	6.53%	3.86%	4.32%	3.90%
24	2009	10.22%	6.04%	4.18%	4.27%	4.02%
25	2010	10.15%	5.47%	4.68%	4.24%	4.17%
26	2011	9.92%	5.04%	4.88%	4.35%	4.34%
27	2012	9.94%	4.13%	5.81%	4.68%	4.55%
28	2013	9.68%	4.48%	5.20%	4.95%	4.63%
29	2014	9.78%	4.28%	5.50%	5.22%	4.74%
30	2015	9.60%	4.12%	5.48%	5.38%	4.81%
31	2016	9.54%	3.93%	5.61%	5.52%	4.94%
32	2017	9.72%	4.00%	5.72%	5.50%	5.09%
33	2018	9.59%	4.25%	5.34%	5.53%	5.24%
34	2019	9.71%	3.77%	5.94%	5.62%	5.42%
35	2020	9.46%	3.05%	6.41%	5.80%	5.59%
36	2021	9.56%	3.10%	6.46%	5.97%	5.75%
37	2022	9.53%	4.72%	4.81%	5.79%	5.65%
38	2023	9.60%	5.55%	4.05%	5.53%	5.53%
39	2024 [3]	9.78%	5.53%	4.25%	5.19%	5.41%
39	**Average**	**10.77%**	**6.50%**	**4.27%**	**4.32%**	**4.32%**
40	**Minimum**				**2.80%**	**3.11%**
41	**Maximum**				**5.97%**	**5.75%**

Sources:

[1] *Regulatory Research Associates, Inc*., Regulatory Focus, Major Rate Case Decisions, Jan. 1997 p. 5, and Jan. 2011 p. 3. S&P Global Market Intelligence, RRA Regulatory Focus, Major Rate Case Decisions, January - March 2024 April 19, 2024 at page 3.

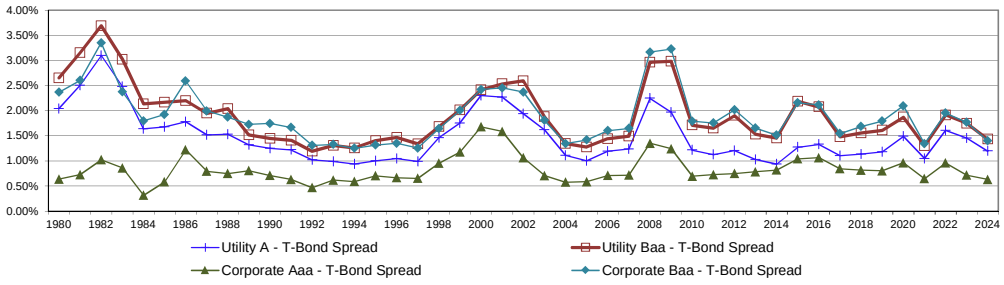
[2] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.

