CONFIDENTIAL DESIGNATIONS

The Empire District Electric Company d/b/a Liberty

Case No. ER-2024-0261

RE: Rebuttal Testimony of Daniel S. Dane, portions of pages 12-13 and 29-30

The information is designated "Confidential" in accordance with Commission Rule 20 CSR 4240-2.135(2)(A)5 and 8 due to the nature of the material regarding reports, work papers, or other documentation related to work produced by internal or external auditors, consultants, or attorneys, as well as trade secrets, as the information contains private and confidential financial information of a publicly-traded corporation. The confidentiality shall be maintained consistent with the referenced Rule and/or Section 386.480, RSMo., as the case may be.

Exhibit No.: _____
Issues: Capital Structure, ROE, Cost of Debt
Witness: Daniel S. Dane
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: The Empire District Electric Company d/b/a Liberty
Case No.: ER-2024-0261
Date Testimony Prepared: August 2025

Before the Public Service Commission of the State of Missouri

Rebuttal Testimony

of

Daniel S. Dane

on behalf of

The Empire District Electric Company d/b/a Liberty

August 18, 2025

DENOTES CONFIDENTIAL
20 CSR 4240-2.135(2)(A)5, 8

PUBLIC VERSION

TABLE OF CONTENTS
FOR THE REBUTTAL TESTIMONY OF DANIEL S. DANE
THE EMPIRE DISTRICT ELECTRIC COMPANY D/B/A LIBERTY
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2024-0261

SUBJECT **PAGE**

REBUTTAL TESTIMONY OF DANIEL S. DANE
THE EMPIRE DISTRICT ELECTRIC COMPANY D/B/A/ LIBERTY
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2024-0261

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Daniel S. Dane. My business address is 293 Boston Post Road West, Suite 500, Marlborough, Massachusetts 01752.

Q. Did you also provide direct testimony in this matter on behalf of The Empire District Electric Company d/b/a Liberty ("Liberty" or the "Company")?

A. Yes.

Q. What is the purpose of your rebuttal testimony in this proceeding before the Missouri Public Service Commission ("Commission")?

A. The purpose of my rebuttal testimony is to respond to the Direct Testimony of Christopher C. Walters on behalf of the Staff of the Commission ("Staff") and the Direct Testimony of David Murray on behalf of the Office of the Public Counsel ("OPC") as it relates to the appropriate authorized return on equity ("ROE"), capital structure, and cost of debt for Liberty in this proceeding. I also respond to the Direct Testimony of Staff witness James Busch and OPC witness Dr. Geoff Marke as it relates to proposed reductions in Liberty's earnings due to concerns over the Company's customer billing system.

Q. Are you sponsoring any exhibits as part of your rebuttal testimony?

A. Yes, I am sponsoring **Rebuttal Schedules DSD-1 through DSD-10** to support my rebuttal testimony, which were prepared by me or under my direction.

Q. How is the remainder of your rebuttal testimony organized?

A. The remainder of my rebuttal testimony is organized as follows:

- In Section II, I provide a summary and overview of my rebuttal testimony.
- In Section III, I discuss relevant benchmarks that demonstrate that Staff's and OPC's ROE recommendations fail to reflect a fair return for Liberty. Specifically, I discuss how Staff's and OPC's ROE recommendations compare with recent authorized returns for U.S. vertically integrated electric utilities and how conditions in the economy and capital markets today compare to those in July 2020 when the Commission last set the authorized ROE for Liberty.
- In Section IV, I provide the updated results of my ROE analyses.
- In Section V, I respond to Mr. Murray's testimony with respect to the appropriate capital structure and cost of debt for Liberty in this proceeding. In his direct testimony, Mr. Walters accepted Liberty's proposed capital structure and cost of debt.
- In Section VI, I respond to Staff's and OPC's recommendations to reduce Liberty's earnings as a performance penalty.
- In Section VII, I respond to Mr. Walters' testimony related to his ROE analyses and recommendation for Liberty in this proceeding.
- In Section VIII, I respond to Mr. Murray's testimony related to his ROE analyses and recommendation for Liberty in this proceeding.
- In Section IX, I summarize my conclusions and recommendations.

II. SUMMARY AND OVERVIEW

Q. Has your cost of capital recommendation been updated in this proceeding?

A. Yes. While, as discussed below, my recommended ROE range of 9.75 percent to 11.00 percent and the Company's proposed ROE of 10.00 percent has not changed, the Company was ordered to True-up its capital structure and cost of debt to reflect updated values for those cost of capital components as of March 31, 2025. The True-up capital structure and cost of capital are provided in Figure 1.

Figure 1: Capital Structure and Cost of Capital (March 31, 2025 True-up)

	Percent	Cost Rate	Weighted Cost
Common Equity	53.0%	10.00%	5.30%
Long-term debt	47.0%	4.53%	2.13%
Total			7.43%

Q. Please provide a summary of the ROE witnesses' recommendations in this case.

A. The following table summarizes the ROE witnesses' ROE and equity ratio recommendations in this proceeding:

Figure 2: Summary of Cost of Capital Recommendations

	Dane Rebuttal (Liberty)	Walters (Staff)	Murray (OPC)
ROE Range	9.75 – 11.00%	9.00 - 10.00%	9.00 – 9.50%
ROE Recommendation	10.00%	9.50%	9.25%
Equity Ratio Recommendation	53.00%	53.10%	45.00%

Staff also recommends a penalty equivalent to a 1.00 percent reduction in ROE, which effectively reduces Staff's ROE to 8.50 percent. Mr. Murray states that his 9.25 percent recommendation is lower than ROEs he has recommended in other utility cases "due to Liberty's significant operational and customer service problems."[1]

[1] Direct Testimony of David Murray, at p. 3.

