Exhibit No.:	
Issue(s):	*Rate of Return*
Witness:	*Christopher C. Walters*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Surrebuttal Testimony*
Case No.:	*WR-2024-0104*
Date Testimony Prepared:	*October 24, 2024*

MISSOURI PUBLIC SERVICE COMMISSION

FINANCIAL AND BUSINESS ANALYSIS DIVISION

FINANCIAL ANALYSIS DEPARTMENT

SURREBUTTAL TESTIMONY

OF

CHRISTOPHER C. WALTERS

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

CASE NO. WR-2024-0104

Jefferson City, Missouri
October 24, 2024

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d/b/a LIBERTY

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. Are you the same Christopher C. Walters who previously filed direct testimony and rebuttal testimony on behalf of the Staff of the Missouri Public Service Commission on August 20, 2024 and September 27, 2024, respectively?

A. Yes, I am.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of the Office of the Public Council ("OPC") witness David Murray and Liberty Utilities (Missouri Water), LLC, d/b/a Liberty ("Liberty Water") witness John Cochrane. My silence with regard to any position taken by Liberty Water or any other party in this proceeding does not indicate my endorsement of that position.

II. SUMMARY

Q. Please summarize your surrebuttal testimony.

A. In Section III, I will respond to certain criticisms offered in the rebuttal testimony of Mr. Murray as it relates to my recommended embedded cost of debt.

In Section IV, I will respond to the rebuttal testimony of Mr. Cochrane as it relates to my recommended capital structure and Cost of Equity ("COE") analysis.

Q. Has Liberty Water updated its requested overall rate of return?

A. Yes. Liberty Water has revised its requested Return on Equity ("ROE") to 10.0%, despite Mr. Cochrane increasing his recommendation from 10.62% to 10.79%. In addition, Liberty Water also requested an increase in its common equity ratio from 52.61% to 52.99%. Finally, Liberty Water has updated its requested cost of debt to 4.97% from 5.04%. The impact of these revised requests reduces Liberty Water's requested overall Rate of Return ("ROR") from 8.05% to 7.64%.[1]

Q. Based on the rebuttal testimony filed by the parties in this case, do you have any changes to your recommendations?

A. No. I continue to recommend Liberty Water's ROE be set at 9.45%, the capital structure be set at 50% common equity and 50% long-term debt and continue to assume an embedded cost of long-term debt of 4.97%.

III. RESPONSE TO MR. MURRAY

Q. Please summarize Mr. Murray's criticisms of your recommendations.

A. Mr. Murray criticizes my adoption of a 4.97% cost of debt for Liberty Water, asserting that it is based on Liberty Water' affiliate Promissory Notes, which he argues the lack of economic legitimacy. He believes these internal transactions are designed to manipulate capital structure and debt costs for rate case purposes, rather than reflecting actual market costs. He points out that other Missouri utilities have lower embedded costs of debt and contends that

[1] Rebuttal testimony of John Cochrane at 2; Rebuttal Schedules JC-1 and JC-2.

the affiliate financing process is driven by internal bookkeeping needs rather than economic substance.

Q. Please respond.

A. The concept of the embedded cost of debt for Liberty Water is interesting as it does not issue its own debt and relies entirely on affiliates for access to external capital. Based on my understanding, this Commission determined in a previously litigated proceeding for a Liberty Water affiliate company, Liberty Midstates Natural Gas Company ("Liberty Midstates"), that the embedded cost of long-term debt for Liberty Utilities Company ("LUCo") should be used for establishing Liberty Midstates' cost of debt, particularly when it uses LUCo's capital structure as Liberty Water's capital structure. This Commission has previously found as follows:

> Having chosen Staff's capital structure, which is based on Liberty Utilities Company's capital structure, it follows that the appropriate cost of debt should be based upon Liberty Utilities Company's embedded cost of debt.[2]

Because Liberty Water does not issue its own debt, it would not be unreasonable to use LUCo's embedded cost of debt in a manner relatively consistent with how Mr. Murray has proposed.[3] However, I am not recommending LUCo's capital structure be used here. Rather, I am proposing a hypothetical capital structure consisting of 50.0% common equity and 50.0% long-term debt. However, I will note that 4.97% is lower than yields on recent long-term utility bonds. As shown on my Exhibit CCW-13 as part of my direct testimony, the 13-week average