Liberty Utilities (Missouri Water) LLC

Bond Yield Spreads

			Public Utility Bond				Corporate Bond				Utility to Corporate	
Line	Year	T-Bond Yield[1]	A[2]	Baa[2]	A-T-Bond Spread	Baa-T-Bond Spread	Aaa[3]	Baa[3]	Aaa-T-Bond Spread	Baa-T-Bond Spread	Baa Spread	A-Aaa Spread
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	1980	11.30%	13.34%	13.95%	2.04%	2.65%	11.94%	13.67%	0.64%	2.37%	0.28%	1.40%
2	1981	13.44%	15.95%	16.60%	2.51%	3.16%	14.17%	16.04%	0.73%	2.60%	0.56%	1.78%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	0.34%	2.07%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.38%	0.65%	1.62%
5	1984	12.39%	14.03%	14.53%	1.64%	2.14%	12.71%	14.19%	0.32%	1.80%	0.34%	1.32%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	0.24%	1.10%
7	1986	7.80%	9.58%	10.00%	1.78%	2.20%	9.02%	10.39%	1.22%	2.59%	-0.39%	0.56%
8	1987	8.58%	10.10%	10.53%	1.52%	1.95%	9.38%	10.58%	0.80%	2.00%	-0.05%	0.72%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.17%	0.78%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	-0.21%	0.51%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	-0.30%	0.54%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.67%	-0.25%	0.59%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	-0.12%	0.55%
14	1993	6.60%	7.59%	7.91%	0.99%	1.31%	7.22%	7.93%	0.62%	1.33%	-0.02%	0.37%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.01%	0.35%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%	0.30%
17	1996	6.70%	7.75%	8.17%	1.05%	1.47%	7.37%	8.05%	0.67%	1.35%	0.12%	0.38%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.66%	1.26%	0.09%	0.34%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.04%	0.51%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.18%	2.01%	0.01%	0.58%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	-0.01%	0.62%
22	2001	5.49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.45%	0.08%	0.68%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.22%	0.88%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.08%	0.91%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.35%	0.00%	0.53%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.42%	-0.14%	0.41%
27	2006	4.87%	6.07%	6.32%	1.20%	1.44%	5.59%	6.48%	0.71%	1.61%	-0.16%	0.48%
28	2007	4.83%	6.07%	6.33%	1.24%	1.50%	5.56%	6.48%	0.72%	1.65%	-0.15%	0.52%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	-0.20%	0.90%
30	2009	4.07%	6.04%	7.06%	1.97%	2.99%	5.31%	7.30%	1.24%	3.23%	-0.24%	0.73%
31	2010	4.25%	5.47%	5.96%	1.22%	1.71%	4.95%	6.04%	0.70%	1.79%	-0.08%	0.52%
32	2011	3.91%	5.04%	5.57%	1.13%	1.66%	4.64%	5.67%	0.73%	1.76%	-0.10%	0.40%
33	2012	2.92%	4.13%	4.83%	1.21%	1.90%	3.67%	4.94%	0.75%	2.02%	-0.11%	0.46%
34	2013	3.45%	4.48%	4.98%	1.03%	1.53%	4.24%	5.10%	0.79%	1.65%	-0.12%	0.24%
35	2014	3.34%	4.28%	4.80%	0.94%	1.46%	4.16%	4.86%	0.82%	1.52%	-0.06%	0.12%
36	2015	2.84%	4.12%	5.03%	1.27%	2.19%	3.89%	5.00%	1.05%	2.16%	0.03%	0.23%
37	2016	2.60%	3.93%	4.67%	1.33%	2.08%	3.66%	4.71%	1.07%	2.12%	-0.04%	0.27%
38	2017	2.90%	4.00%	4.38%	1.10%	1.48%	3.74%	4.44%	0.85%	1.55%	-0.06%	0.26%
39	2018	3.11%	4.25%	4.67%	1.14%	1.56%	3.93%	4.80%	0.82%	1.69%	-0.13%	0.32%
40	2019	2.58%	3.77%	4.19%	1.18%	1.61%	3.39%	4.38%	0.81%	1.79%	-0.18%	0.38%
41	2020	1.56%	3.05%	3.44%	1.49%	1.87%	2.53%	3.66%	0.96%	2.10%	-0.22%	0.53%
42	2021	2.05%	3.10%	3.36%	1.05%	1.30%	2.70%	3.39%	0.65%	1.34%	-0.04%	0.40%
43	2022	3.12%	4.72%	5.03%	1.61%	1.91%	4.08%	5.07%	0.96%	1.96%	-0.04%	0.65%
44	2023	4.09%	5.55%	5.84%	1.45%	1.75%	4.81%	5.86%	0.72%	1.77%	-0.02%	0.74%
45	2024[4]	4.33%	5.53%	5.77%	1.20%	1.43%	4.97%	5.73%	0.63%	1.40%	0.04%	0.56%
46	**Average**	**6.05%**	**7.53%**	**7.95%**	**1.48%**	**1.90%**	**6.88%**	**7.95%**	**0.83%**	**1.90%**	**0.00%**	**0.65%**

Yield Spreads
Treasury Vs. Corporate & Treasury Vs. Utility



Sources:
[1] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.
[2] The utility yields for the period 1980-2000 were obtained from Mergent Public Utility Manual, Mergent Weekly News Reports, 2003.
The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record.
The utility yields for the period 2010-2023 were obtained from http://credittrends.moodys.com/.
[3] The corporate yields for the period 1980-2009 were obtained from the St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.
The corporate yields from 2010-2024 were obtained from http://credittrends.moodys.com/.
[4] Data represents January - March, 2024.