Q. Please summarize your key rebuttal testimony findings.

A. The key findings in my rebuttal testimony are as follows:

- Since the Commission's July 1, 2020 order in ER-2019-0374, interest rates, based on the 30-year Treasury bond, have increased from 1.47 percent to 4.92 percent (i.e., 345 basis points), and, based on Baa-rated utility bonds, have increased from 3.47 percent to 6.17 percent (i.e., 270 basis points). In addition, capital needs in the electric utility industry have climbed and will only continue to do so as participants across the country invest to meet growing electricity demand. These indicators together demonstrate an increase in Liberty's cost of capital and a continued and growing need to support the Company's access to capital. The status quo (or a decrease from the status quo, as Mr. Murray recommends), is simply not reflective of a fair return for Liberty.
- Penalty reductions in the authorized ROE for Liberty, as proposed by both Staff and OPC, would result in a substantial and lasting impairment on the Company's ability to earn a fair return, reducing the Company's creditworthiness and harming the ability of the Company to attract capital on reasonable terms. Mr. Busch states that a 100 basis point reduction in ROE would "be seen as a signal to customers" and "be a signal to other utilities" regarding performance issues.[2] It is important to understand, however, that approval of these proposals will also be a signal to investors and affect their perception of the regulatory environment in Missouri, sending a strong negative message about the attractiveness of funding electric infrastructure in Missouri.

[2] Direct Testimony of James A. Busch, at p. 8.

- Nothing in Mr. Walters' or Mr. Murray's direct testimony has caused me to revise my ROE or capital structure recommendations in this proceeding. In fact, primary economic risk factors currently impacting the cost of capital that I identified in my direct testimony, namely inflation and interest rates, remain elevated compared to recent historical levels. Market conditions also support the use of multiple models, as well as the application of analytical judgment as to where, within a reasonable range, Liberty's ROE reasonably falls. Further, I have updated the analyses I performed in my direct testimony with market data through June 30, 2025, and they continue to support my recommended range of 9.75 percent to 11.00 percent and the Company's requested ROE of 10.00 percent.
- In his direct testimony, Mr. Walters has adopted the Company's proposed capital structure in his cost of capital analysis. OPC, on the other hand, recommends a hypothetical capital structure with a common equity ratio of 45 percent that is arbitrary, not based on any factual or empirical analysis, and misaligned with authorized capital structures for other U.S. vertically-integrated electric utilities. Mr. Murray's testimony that Liberty's parent company, Algonquin Power & Utilities Corp. ("APUC"), announced in 2017 that the *target* equity ratio for its utility subsidiaries was in the range of 45-50 percent is irrelevant to the determination of an appropriate capital structure in this case. Mr. Murray's recommendation is not based on how Liberty is actually capitalized; is inconsistent with the merger condition that requires use of the "most economical" capital structure among Liberty, Liberty Utilities Co. ("LUCo") and APUC; is substantially below the average actual and authorized

common equity ratios for the operating utilities held by the proxy group; and would result in substantially increased financial risk for Liberty. Proposed capital structure analyses through the update period ending March 31, 2025 result in a slight decrease in Liberty's equity ratio (from 53.10 percent to 53.00 percent) and continue to demonstrate that Liberty's proposed capital structure is "most economical" when compared to LUCo's and APUC's actual capital structures.

- While there are several similarities between mine and Mr. Walters' ROE analyses, Mr. Walters makes certain unreasonable assumptions and relies on certain flawed specifications of models that result in an unreasonably low ROE recommendation. Focusing on Mr. Walters' more reasonable specifications of his models results in an ROE that is within my recommended range of results, albeit higher than the Company's proposed 10.00 percent ROE. In addition, Mr. Walters has not adequately considered Liberty's elevated level of business risk compared to the proxy companies.
- Mr. Murray's analytical assumptions lead him to falsely conclude that the cost of equity ("COE") is substantially below the allowed ROE. His analytical results – which Mr. Murray ultimately abandons – create a misplaced anchor against which to compare his ROE recommendation. This is demonstrated by 1,080 regulatory decisions in the U.S. since January 1, 2010 in which no regulator has approved an ROE as low as Mr. Murray's COE results, as well as the fact that both my and Mr. Walters' analyses support an ROE of 10.00 percent.

III. RELEVANT BENCHMARKS FOR ASSESSING COST OF CAPITAL RECOMMENDATIONS

Q. What do you address in this section of your rebuttal testimony?

A. In this section of my testimony, I discuss relevant benchmarks that demonstrate that the cost of capital has increased for Liberty since the Commission's decision in Case No. ER-2019-0374. Staff's cost of capital recommendation (before ROE penalties) does not fully reflect this increase. OPC's cost of capital recommendation, which implies a *decrease* in the cost of capital since Case No. ER-2019-0374, is simply not supported by objective benchmarks of utility risk and return.

Q. Please summarize the ROE analyses and recommendations of Staff and OPC in this proceeding.

A. Staff witness Walters recommends an authorized ROE of 9.50 percent for Liberty, while OPC witness Murray's ROE recommendation is 9.25 percent. Further, Staff proposes a 100 basis points ROE penalty that would result in an impairment of the Company's ROE to 8.50 percent until the Company's next rate case, while Mr. Murray's 9.25 percent recommendation also reflects a penalty "due to Liberty's significant operational and customer service problems."[3] Both ROE witnesses rely on the results of multiple ROE models to inform their recommendations, although Mr. Murray ultimately abandons his analytical results. Figure 3 below provides a summary of the model results presented by Messrs. Walters and Murray, as well as Staff's proposed ROE penalty, which is presented by Mr. Busch.

[3] Direct Testimony of David Murray, at p. 3.