[2] Missouri Public Service Commission, File No. GR-2014-0152, Report and Order at 19. December 3, 2014.
[3] I note that Mr. Murray makes a 50 basis point downward adjustment to one of LUCo's bonds because, in his opinion, it was priced more like 'BBB-'rated debt instead of like 'BBB' rated debt. After his adjustment, he estimates an embedded cost of debt of 4.29%.

yield on A-rated utility bonds was 5.71% and 5.93% for Baa-rated utility bonds. More recently, the average yields on A-rated and Baa-rated utility bonds were 5.20% and 5.41%, respectively. Should LUCo go to the capital markets to access debt capital, it is likely that the interest rate on that debt would be higher than the 4.97% cost rate that I have assumed in my recommended overall rate of return. I still believe an embedded cost of debt of 4.97% is reasonable and consistent with the current utility debt market.

IV. RESPONSE TO MR. COCHRANE

Q. Please summarize Mr. Cochrane's criticisms of your recommendations.

A. Aside from my embedded cost of debt, Mr. Cochrane takes issue with every aspect of my testimony. He takes particular issue with my recommended capital structure, my recommended proxy group, and the various analyses used to support my recommended ROE. In particular, he disagrees with my sustainable growth and multi-stage growth Discounted Cash Flow ("DCF") models, various inputs to my Capital Asset Pricing Model ("CAPM"), as well as my risk premium analysis.

Q. Please summarize Mr. Cochrane's criticisms of your recommended capital structure.

A. Mr. Cochrane argues that my recommended 50% common equity ratio is flawed. He claims that I arbitrarily rounded up the proxy group's 48.5% average equity ratio and criticizes me for ignoring industry norms, which suggest a higher equity ratio of 52.99% for water utilities like Liberty Water.

Q. How does Mr. Cochrane criticize the proxy group you used to support your recommendation?

A. Mr. Cochrane contends that my proxy group is inappropriate because it includes gas and electric utilities, which face significantly different risks than water utilities. He specifically points out that gas utilities deal with volatile commodity prices and differing regulatory risks, making them unsuitable comparators for Liberty Water, a pure water utility.

Q. Please respond.

A. My proxy group is reasonable because it provides a broader, more balanced representation of utility companies with similar risks to Liberty Water. While Mr. Cochrane criticizes the inclusion of gas utilities and a multi-utility, these companies still operate in regulated environments similar to water utilities, sharing comparable regulatory frameworks, risk profiles, and market conditions. My broader proxy group allows for a more comprehensive evaluation of the market and risk conditions facing Liberty Water, leading to a more accurate determination of the appropriate COE. His concerns should be disregarded.

Q. What does Mr. Cochrane say about the equity ratios you used for comparison?

A. Mr. Cochrane highlights that I overlooked the fact that the average common equity ratio for water utilities over the last decade is closer to 50.68%, and that recent years have shown equity ratios as high as 52.53%. He argues that these figures support his own recommended ratio of 52.99%, which he believes is in line with recent industry trends.

Q. Please respond.

A. Mr. Cochrane overlooks the fact that authorized equity ratios are only one observable metric. Importantly, the proxy group, which is used to assess the COE for Liberty Water. As shown on my Exhibit CCW-2 filed with my direct testimony, the proxy group's average equity ratio is 48.5%, while the median equity ratio is 46.8%. My recommended equity ratio of 50.0% is right in the middle of the range of equity ratios of the proxy group and the

authorized equity ratio for the industry. This demonstrates the reasonableness of my recommended equity ratio.

Q. Does Mr. Cochrane believe Staff has supported using gas or electric utilities in previous water utility rate cases?

A. No. Mr. Cochrane asserts that my inclusion of gas and electric utilities in the proxy group is not supported by past Commission decisions. He states that the Commission Staff has consistently used only water utilities in proxy groups for determining capital structures in water utility rate cases. Mr. Cochrane goes as far as saying as follows:

> Yes, I also reviewed Missouri water company rate case filings and Commission Orders going back to 2010 and could not find one instance where Staff proposed a water company proxy group with anything but water utilities.