Liberty Utilities (Missouri Water) LLC

13-Week Treasury and Utility Bond Yields

Line	Date	Treasury Bond Yield[1] (1)	"A" Rated Utility Bond Yield[2] (2)	"Baa" Rated Utility Bond Yield[2] (3)
1	06/21/24	4.39%	5.59%	5.82%
2	06/14/24	4.34%	5.52%	5.74%
3	06/07/24	4.55%	5.68%	5.91%
4	05/31/24	4.65%	5.77%	6.00%
5	05/24/24	4.57%	5.71%	5.94%
6	05/17/24	4.56%	5.69%	5.92%
7	05/10/24	4.64%	5.77%	6.00%
8	05/03/24	4.66%	5.78%	6.01%
9	04/26/24	4.78%	5.91%	6.14%
10	04/19/24	4.72%	5.85%	6.08%
11	04/12/24	4.61%	5.73%	5.95%
12	04/05/24	4.54%	5.67%	5.90%
13	03/28/24	4.34%	5.50%	5.72%
14	**Average**	**4.57%**	**5.71%**	**5.93%**
15	**Spread To Treasury**		**1.14%**	**1.36%**

Sources:

[1] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.

[2] http://credittrends.moodys.com/.

Liberty Utilities (Missouri Water) LLC

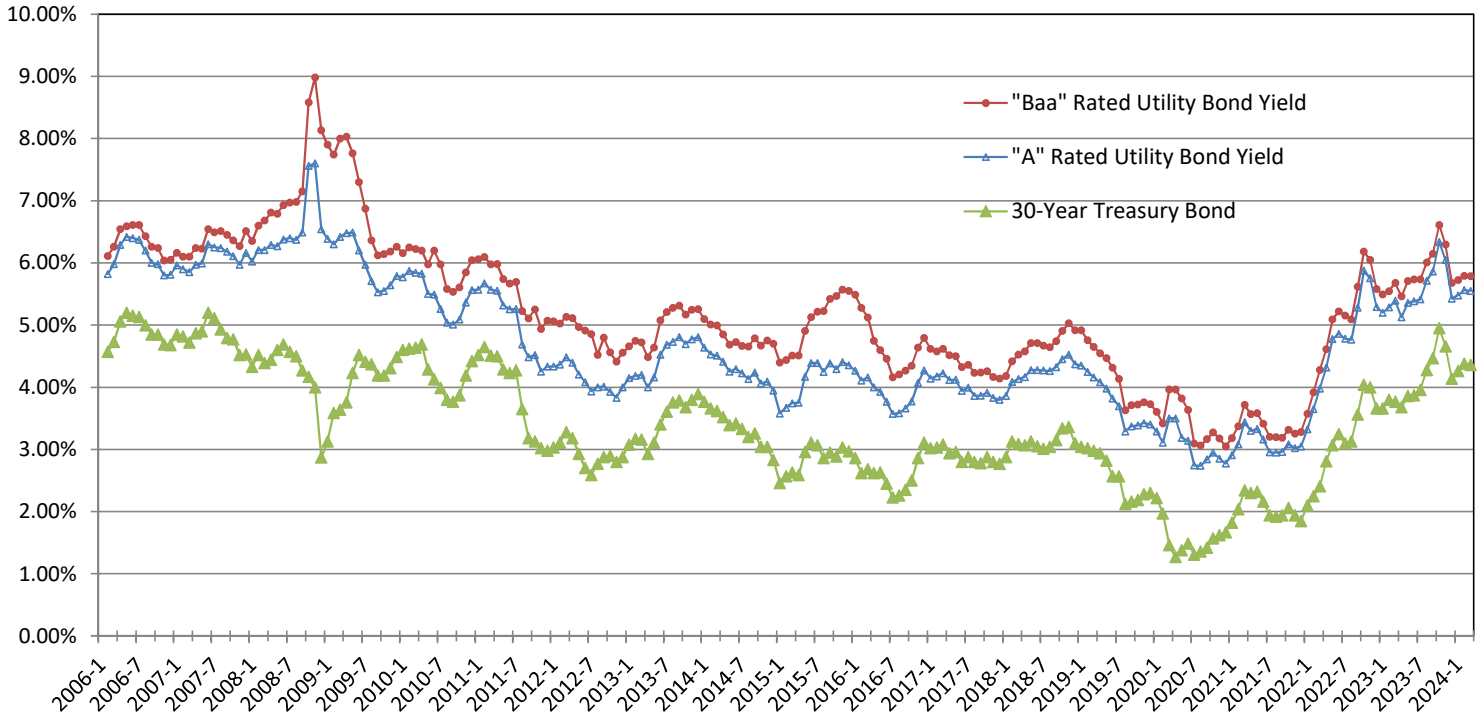
26-Week Treasury and Utility Bond Yields