Figure 3: Summary of Staff and OPC ROE Results

Model	Walters (Staff)	Murray (OPC)
Constant Growth DCF	9.13 - 10.63%	N/A
Multi-Stage DCF	8.38 - 8.59%	7.80 – 8.30%
CAPM	7.71 – 10.36%	7.80 - 9.00%
Risk Premium	9.98 – 10.23%	7.10 – 9.23%
Authorized ROEs for electric utilities	N/A	9.75% (within range of +/- 100 bps)
Range of Results	9.00 – 10.00%	9.00 – 9.50%
Recommendation	**9.50%**	**9.25%**
ROE Penalty	**(1.00%)**	**Reflected in Recommendation**
Adjusted Recommendation	**8.50%**	**9.25%**

Q. Are authorized returns in other jurisdictions a relevant benchmark to evaluate the reasonableness of Staff's and OPC's ROE recommendations?

A. Yes. The comparability standard of the *Hope* and *Bluefield* cases, discussed in my direct testimony, establishes that authorized ROEs must be comparable to returns on other investments with commensurate risk. The regulatory decisions of other commissions provide a basic test of reasonableness and a benchmark that investors consider in assessing the authorized ROE of one utility against the returns available from other regulated utilities with comparable risk. To that point, Mr. Murray refers to authorized returns for electric utilities in other jurisdictions in discussing his ROE recommendation for Liberty in this proceeding.

Q. How do Mr. Walters' and Mr. Murray's ROE recommendations compare to the authorized ROEs for integrated electric utilities across the U.S.?

A. The authorized ROEs for vertically integrated electric utilities over the period from January 2024 through July 2025 range from 9.26 percent to 10.50 percent, with an

average of 9.82 percent.[4] The majority of authorized returns for vertically integrated electric utilities (36 out of 58 decisions, or 62 percent) over this period have been greater than 9.50 percent. Mr. Walters' and Mr. Murray's ROE recommendations of 9.50 percent and 9.25 percent, respectively, are 32 to 57 basis points lower than the average of authorized returns for integrated electric utilities nationwide, suggesting that they believe Liberty has lower risk than other integrated electric utilities across the U.S. However, as the risk assessment in my direct testimony shows,[5] Liberty has above average business risk, and current market conditions indicate upward pressure on the Company's cost of equity, suggesting an ROE above national averages is warranted. When Staff's 1.00 percent ROE penalty is considered, Staff's recommended ROE of 8.50 percent, which would remain in place until the Company's next base rate case, would be 132 basis points below the average allowed ROE for vertically integrated electric utilities since January 2024, and more than 75 basis points lower than the lowest allowed ROE in that period. In fact, it would be the lowest allowed ROE in the U.S. in the last 15 years.[6]

[4] Source: Regulatory Research Associates, accessed July 16, 2025.
[5] Direct Testimony of Daniel S. Dane, at pp. 35-43.
[6] Excludes an ROE set pursuant to an automatic formula in Vermont in 2020. In that case, the Vermont Public Utility Commission ("VPUC") made it clear that the formulaically-established ROE was driven by the drop in interest rates caused by Federal intervention related to COVID-19 pandemic. The VPUC found that "[u]nder the MYRP [Multi-Year Rate Plan], the authorized ROE is calculated based on fluctuations in the yield on 10-Year Treasury Notes, which has dropped precipitously as a result of disruptions to financial markets caused by the COVID-19 pandemic. The Commission emphasizes that the reduction of GMP's ROE from 9.06% to 8.20% is based exclusively on the results of the ROE formula set forth in the MYRP." Vermont Public Utility Commission, Order Setting Base Rates for Fiscal Year 2021, Case No. 20-1407-TF, August 27, 2020.

Q. Have average authorized ROEs for vertically integrated utilities changed since the conclusion of Case No. ER-2019-0374?

A. Yes. Average authorized ROEs for vertically integrated utilities have increased since the Commission's decision in Case No. ER-2019-0374, from 9.70 percent[7] to 9.82 percent.

Q. How do current conditions in the economy and capital markets compare to conditions when the Commission approved Liberty's current authorized ROE in Case No. ER-2019-0374?

A. The cost of capital has increased for all companies, including regulated utilities, since the Commission approved Liberty's current authorized ROE of 9.25 percent. As shown in Figure 4 below, interest rates on 30-year Treasury bonds have increased by 345 basis points and yields on utility bonds have increased by 270 to 289 basis points since the Commission's decision in that 2019 rate case was issued on July 1, 2020. In addition, core inflation increased substantially in 2022 and 2023 and remains well above the average inflation rate in the decade following the Great Recession and financial crisis of 2007-2009. The Federal Reserve has tightened monetary policy by raising short-term interest rates such as the federal funds rate, which is significantly higher than it was in July 2020, to combat inflationary pressure that was induced by supply chain disruptions and stimulus from both fiscal and monetary policy in response to the COVID-19 pandemic.

[7] Reflects average authorized ROEs for the period January 1, 2019 through July 1, 2020.

Figure 4: Comparison of Economic and Market Indicators[8]

Indicator	July 1, 2020	June 30, 2025
30-year Treasury bond yield	1.47%	4.92%
Moody's A-rated Utility bond yield	3.09%	5.98%
Moody's Baa-rated Utility bond yield	3.47%	6.17%
Core Inflation Rate – Year over Year	1.20%	2.90%
Federal Funds Rate (Upper Limit)	0.25%	4.50%
Authorized ROEs – Vertically Integrated Electric Utilities	9.70%	9.82%

Q. What do these benchmarks demonstrate about the ROE recommendations of Mr. Walters and Mr. Murray?

A. While certain of the modeling assumptions used to derive Mr. Walters' ROE recommendation are in some ways similar to those I have relied on, Mr. Walters' ROE recommendation of 9.50 percent is 25 basis points below the low end of my recommended ROE range for Liberty, and 32 basis points below current levels of authorized ROEs for vertically integrated electric utilities. His recommendation, therefore, does not take into account the company-specific business risks of Liberty relative to the proxy group, nor does it fully reflect market conditions with regard to inflation and projected interest rates. Mr. Murray discards his analytical results and instead bases his ROE proposal on his recommendations in other Missouri cases. This approach is untethered from objective regulatory commission and market benchmarks, and results in a cost of capital recommendation that simply is not reflective of a fair

[8] Sources: Bloomberg Financial and Federal Reserve Bank of St. Louis, as of July 22, 2025. Treasury and bond yields are based on a 30-day average as of the indicated dates. Authorized ROEs – VI Electric Utilities are the averages of authorized ROEs in January of the prior year through the date indicated.

return for Liberty. Specifically, and in conjunction with Mr. Murray's capital structure recommendation for Liberty, his ROE recommendation is not reasonably comparable to returns available to investors in companies with similar risk as Liberty, and fails the comparability standard of *Hope* and *Bluefield*.