Q. Is Mr. Cochrane correct in his assertion?

A. No, he is not. Mr. Cochrane clearly overlooks the proxy group I utilized in my testimony, on behalf of Staff, in the Confluence Rivers Utility Operating Company, Inc. rate case (Case No. WR-2023-0006). In that case, I utilized a proxy group of 13 companies including six water utilities and seven natural gas and multi-utilities. Notably, Mr. Cochrane reviewed the Report and Order in that case which was issued by this Commission on October 25, 2023. However, he overlooks this fact. In that case, my recommended hypothetical equity ratio, which was supported by the mixed utility proxy group, was adopted by the Commission. For Mr. Cochrane to state that Staff and/or the Commission have only utilized water utilities in a proxy group for a water utility rate case ignores reality. Mr. Cochrane's baseless assertions should be rejected in their entirety.

Q. Please summarize Mr. Cochrane's criticisms of your sustainable growth DCF analysis.

A. Mr. Cochrane has several concerns with my sustainable growth DCF analysis. First, he critiques the methodology I used to calculate the sustainable growth rates, arguing that my results are inconsistent with the inputs I selected. Specifically, he claims that my calculated sustainable growth DCF result is inconsistent with the expected ROE I use as an input. He calls my methodology "circular," because I use an expected ROE as part of my formula, yet the results of my analysis yield a lower ROE than the input. Additionally, Mr. Cochrane criticizes my sustainable growth DCF results for being lower than most state-authorized ROEs in the past 14 years. He points out that my results, which average around 8.21%, are lower than all but two historical authorized ROEs for water utilities, which he believes makes my results unreasonable.

Q. Please respond.

A. As a practical matter, all models available for estimating the COE are subject to limiting assumptions or other methodological constraints. Using multiple methods provides a more comprehensive, and therefore, more reliable perspective on investors' return requirements. For this reason alone, it is important to perform a thorough analysis, and apply informed, reasoned judgement in the interpretation of the results. The use of multiple DCF models and considering those results is consistent with that approach and financial texts.

For example, using the retention growth methodology is a recognized reasonable method for estimating sustainable dividend growth and should not be ignored.

As noted by the Chartered Financial Analyst ("CFA") curriculum text:

> We define the sustainable growth rate as the rate of dividend (and earnings) growth that can be sustained for a given level of return on equity, assuming that the capital structure is constant through time and that additional common stock is not issued. The reason for studying this concept is that it can help in estimating the stable growth rate in a Gordon growth model valuation, or the mature growth rate in a multistage DDM in which the Gordon growth formula is used to find the terminal value of the stock.
>
> The expression to calculate the sustainable growth rate is: $g = b \times ROE$[4]

Notably, the same CFA text observes that "caution is appropriate in assuming that dividends displace earnings."[5] However, that same text concludes that "[n]evertheless, the equation can be useful as a simple expression for approximating the average rate at which dividends can grow over a long horizon."[6] Further, *Brigham and Houston* state that, "Companies that retain a high percentage of their earnings rather than paying them out as dividends generate more retained earnings and thus need less external capital."[7] The sustainable growth model is a valid model and should be considered in determining Liberty Water's COE.

Q. In his Figure 1, Mr. Cochrane provides a scatterplot of authorized ROEs for water utilities dating back to 2010. What can be gleaned from that figure?

A. Clearly, my recommended range of 9.0% to 9.9% captures the overwhelming majority of authorized ROE decisions for water utilities. Further, Mr. Cochrane's Figure 1 clearly shows that a level of 9.0% is an acceptable low-end for a reasonable range.

[4] See CFA Program Curriculum, 2014, Level II, Volume 4, "Dividend Discount Valuation," at page 264.
[5] See CFA Program Curriculum, 2014, Level II, Volume 4, "Dividend Discount Valuation," at pages 265-266.
[6] *Ibid.* at 266.
[7] See *Fundamentals of Financial Management*, Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at page 558.