Line	Date	Treasury Bond Yield[1] (1)	"A" Rated Utility Bond Yield[2] (2)	"Baa" Rated Utility Bond Yield[2] (3)
1	06/21/24	4.39%	5.59%	5.82%
2	06/14/24	4.34%	5.52%	5.74%
3	06/07/24	4.55%	5.68%	5.91%
4	05/31/24	4.65%	5.77%	6.00%
5	05/24/24	4.57%	5.71%	5.94%
6	05/17/24	4.56%	5.69%	5.92%
7	05/10/24	4.64%	5.77%	6.00%
8	05/03/24	4.66%	5.78%	6.01%
9	04/26/24	4.78%	5.91%	6.14%
10	04/19/24	4.72%	5.85%	6.08%
11	04/12/24	4.61%	5.73%	5.95%
12	04/05/24	4.54%	5.67%	5.90%
13	03/28/24	4.34%	5.50%	5.72%
14	03/22/24	4.39%	5.55%	5.78%
15	03/15/24	4.43%	5.60%	5.83%
16	03/08/24	4.26%	5.48%	5.72%
17	03/01/24	4.33%	5.56%	5.79%
18	02/23/24	4.37%	5.56%	5.77%
19	02/16/24	4.45%	5.62%	5.85%
20	02/09/24	4.37%	5.56%	5.79%
21	02/02/24	4.22%	5.42%	5.66%
22	01/26/24	4.38%	5.54%	5.78%
23	01/19/24	4.36%	5.55%	5.80%
24	01/12/24	4.20%	5.42%	5.66%
25	01/05/24	4.21%	5.47%	5.74%
26	12/29/23	4.03%	5.28%	5.54%
27	**Average**	**4.44%**	**5.61%**	**5.84%**
28	**Spread To Treasury**		**1.17%**	**1.40%**

Sources:
[1] St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.
[2] http://credittrends.moodys.com/.