Q. Mr. Murray performs an assessment of "Records and Analysis Demonstrating Reasonableness," from which he concludes that APUC's own estimation of its COE is close to his assessed COE. What is your response?

A. Mr. Murray concludes from a review of ** [redacted] ** First of all, there is an inherent circularity and other issues associated with relying on parent company investor presentation materials for the purpose of establishing the ROE in a rate case. Setting those concerns aside, however, Mr. Murray appears to have taken APUC's analysis out of context. ** [redacted] ** these assumptions are at odds with reasonable assumptions used in, for example, the Constant Growth DCF model and, as such, would fail to provide reasonable estimations of returns required for electric operating companies of similar risk to Liberty. ** [redacted] ** which is much higher than any of the ROE recommendations put forward by experts in this proceeding. These results, both on the low and high end, demonstrate the importance of understanding the assumptions underlying the data

points used to corroborate ROE recommendations in this proceeding, and they also show that APUC's WACC analysis does not, in fact, corroborate Mr. Murray's COE. Further, focusing on comments made by Liberty or its parent companies as to the cost of capital undermines the concept of peer analysis in cost of capital studies of the comparable return component of the *Hope* and *Bluefield* standards. As such, I recommend the Commission put no weight on Mr. Murray's "Records and Analysis Demonstrating Reasonableness."

Q. Mr. Murray also suggests, at page 48 of his direct testimony, that a "simple test of reasonableness" based on the CFA curriculum shows his COE estimates are "rational and logical." What is your response to that assertion?

A. Mr. Murray asserts that the CFA curriculum "suggests" that adding a "3% to 4% risk premium" to a company's bond yield produces an "objective cost of equity." Fundamentally, Mr. Murray has provided no evidence to support the applicability of what the CFA curriculum "suggests" to the determination of the ROE in this proceeding (i.e., if the risk premium is meant for real world applications or simply for CFA practice problems, if it applies in all markets and time periods, etc.). Setting those concerns aside, the CFA curriculum appears to contradict, not support Mr. Murray's cost of equity analysis, which results in a COE of 7.80 to 8.50 percent. Based on the May 2025 Moody's 'Baa' bond yield of 6.23 percent that Mr. Murray establishes, the low end of his COE range would result in an equity risk premium of only 1.57 percent, which is far below what the CFA curriculum "suggests," and which would fail to compensate investors for the residual risks of equity ownership. For that reason, I do not agree that Mr. Murray's approach demonstrates the reasonableness of his analysis, and the Commission should reject it as it is not corroborative of the ROE for Liberty. Rather, I

recommend the Commission consider appropriate and objective benchmarks for a reasonable ROE in this proceeding, such as the significant increase in interest rates and prevailing levels of authorized ROEs for vertically-integrated electric utilities, discussed above.

IV. UPDATED ROE ANALYSES

Q. Have you updated your ROE analyses?

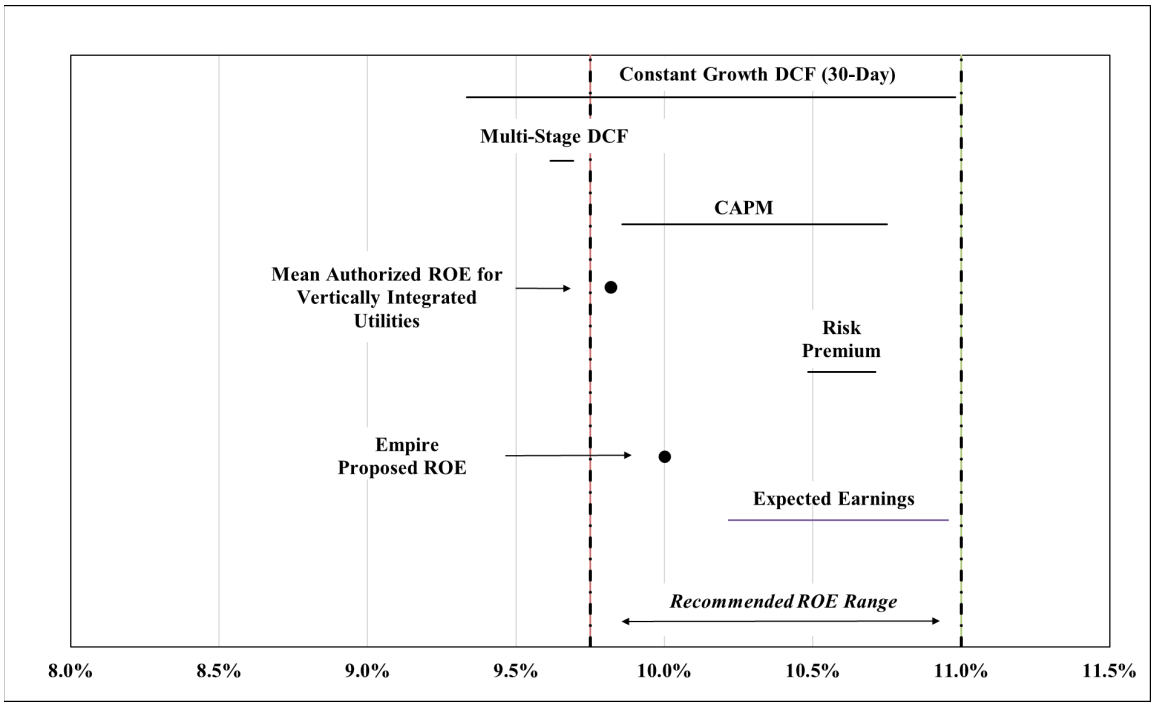
A. Yes. In preparing my rebuttal testimony, I updated the results of the various financial models used to estimate the cost of equity in my direct testimony (which relied on data as of August 31, 2024) based on market data through June 30, 2025. I have excluded two companies from my original proxy group that no longer pass all of the screening criteria. These are Edison International Corp. (which announced potential material liability for the Eaton Fire in California in January 2025) and TXNM Energy, Inc. (which announced in May 2025 that it was being acquired by Blackstone Group). I also included the results of a Multi-Stage DCF model in response to the testimony of Messrs. Walters and Murray. The updated results are summarized in Figure 5 below.