Q. Please summarize Mr. Cochrane's criticisms of your multi-stage DCF analysis.

A. Mr. Cochrane has several concerns with my multi-stage DCF analysis. First, he notes that my results, which average 8.18% and have a median of 8.02%, are significantly lower than historical authorized returns for water utilities. He points out that nine of the twelve results in my analysis fall below 8.65%, which he believes makes my estimates unreasonable when compared to past regulatory decisions. Additionally, he critiques my use of a 4.24% long-term growth rate in the final stage of the analysis, asserting that this growth rate is too low and does not align with historical economic performance or utility industry growth expectations.

Q. Please respond.

A. With regard to his comparison to historical authorized ROEs, I have responded above. Concerning his criticisms of my use of expected Gross Domestic Product ("GDP") growth rather than historical GDP growth, I would note that I relied on the consensus forecast for GDP growth, meaning it is completely rooted in investor expectations and considered as part of the investment decision making process. I provided projected GDP growth rates from several sources which corroborate my use of 4.24%. In the long run, earnings growth will be limited by several factors, including, but not limited to, competition and market saturation. In addition to the texts cited in my direct testimony in support of the premise that GDP is a long-term cap on growth, I would like to refer Mr. Cochrane to the following excerpts. First, as detailed in the CFA Institute's curriculum:

> For earnings growth to exceed GDP growth, the ratio of corporate profits to GDP must trend upward over time. It should be clear that the share of profits in GDP cannot rise forever. At some point, stagnant labor income would make workers unwilling to work and would also undermine demand, making further profit growth unsustainable. *Thus, in the long*

> *run, real earnings growth cannot exceed the growth rate of potential GDP*.[8] [Emphasis added.]

Additionally, Dr. Roger A. Morin details in his book, *New Regulatory Finance*, as follows:

> It is useful to remember that eventually all company growth rates, especially utility services growth rates, converge to a level consistent with the growth rate of the aggregate economy.
>
> * * *
>
> […] it is quite possible that a company's dividends can grow faster than the general economy for five years, *but it is quite implausible for such growth to continue into perpetuity*.[9] [Emphasis added.]

Thus, my use of projected GDP growth as an upper limit for company or industry growth is wholly defensible.

Q. Please summarize Mr. Cochrane's criticisms of your CAPM analysis.

A. Mr. Cochrane has several concerns with my CAPM analysis. First, he criticizes my use of historical Beta values in six of my nine CAPM calculations. He argues that using a 0.75 historical Beta instead of the current 0.85 Beta for my proxy group results in unreliable outcomes. He claims that the six results using the historical Beta should be ignored because they don't reflect the current market situation.

Second, Mr. Cochrane points out that my CAPM results based on the Kroll market risk premium are too low, with some results as low as 8.79% and 8.80%. He argues that these results are outliers and should be disregarded as they fall below the returns calculated in my other CAPM models.

[8] CFA Program Curriculum, 2014 Level II Vol.1, "Ethical and Professional Standards, Quantitative Methods, and Economics" Reading 15 – Economic Growth and the Investment Decision, pages 608-609.
[9] Roger A. Morin, New Regulatory Finance, pages 308-309.

Third, he takes issue with my market risk premium calculation, claiming I mixed historical market returns with a current projected Treasury rate, which he believes is an inconsistent methodology. He argues that this mismatch of historical data with forward-looking rates undermines the validity of my risk premium-derived market returns.

Lastly, Mr. Cochrane asserts that one of my nine CAPM cases, which uses a projected 4.30% 30-year Treasury bond rate, a current Beta of 0.85, and an expected market return of 12.09%, yields a more reasonable ROE of 11.03%. He believes this result is more aligned with current market conditions, while the other eight CAPM results should be ignored.

Q. Please respond.

A. As an initial matter, Mr. Cochrane is factually incorrect in his assertion that results as low as 8.79% and 8.80% are below the results for the last 14 years. This is discussed above and presented in my Exhibit CCW-1SR.