Liberty Utilities (Missouri Water) LLC

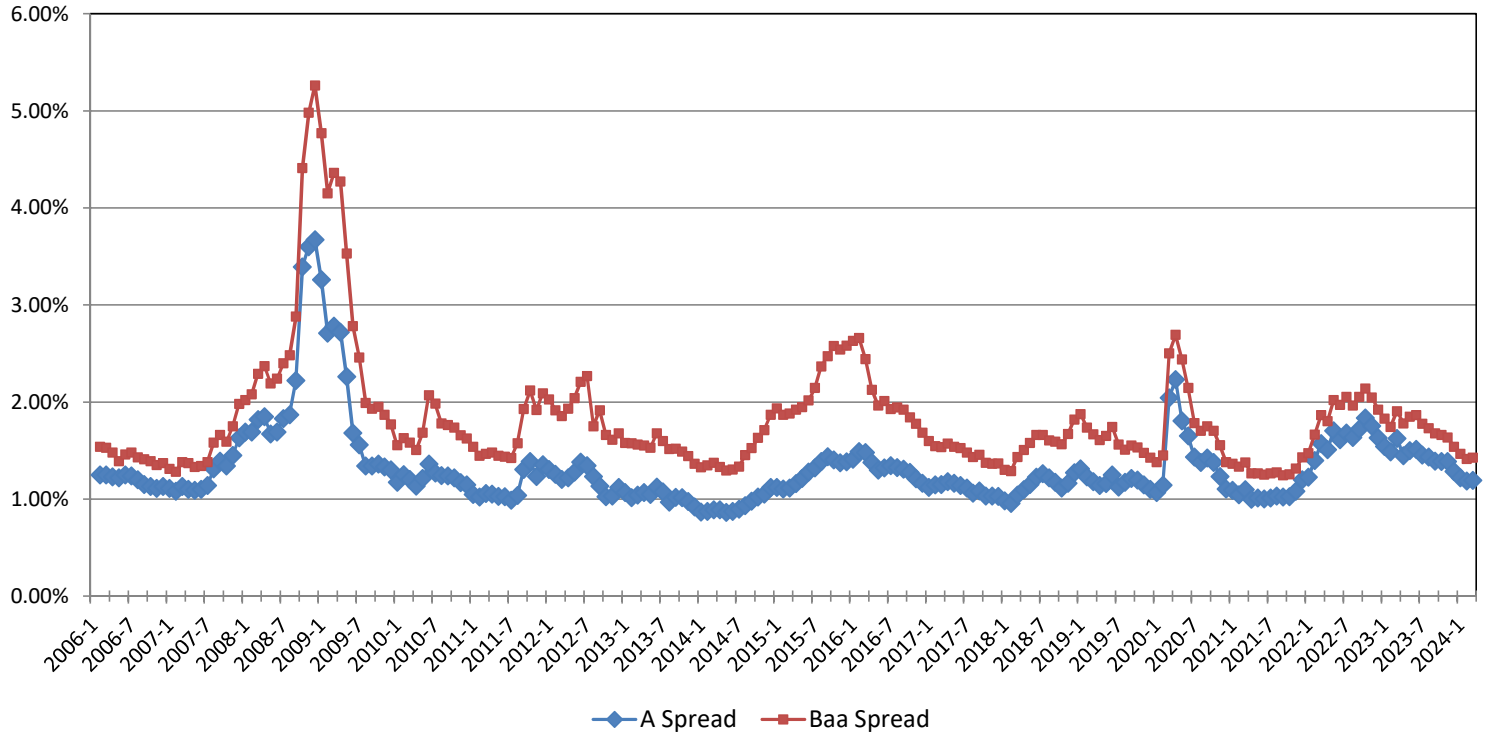
Trends in Bond Yields



Sources:
Mergent Bond Record.
www.moodys.com, Bond Yields and Key Indicators.
St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

Liberty Utilities (Missouri Water) LLC

Yield Spread Between Utility Bonds and 30-Year Treasury Bonds



Sources:
Mergent Bond Record.
www.moodys.com, Bond Yields and Key Indicators.
St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

Liberty Utilities (Missouri Water) LLC

Beta

Line	Company	Beta[1]	S&P Global Market Intelligence Beta[2]
1	American Water Works Company, Inc.	0.95	0.88
2	American States Water Company	0.70	0.62
3	California Water Service Group	0.75	0.65
4	Middlesex Water Company	0.75	0.71
5	SJW Group	0.85	0.75
6	Essential Utilities, Inc.	1.00	0.84
7	Eversource Energy	0.95	0.80
8	Atmos Energy Corporation	0.85	0.74
9	Northwest Natural Holding Company	0.85	0.68
10	ONE Gas, Inc.	0.85	0.75
11	Spire Inc.	0.85	0.77
12	Southwest Gas Holdings, Inc.	0.90	0.80
13	**Average**	**0.85**	**0.75**
14	**Median**	**0.85**	**0.75**
15	**Historical Beta[3]**	**0.75**	

Source:

[1] *The Value Line Investment Survey,* April 5, May 10, and May 24, 2024.

[2] S&P Global Market Intelligence, betas for the period 4/26/2019 - 4/26/2024.

[3] Exhibit CCW-14, page 2.

Liberty Utilities (Missouri Water) LLC

Historical Betas
(Electric Utilities)