Figure 5: Summary of Cost of Capital Analyses

Constant Growth DCF Results			
	Low	Mean	High
30-day Average	9.33%	10.24%	10.98%
90-day Average	9.28%	10.19%	10.93%
180-day Average	9.35%	10.26%	10.99%
Multi-Stage DCF Results			
	Mean		
30-day Average	9.67%		
90-day Average	9.62%		
180-day Average	9.69%		
Capital Asset Pricing Model (Subset of S&P 500 Companies)			
	Current Risk-Free Rate	2025-26 Projected Risk-Free Rate	2027-2031 Projected Risk-Free Rate
Value Line Betas	10.14%	10.08%	10.03%
Bloomberg Betas	9.98%	9.92%	9.86%
Capital Asset Pricing Model (Historical Market Return)			
	Current Risk-Free Rate	2025-26 Projected Risk-Free Rate	2027-2031 Projected Risk-Free Rate
Value Line Betas	10.75%	10.70%	10.64%
Bloomberg Betas	10.57%	10.51%	10.45%
Risk Premium			
	Current Risk-Free Rate	2025-26 Projected Risk-Free Rate	2027-2031 Projected Risk-Free Rate
Risk Premium Results	10.71%	10.60%	10.48%
Expected Earnings			
Average	10.96%		
Median	10.22%		

Below is a chart showing these analytical results, which is an update to Figure 2 from my direct testimony.

Figure 6: Summary of Cost of Equity Results (Update to Figure 2 from Direct Testimony)



Q. What conclusions do you draw from these updated analyses?

A. Based on the updated analyses presented above, I continue to find a reasonable range of ROE results for Liberty is from 9.75 percent to 11.00 percent, and I continue to find that an authorized ROE for the Company above the midpoint of this range would be reasonable, although Liberty is requesting an authorized ROE of 10.00 percent in this proceeding in order to mitigate the effect on ratepayers of this filing.

V. CAPITAL STRUCTURE AND COST OF DEBT

Q. Have you revised your capital structure analysis and cost of debt for the Company since the filing of your direct testimony?

A. Yes. Since the Company's True-up period in this proceeding ends March 31, 2025, I updated my capital structure analysis through that date. That analysis, which is provided in **Rebuttal Schedule DSD-8** shows that: (1) Liberty's equity ratio has decreased slightly from 53.10 percent to 53.00 percent, reflecting a planned debt issuance in 2025; and (2) Liberty's capital structure continues to be the "most economical" when compared to the capital structures of APUC and LUCo.

In addition, the Company revised its cost of debt analysis to include the cost of debt for the planned debt issuance. The Company will reflect the March 31, 2025, capital structure and cost of debt in its True-up testimony to be filed in September 2025.

Q. Please summarize Mr. Murray's capital structure testimony and recommendation for Liberty.

A. Mr. Murray opposes the use of Liberty's proposed capital structure. As an alternative, Mr. Murray proposes a hypothetical capital structure of 45 percent common equity and 55 percent long-term debt. He supports this recommendation by reference to the low end of the target capital structure that APUC communicated to LUCo debt investors in 2017 of 45-50 percent equity for its regulated utility subsidiaries.[9] Mr. Murray also testifies that an equity ratio of 45 percent is generally consistent with APUC's consolidated common equity ratio as of March 31, 2025.[10] Even though he "still consider[s] LUCo as a potential appropriate proxy,"[11] Mr. Murray's approach to capital

[9] Direct Testimony of David Murray, at p. 8.
[10] *Id*., at p. 9.
[11] *Id*., at p. 8.

structure in this case contrasts with his capital structure recommendations in the Company's two most recent rate cases, where Mr. Murray based his capital structure proposal on LUCo's capital structure. By comparison, in his direct testimony Staff witness Walters accepts Liberty's proposed capital structure, although he incorrectly compares it to the holding company capital structures for the proxy group companies, which is not the appropriate point of comparison as discussed below.

Q. Is basing a utility's authorized capital structure on the low end of the range of targeted capital structures disclosed in an outdated investor presentation, as Mr. Murray has done, an appropriate basis to establish the cost of capital in a rate case?

A. No. There are numerous issues with that approach. Among those issues is that the presentation was made in 2017, under different market conditions and under different corporate leadership. For perspective, APUC's regulated utility group's capital expenditures have more than doubled since 2017.[12] In addition, Mr. Murray's hypothetical 45 percent equity ratio simply is not reflective of the actual capital structure at any level of the Company (i.e., Liberty, LUCo, or APUC). There is no empirical basis for Mr. Murray's recommendation, and, even if the Commission were to decide to set Liberty's capital structure based on a 2017 investor presentation (which I strongly recommend against), there is further no basis to arbitrarily set the equity ratio at the low end of the range, particularly when that low end is more than 7.00 percentage points below prevailing levels of authorized equity ratios for utility companies.

[12] In 2018, Liberty Utilities Group (Regulated assets) reported capital expenditures of $351.6 million for the 12 months ended December 31, 2018. In 2024, the Regulated Services Group reported capital expenditures of $756.2 million for the 12 months ended December 31, 2024. *See,* APUC's 2018 Annual Report at 35, and 2024 Annual Report, at 39.