Mr. Cochrane's concern with my use of Beta estimates other than the five-year Beta estimates provided by *Value Line* overlooks an important factor: Betas based on the most recent five years of stock prices and volatility do not necessarily reflect current investor expectations. The COVID-19 pandemic, for example, had a significant impact on market volatility in early 2020, with the S&P 500 falling over 40%. This extreme market reaction has distorted the current Beta values, causing them to be abnormally high. Betas derived from such a short, tumultuous period may not be representative of the true, long-term systematic risk facing the proxy companies. For this reason, I used a long-term average Beta of 0.75 in several of my CAPM models, which smooths out short-term volatility and better reflects the true, long-term risks that investors consider when determining the COE. This approach aligns with standard practices in financial analysis, where longer historical data is often favored for Beta calculations

to avoid the distortions caused by short-term market anomalies. Therefore, while Mr. Cochrane prefers to use the 0.85 Beta derived from a five-year period, I believe that relying solely on this figure ignores the broader market context and results in an inflated estimate of the COE.

In addition, in my rebuttal testimony, I provided evidence in Table CCW-3R demonstrating that investor's perception of risk for utility stocks as measured by Beta has subsided significantly when looking at the most recent three years of prices and volatility. As I explained in that testimony, all beta estimates calculated over a 5-year historical price period (i.e. *Value Line* betas) will include the unprecedented volatility and market prices caused by the onset of the COVID-19 pandemic in early 2020. It is unreasonable to assume that those prices and resulting volatility resemble investor expectations going forward. Prior to the market fallout from the pandemic, utility beta estimates were at several year lows. Subsequent to the period of peak volatility from the pandemic, utility betas have actually declined back toward their normalized levels.

Q. Please respond to Mr. Cochrane's criticisms of your expected market return based on the real historical market return.

A. The use of historical data is perfectly acceptable in market risk premium estimation. For example, Dr. Morin states in his book, *New Regulatory Finance*:

> Although realized returns for a particular time period can deviate substantially from what was expected, it is reasonable to believe that long-run average realized returns provide an unbiased estimate of what were expected returns. This is the fundamental rationale behind the historical risk premium approach. Analysts and regulators often assume that the average historical risk premium over long periods is the best proxy for the future risk premium.

*** * ***

> From a statistical viewpoint, to the extent that the historical equity risk premium estimated follows what is known in statistics as a random walk, one should expect the equity risk premium to remain at its historical mean. The best estimate of the future risk premium is the historical mean. Since, as discussed in Chapter 4, there is little evidence that the MRP has changed over time, it is reasonable to assume that these quantities will remain stable in the future.
>
> * * *
>
> There are two broad approaches to estimating the risk premium: retrospective and prospective. Each has its own strengths and weaknesses, hence the need to utilize both methods.
>
> * * *
>
> Therefore, a regulatory body should rely on the results of both historical and prospective studies in arriving at an appropriate risk premium, data permitting. Each proxy for the expected risk premium brings information to the judgment process from a different light.
>
> * * *
>
> Faced with this myriad, and often conflicting, evidence on the magnitude of the risk premium, a regulator might very well be confused about the correct market risk premium. The author's opinion is that a range of 5% to 8% is reasonable for the United States with a slight preference for the upper end of the range.[10]

As described above, my inclusion of a historical component in estimating the market risk premium is perfectly acceptable.

Q. Mr. Cochrane's testimony seems to suggest that your use of historical betas was intentionally used to lower the results of your CAPM analysis. Is this an accurate characterization of what the intent was behind your choice to include historical average betas dating back to 2014?

[10] See Roger A. Morin, *New Regulatory Finance*, Pub. Util. Reports, Inc. (2006) at pages 156-157 and pages 162-163. (emphasis added)

A. Absolutely not. Prior to the onset of a global pandemic in early 2020, utility beta estimates were at historically low levels. During the 2018 to early 2020 period, I included the same historical betas as part of my CAPM analysis even though they were, not surprisingly, higher than current betas. For example, below is an excerpt from my direct testimony filed in a previous Ameren Missouri rate case.