Line	Company	Average	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19	2Q19	1Q19	4Q18	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16	1Q16	4Q15	3Q15	2Q15	1Q15	4Q14	3Q14
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)
1	American Water Works Company, Inc.	0.75	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.70	0.70
2	American States Water Company	0.69	0.70	0.70	0.70	0.65	0.70	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
3	California Water Service Group	0.72	0.75	0.75	0.70	0.70	0.70	0.70	0.70	0.65	0.65	0.70	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.70	0.70
4	Middlesex Water Company	0.73	0.75	0.75	0.75	0.70	0.75	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.70	0.70
5	SJW Group	0.75	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.75	0.75	0.75	0.75	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.85	0.85
6	Essential Utilities, Inc.	0.81	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95	N/A	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.70	0.70
7	Eversource Energy	0.77	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.55	0.55	0.60	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.75	0.75	0.75
8	Atmos Energy Corporation	0.76	0.85	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.55	0.60	0.60	0.65	0.60	0.60	0.60	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.75	0.80	0.80	0.85	0.85	0.85	0.80	0.80
9	Northwest Natural Holding Company	0.72	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.55	0.60	0.60	0.60	0.65	0.60	0.65	0.70	0.65	0.70	0.70	0.70	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70
10	ONE Gas, Inc.	0.75	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	Spire Inc.	0.75	0.85	0.85	0.85	0.85	0.80	0.85	0.85	0.80	0.80	0.85	0.85	0.85	0.85	0.85	1.00	0.80	0.80	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
12	Southwest Gas Holdings, Inc.	0.83	0.90	0.90	0.90	0.90	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.65	0.70	0.70	0.70	0.70	0.70	0.75	0.80	0.75	0.80	0.75	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.85	0.85	0.85	0.85	0.85
13	**Average**	0.75	0.85	0.85	0.85	0.82	0.82	0.82	0.81	0.80	0.80	0.80	0.81	0.81	0.81	0.81	0.82	0.80	0.80	0.67	0.64	0.64	0.65	0.65	0.67	0.68	0.70	0.69	0.73	0.73	0.72	0.73	0.70	0.70	0.71	0.72	0.74	0.75	0.75	0.75	0.74	0.74

Source: Value Line Software Analyzer

Liberty Utilities (Missouri Water) LLC

CAPM Return

Line	Description	Kroll Normalized[2] MRP (1)	Risk Premium[3] Derived MRP (2)	Average FERC S&P 500 DCF[4] Derived MRP (3)
	Current Beta			
1	Risk-Free Rate[1,2]	4.67%	4.30%	4.30%
2	Market Risk Premium	5.50%	7.30%	8.45%
3	Beta[6]	0.85	0.85	0.85
4	**CAPM**	**9.36%**	**10.54%**	**11.52%**
	Historical Beta			
5	Risk-Free Rate[1,2]	4.67%	4.30%	4.30%
6	Market Risk Premium	5.50%	7.30%	8.45%
7	Beta[6]	0.75	0.75	0.75
8	**CAPM**	**8.80%**	**9.79%**	**10.65%**
	Current S&P Global Market Intelligence Beta			
9	Risk-Free Rate[1,2]	4.67%	4.30%	4.30%
10	Market Risk Premium	5.50%	7.30%	8.45%
11	Beta[6]	0.75	0.75	0.75
12	**CAPM**	**8.79%**	**9.77%**	**10.63%**

Sources:

[1] *Kroll Cost of Capital Navigator.*

[2] *Morningstar Direct.*

[3] *Kroll 2023 SBBI Yearbook*, page 138.

[4] S&P 500 1-Step DCF through June 21, 2024 for Dividend Paying Companies.

[5] S&P 500 1-Step DCF through June 21, 2024 for all Companies.

[6] Exhibit CCW-14, page 1.

Liberty Utilities (Missouri Water) LLC

Development of the Market Risk Premium

Line	Description	MRP	
Risk Premium Based Method:			
1	Lg. Co. Stock Real Market Return	9.02%	[1]
2	Projected Consumer Price Index	2.40%	[2]
3	Expected Market Return	11.64%	
4	Risk-Free Rate	4.30%	[2]
5	Market Risk Premium	**7.30%**	
FERC S&P 500 (Dividend Companies) 1-Step DCF Based Method:			
6	S&P 500 Growth	10.90%	[3]
7	Index Dividend Yield	1.70%	[3]
8	Adjusted Yield	1.79%	
9	Expected Market Return	12.69%	
10	Risk-Free Rate	4.30%	[2]
11	Market Risk Premium	**8.40%**	
FERC S&P 500 (All Companies) 1-Step DCF Based Method:			
12	Short-Term S&P 500 Growth	11.10%	[4]
13	Index Dividend Yield	1.60%	[4]
14	Adjusted Yield	1.69%	
15	Expected Market Return	12.79%	
16	Risk-Free Rate	4.30%	[2]
17	Market Risk Premium	**8.50%**	
18	Average DCF Based MRP	**8.45%**	

Sources & Note:

[1] Morningstar Direct.

[2] *Blue Chip Financial Forecast May 31, 2024.*

[3] S&P 500 1-Step DCF through June 21, 2024 for Dividend Paying Companies.

[4] S&P 500 1-Step DCF through June 21, 2024 for all Companies.