Q. What additional benchmark does Mr. Murray assert supports his recommendation?

A. Mr. Murray states that "APUC's cost of capital can at least be used to test the reasonableness of ROR recommendations in this case, as well as to test the reasonableness of recommended ratemaking common equity ratios."[13] Mr. Murray calculates APUC's common equity ratio to be 42.95 percent.[14] As I will discuss below, there are errors in his analysis that artificially reduce APUC's equity ratio.

Q. Does Mr. Murray provide other benchmarks that he ignores in his final recommendation?

A. Yes. Mr. Murray identifies that, prior to the acquisition by APUC, "Liberty accessed the capital markets directly based purely on its own risk profile,"[15] and that "[b]efore APUC acquired Liberty, Liberty typically maintained a common equity ratio of around 50%."[16] In his final recommendation, however, Mr. Murray ignores this data point, and instead opts for the low end of a target range disclosed in a 2017 investor presentation. While I am not suggesting that the Commission authorize an equity ratio based on Liberty's 2016 pre-acquisition capital structure, especially when it has current evidence before it that Liberty's equity ratio is 53.00 percent and the "most economical" when compared to its parent companies, 50.00 percent is closer to industry averages for regulated utility operating companies and avoids arbitrarily picking the low end of Mr. Murray's range. Mr. Murray, however, ignores this data point.

[13] Direct Testimony of David Murray, at p. 21.
[14] *Id*., at p. 20.
[15] *Id*., at p. 19.
[16] *Ibid*.

Q. If Mr. Murray formerly based his capital structure recommendations on LUCOs capital structure, and continues to "still consider LUCo as a potential appropriate proxy," is it reasonable to now switch to APUC as the appropriate benchmark?

A. No, for four primary reasons. First, as a primary matter, I believe the capital structure for Liberty should be based on its proposed capitalization unless such capitalization is shown to be unreasonable compared to other benchmarks such as authorized capital structures for other utility operating companies. Second, even ignoring whether APUC (or LUCo, for that matter), is an appropriate benchmark for Liberty, my analysis demonstrates that Liberty's proposed capital structure reflects the lowest equity ratio among Liberty, LUCo, and APUC. Liberty's capital structure, therefore, is conservative relative to its parent companies. Mr. Murray concludes that APUC's equity ratio is lower than Liberty's, but that is due to a miscalculation on his part. Third, there is nothing that has changed in LUCo's business model since Liberty's prior rate cases that would make it *less* appropriate for comparison to Liberty. In fact, Mr. Murray "still consider[s] LUCo as a potential appropriate proxy."[17] It's equity ratio, however, has increased (and, per Mr. Murray's analysis, is generally consistent with Liberty's capital structure, if not reflective of a greater equity ratio). As such, it no longer comports with Mr. Murray's definition of an appropriate utility operating company capital structure. That definition, however, is at odds with almost any other reasonable benchmark, including my and Staff's recommendations, industry equity ratios, and the actual capital structures at Liberty, LUCo, and APUC. Fourth, APUC is a utility holding company, not a utility operating company. While APUC has sold the majority of its non-regulated business, it continues to reflect a different risk profile than Liberty

[17] *Id.*, at p. 8.

or LUCo, and, as such, makes for an inappropriate basis on which to set Liberty's capital structure. To this point, Mr. Murray acknowledges that "APUC's capital structure still includes legacy capital issued when APUC was a diversified utility holding company…"[18]

Q. Mr. Murray states at page 30 of his direct testimony that "[i]t is wholly inappropriate to directly or indirectly charge utility ratepayers any increased costs caused by APUC's financial weakness." What is your response?

A. Setting aside Mr. Murray's characterization of APUC's financial position, Mr. Murray does not follow his own directive, as he seeks to apply APUC's capital structure to Liberty but reflects *greater* financial risk (i.e., more leverage) than is attributed to APUC by ratings agencies, as described below. As such, not only is Mr. Murray applying APUC's financial position to Liberty, but he is doing so in a way that introduces additional financial risk.

Q. Have the ratings agencies commented on APUC's capital structure since the sale of the Renewable Energy Group?

A. Yes. Specifically, the ratings agencies have commented on APUC's need to deleverage in light of the Renewable Energy Group divestiture. As noted by Fitch in May 2025 (i.e., after the March 31, 2025 update period in this case):

> *Algonquin Power & Utilities Corp.'s (APUC) ratings and Stable Outlook reflect the expectation that funds from operations (FFO) leverage will stay below the negative sensitivity threshold, following divestiture of non-regulated businesses.* ***APUC's Stable Rating Outlook and ratings affirmation is contingent on the company's ability to adjust its capital structure and bring leverage down in line with the current ratings following the sale of its Renewable Energy Group.***[19]

[18] *Ibid*.
[19] FitchRatings, "Rating Report: Algonquin Power & Utilities Corp.," May 1, 2024. **Emphasis added**.

Q. What are your concerns with Mr. Murray's calculation of APUC's capital structure as of March 31, 2025?

A. Mr. Murray testifies that the S&P credit process is relevant to the determination of Liberty's cost of capital, and specifically points to S&P's group rating methodology.[20] However, in analyzing APUC's capital structure, Mr. Murray fails to adjust APUC's capital structure to account for key reclassifications of debt and equity that are made as part of S&P's ratings process: (1) reclassification of preferred equity (50 percent of preferred equity as long-term debt and 50 percent as equity);[21] (2) reclassification of subordinated unsecured notes (50 percent of APUC's hybrid debt is reclassified to common equity and 50 percent remains in long-term debt);[22] and (3) inclusion of non-controlling interests in equity. These adjustments are key inputs to S&P's assessment of APUC's credit ratios and should be reflected in any such analysis of the capital structure. In addition, Mr. Murray incorrectly includes APUC's short-term bank credit facilities in the calculation of total long-term debt.[23] My analysis of APUC's capital structure, provided in **Rebuttal Schedule DSD-8**, makes these adjustments, resulting in an equity ratio of 53.50 percent, which is higher than the 53.00 percent at Liberty. As such, Mr. Murray has not considered the "most economical" capital structure for Liberty, as required by the Commission's order approving the acquisition of Liberty by APUC.