> Q: What beta did you use in your analysis?
>
> A: As shown in Schedule CCW-16, the proxy group average and median Value Line beta estimates are 0.57 and 0.55, respectively. In my experience, a beta of this level is relatively low compared to previous years. Given the sudden drop in beta estimates over the last year or so, I have also calculated the average beta measured since 2014. The historical average Value Line beta since then is 0.68 and has ranged from 0.58 to 0.75.[11]

Mr. Cochrane's assertion that I incorporated long-term betas simply because they produce a lower result is out of touch with reality and should be rejected in its entirety.

Q. Do you have any additional comments regarding Mr. Cochrane's criticisms of your historical beta analysis?

A. Yes. Mr. Cochrane observes the reported betas by quarter provided in my Exhibit CCW-14, page 2, for the four-year period 2Q 2024 through the 2Q 2020 had an average of 0.80 and higher up to 0.85. He asserts that I ignored that four-year trend and decides that ten years of historical beta information is better, especially since the result is a lower average beta of 0.75. Mr. Cochrane has shown no evidence to support a "trend" over any four-year period. It is clear that the betas starting in 2Q 2020 started to reflect the volatility spike directly as a result of the global pandemic's impact on capital markets starting in March 2020.

[11] Missouri Public Service Commission, Case No. ER-2019-0335, Direct testimony of Christopher C. Walters, CFA at 44, December 4, 2019.

Unsurprisingly, prior to the onset of the global pandemic, utility betas were at historical low levels. There is no evidence provided to support a rising "trend" in utility betas. The evidence shows that Value Line betas are heavily influenced by stock prices and volatility that were present for two months back in 2020.

Q. Does this conclude your surrebuttal 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 *Surrebuttal 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 24th day of October 2024.

ADRIENNE JEAN NAVARRO
Notary Public - Notary Seal
STATE OF MISSOURI
Jefferson County
My Commission Expires: Mar. 22, 2025
Commission # 21989987

Notary Public

Liberty Water

Authorized ROEs of 8.91% or Lower

State	Company	Docket No.	Service Type	Case type	Order date	Decision type	Auth. ROE (%)	CE (%)
Illinois	Ameren Illinois	D-21-0365	Electric	Distribution	12/13/21	Fully Litigated	**7.36**	**51.00**
Illinois	Commonwealth Edison Co.	D-21-0367	Electric	Distribution	12/01/21	Fully Litigated	**7.36**	**48.70**
South Carolina	Blue Granite Water Service	2019-290-WS	Water/WW	Base rate case	03/25/20	Litigated	**7.46**	**47.09**
Illinois	Ameren Illinois	D-22-0297	Electric	Distribution	12/01/22	Fully Litigated	**7.85**	**50.00**
Illinois	Commonwealth Edison Co.	D-22-0302	Electric	Distribution	11/17/22	Fully Litigated	**7.85**	**49.45**
Vermont	Green Mountain Power Corp.	20-1407-TF	Electric	Vertically Integrated	08/27/20	Fully Litigated	**8.20**	**49.87**
Maine	Central Maine Power Co.	D-2018-00194	Electric	Distribution	02/19/20	Fully Litigated	**8.25**	**50.00**
Illinois	Ameren Illinois	D-20-0381	Electric	Distribution	12/09/20	Fully Litigated	**8.38**	**50.00**
Illinois	Commonwealth Edison Co.	D-20-0393	Electric	Distribution	12/09/20	Fully Litigated	**8.38**	**48.16**
Illinois	Ameren Illinois	D-17-0197	Electric	Distribution	12/06/17	Fully Litigated	**8.40**	**50.00**
Illinois	Commonwealth Edison Co.	D-17-0196	Electric	Distribution	12/06/17	Fully Litigated	**8.40**	**45.89**
Vermont	Green Mountain Power Corp.	C-22-0175-TF	Electric	Vertically Integrated	08/31/22	Fully Litigated	**8.57**	**49.98**
Vermont	Green Mountain Power Corp.	21-1963-TF	Electric	Vertically Integrated	08/31/21	Fully Litigated	**8.57**	**50.42**
Mississippi	Mississippi Power Co.	D-2017-AD-0112	Electric	Limited-Issue Rider	02/06/18	Settled	**8.58**	**50.45**
Connecticut	The United Illuminating Co.	D-22-08-08	Electric	Distribution	08/25/23	Fully Litigated	**8.63**	**50.00**
Illinois	Ameren Illinois	D-18-0807	Electric	Distribution	11/01/18	Fully Litigated	**8.69**	**50.00**
Illinois	Commonwealth Edison Co.	D-18-0808	Electric	Distribution	12/04/18	Fully Litigated	**8.69**	**47.11**
Connecticut	Aquarion Water Co. of Connecticut	22-07-01	Water	Base rate case	03/15/23	Litigated	**8.70**	**50.35**
New York	Natl Fuel Gas Distribution Cor	C-16-G-0257	Natural Gas	Distribution	04/20/17	Fully Litigated	**8.70**	**42.90**
Illinois	Ameren Illinois	D-23-0082	Electric	Distribution	12/14/23	Fully Litigated	**8.72**	**50.00**
South Dakota	Otter Tail Power Co.	D-EL18-021	Electric	Vertically Integrated	05/14/19	Fully Litigated	**8.75**	**52.92**
New York	Veolia Water New York Inc.	19-W-0168	Water	Base rate case	07/16/20	Settled	**8.80**	**48.00**
New York	Central Hudson Gas & Electric	C-17-E-0459	Electric	Distribution	06/14/18	Settled	**8.80**	**48.00**
New York	Central Hudson Gas & Electric	C-17-G-0460	Natural Gas	Distribution	06/14/18	Settled	**8.80**	**48.00**
New York	Consolidated Edison Company	C-19-E-0065	Electric	Distribution	01/16/20	Settled	**8.80**	**48.00**
New York	Consolidated Edison Company	C-19-G-0066	Natural Gas	Distribution	01/16/20	Settled	**8.80**	**48.00**
New York	Corning Natural Gas Corp.	C-20-G-0101	Natural Gas	Distribution	05/19/21	Fully Litigated	**8.80**	**48.00**
New York	KeySpan Gas East Corp.	C-19-G-0310	Natural Gas	Distribution	08/12/21	Settled	**8.80**	**48.00**
New York	NY State Electric & Gas Corp.	C-19-E-0378	Electric	Distribution	11/19/20	Settled	**8.80**	**48.00**
New York	NY State Electric & Gas Corp.	C-19-G-0379	Natural Gas	Distribution	11/19/20	Settled	**8.80**	**48.00**
New York	Rochester Gas & Electric Corp.	C-19-E-0380	Electric	Distribution	11/19/20	Settled	**8.80**	**48.00**
New York	Rochester Gas & Electric Corp.	C-19-G-0381	Natural Gas	Distribution	11/19/20	Settled	**8.80**	**48.00**
New York	The Brooklyn Union Gas Co.	C-19-G-0309	Natural Gas	Distribution	08/12/21	Settled	**8.80**	**48.00**
California	Golden State Water Co.	A17-04-002	Water	Cost of capital	03/22/18	Litigated	**8.90**	**57.00**
California	San Jose Water Co.	A17-04-001	Water	Cost of capital	03/22/18	Litigated	**8.90**	**53.28**
New York	Veolia Water New York Inc.	17-W-0528	Water	Base rate case	07/13/18	Settled	**8.90**	**46.00**
Arizona	Arizona Public Service Co.	D-E-01345A-19-	Electric	Vertically Integrated	11/02/21	Fully Litigated	**8.90**	**54.67**
Illinois	Ameren Illinois	D-19-0436	Electric	Distribution	12/16/19	Fully Litigated	**8.91**	**50.00**
Illinois	Commonwealth Edison Co.	D-23-0055	Electric	Distribution	12/14/23	Fully Litigated	**8.91**	**50.00**
Illinois	Commonwealth Edison Co.	D-19-0387	Electric	Distribution	12/04/19	Fully Litigated	**8.91**	**47.97**
						Average	**8.56**	**49.23**
						Median	**8.74**	**49.08**

Source: S&P Capital IQ Pro.