[20] Direct Testimony of David Murray, at pp. 17-18.
[21] S&P Global Ratings, "General Criteria – Hybrid Capital: Methodology And Assumptions," February 10, 2025.
[22] *Ibid*.
[23] For example, Mr. Murray includes bank facilities with maturity dates within the next 12 months (as of March 31, 2025) in long-term debt. These amounts should be classified as short-term debt. *See*, APUC's Unaudited Interim Condensed Consolidated Financial Statements as of March 31, 2025.

Q. You mentioned S&P's assessment of APUC. What equity ratio does S&P use in its credit analysis of APUC?

A. S&P uses an equity ratio of 53.66 percent in its credit assessment of APUC,[24] which is close to but even greater than the figure I analyzed in **Rebuttal Schedule DSD-8**. This demonstrates that the market considers APUC to have much less leverage than Mr. Murray's assessment.

Q. After correcting for these adjustments in APUC's capital structure analysis, do you agree with Mr. Murray's assertion that the resulting ratios should have more weight in the consideration of Liberty's capital structure?[25]

A. No, I do not. As discussed in my direct testimony, it is appropriate to determine the return for Liberty, not its publicly traded parent, APUC. [26] Similarly, it is appropriate to extend that methodology to the capital structure, pursuant to the stand-alone principle of ratemaking and the ratemaking assurances and Stipulation and Agreement in in Case No. EM-2016-0213. The rates set for Liberty in this proceeding will apply to the Company on a stand-alone basis; therefore, its authorized rate of return ("ROR," i.e., the ROE times the equity ratio) must reflect its stand-alone risk profile. Liberty's parent companies have finite capital that must be allocated based on the risk-adjusted return of each investment alternative in their capital budgeting process. The authorized ROR, therefore, must reflect the risks and prospects of the individual utility's operations and support the utility's financial integrity from a stand-alone perspective.

[24] S&P Ratings Direct, CreditStats Direct Reconciliation, data as of December 31, 2024. *See,* Exhibit DSD-10.
[25] Direct Testimony of David Murray, at p. 4.
[26] Direct Testimony of Daniel S. Dane, at p. 10.

Q. Please explain why you disagree with Staff witness Walters' comparison of Liberty's proposed capital structure to that of the proxy group companies at the holding company level.

A. Although Mr. Walters adopts Liberty's proposed capital structure, he testifies that the equity ratio of 53.1 percent is higher than the proxy group average of 43.1 percent (excluding short-term debt), based on data from Value Line.[27] However, Mr. Walters' analysis was performed using data for the proxy group companies at the holding company level rather than at the operating utility company level. Because the authorized equity ratio is intended to reflect the business and operating risks of the utility for which the authorized return is being set, it is appropriate to perform this comparison at the operating utility company level. I agree that cost of equity analyses are often, and necessarily, performed using publicly-traded holding company data, but my business risk analysis addresses differences in risk between Liberty, as an operating company, and the proxy group holding companies. Because capital structure data is available for the proxy group operating companies, it is appropriate to use that data, not holding company data, for the purpose of evaluating the reasonableness of the Company's proposed capital structure. In addition, the holding company capital structure often includes additional debt to finance unregulated operations and may not reflect how the regulated utility is capitalized.

Q. Please elaborate on how Mr. Murray's capital structure recommendation affects the cost of equity for Liberty in this proceeding.

A. The authorized capital structure and the authorized return on common equity are closely linked in determining a fair return for regulated utilities. Other factors being

[27] Direct Testimony of Christopher C. Walters, at pp. 24-25.

equal, firms with lower common equity ratios require higher rates of return to compensate investors for the reduced financial flexibility and the additional financial risks of higher financial leverage. Accordingly, it is necessary to consider the capital structure and cost of common equity together to determine whether the Fair Return Standard has been met. As noted by Brigham and Houston in Fundamentals of Financial Management:

> *Other things held constant, an increase in the target debt ratio tends to lower the WACC (and vice versa if the debt ratio is lowered) because the after-tax cost of debt is lower than the cost of equity. However, other things are not likely to remain constant. An increase in the use of debt will increase the riskiness of both the debt and the equity, and these increases in component costs might more than offset the effects of the changes in the weights and raise the WACC.*[28]

As such, I continue to find that Liberty's proposed common equity ratio of 53.00 percent (as updated as of March 31, 2025), is reasonable, if not conservative. This common equity ratio is based on the Company's proposed capital structure rather than on a hypothetical capital structure, as proposed by Mr. Murray. If the Commission approves a lower common equity ratio for Liberty that is not based on the Company's proposed capital structure, it would be necessary to approve a higher ROE to offset the increase in financial risk.

Q. How does the combination of Mr. Murray's recommended ROE and equity ratio for Liberty compare to the authorized weighted equity returns for integrated electric utilities in other jurisdictions?

A. Earlier in my Rebuttal Testimony, I referenced the national average authorized ROE for integrated electric utilities from January 2024 through July 2025 of 9.82 percent. The average authorized common equity ratio for those same companies is 50.96

[28] Eugene F. Brigham, Joel F. Houston, Fundamentals of Financial Management, 14th Edition, 2015, at p. 357.

percent. This produces a weighted ROE (i.e., authorized ROE multiplied by the equity ratio) of 5.00 percent. Based on Mr. Murray's recommended ROE and equity ratio, the weighted ROE for Liberty would be 4.16 percent, which is well below both those benchmarks. Only one ROE decision for an integrated electric utility company since January 2024 has resulted in a weighted ROE lower than Mr. Murray is recommending for Liberty in this proceeding. If the Commission were to adopt Mr. Murray's recommended equity ratio of 45 percent, the authorized ROE would need to be 11.11 percent in order for Liberty's weighted ROE to be equivalent to the national average of 5.00 percent.[29] This assumes that Liberty is an average risk utility, whereas I demonstrated in my direct testimony that the Company has above average business risk.

Q. Are you aware of any utilities that have experienced a credit downgrade related to the financial effects of a rate case decision?

A. Yes. Credit rating agencies take the authorized ROE and equity ratio into consideration in developing a regulated utility company's credit rating. For example, the New York Public Service Commission ("New York PSC") approved a settlement agreement for Central Hudson Electric and Gas Company ("Central Hudson," a "wires only" electric distribution utility) in 2021, which included a reduction in that company's authorized equity ratio from 50.0 percent to 48.0 percent and an increase in the authorized ROE from 8.80 percent to 9.00 percent. Moody's Investors Service ("Moody's") subsequently downgraded the credit rating of Central Hudson on September 22, 2021,

[29] The weighted ROE of 5.00 percent (national average ROE of 9.82 percent multiplied by the national average equity ratio of 50.96 percent) was divided by 45.0 percent equity, which resulted in an ROE of 11.11 percent.

from A3 to Baa1, citing the lower equity ratio as a primary factor in the rating downgrade. Moody's explained the rationale for the downgrade as follows:

> *Several factors incorporated in the proposal will contribute to the weakness in financial metrics including growth in regulatory assets combined with a reduction in regulatory liabilities and a reduction in equity capital from 50% to 48% over the next 3 years and a large ongoing capital program. These factors are only partially offset by an increase in the allowed ROE to 9%.*[30]

Moody's also commented on how the New York PSC's decision affected their view of the regulatory environment in New York, stating:

> *While we don't believe that Central Hudson has been a significant target of such actions, these efforts undermine the consistency and predictability of the state's regulatory framework, an important credit consideration.*[31]

Q. Are there other examples?

A. Yes. Following several rate case decisions that were deemed to be unsupportive of utility investment needs and credit, including the authorization of below average ROEs, Regulatory Research Associates ("RRA"), a division of S&P Global, lowered its ranking of Connecticut's regulatory environment from Below Average/2 to Below Average/3 (the lowest possible ranking on the rating scale). In its assessment, RRA noted that Connecticut has become one of the most challenging regulatory environments in the country, given recent punitive rate case decisions creating "additional uncertainty in overall tenor of regulatory policy in the state."[32]

Credit rating agencies have also taken actions on the individual utilities regulated by the Connecticut Public Utilities Regulatory Authority ("PURA"). As a

[30] Moody's Investors Service, "Rating Action – Moody's downgrades Central Hudson Gas & Electric to Baa1; stable outlook, September 22, 2021, at p. 1.
[31] *Ibid*.
[32] S&P Global, Regulatory Research Associates, "4 jurisdictions show marked change in regulatory risk for utility investors," January 10, 2025.

result, peer utilities operating in the jurisdiction have experienced negative rating impacts and have made transformational business decisions due to the restrictive regulatory environment in Connecticut. On December 8, 2024, S&P lowered Eversource Energy's Issuer Credit Rating to BBB+ from A- and simultaneously lowered the credit ratings of its subsidiaries. Citing recent decisions for Connecticut utilities Connecticut Natural Gas ("CNG") and The Southern Connecticut Gas Company ("SCG") in its rating action, S&P indicated that the regulatory environment in Connecticut no longer meets the prior expectation of supportive credit metrics:

> *In general, we expect utilities to operate in a regulatory jurisdiction that is supportive of their credit quality by allowing for the full recovery of their operating and capital costs in a timely manner. We also expect the regulatory jurisdiction to provide a consistent and predictable regulatory framework that results in cash flow stability. Given, the current trend in Connecticut, we now expect that PURA will continue to order less-than-credit-supportive rate case orders over the longer-term.*[33]

Q. What is your conclusion regarding the appropriate capital structure for Liberty in this proceeding?

A. My conclusion is that Liberty's proposed common equity ratio of 53.00 percent, which is based on the Company's actual pro-forma capital structure as of March 31, 2025, is reasonable because it is consistent with the mean and median equity ratios established for the operating companies held by the proxy group. It is also the "most economical" when compared to LUCo and APUC. Conversely, the hypothetical common equity ratio proposed by Mr. Murray of 45.00 percent is arbitrarily based on the low end of a range provided in an outdated investor presentation from 2017 that is not reflective of

[33] S&P Global, "Eversource Energy Issuer Credit Rating Lowered to 'BBB+' from 'A-'; Subsidiaries Ratings Also Lowered; Outlooks Stable", December 9, 2024.

the actual capital structure at any level of the Company (i.e., Liberty, LUCo, or APUC) and is inconsistent with industry averages. Mr. Murray's recommendation does not reflect the stand-alone risk profile of the utility operating company, is well below the average authorized common equity ratio for the operating utilities held by the proxy group, and would result in increased financial risk for Liberty. If the Commission were to adopt Mr. Murray's capital structure recommendation, it would be necessary to authorize a higher ROE than what I have recommended (over 11.00 percent) to compensate investors for the additional financial risk of Liberty relative to the proxy group.

Q. What are the ROE witnesses' recommendations on the Company's proposed cost of long-term debt?

A. In his direct testimony, Staff witness Walters does not take issue with Liberty's proposed cost of debt.[34] OPC witness Murray does not address Liberty's proposed cost of debt, but rather evaluates LUCo's cost of debt as a proxy for Liberty's cost of debt. After making adjustments to LUCo's actual embedded cost of debt, Mr. Murray concludes that LUCo's embedded cost of long-term debt as of March 31, 2025 is 4.30 percent, compared to its unadjusted, actual cost of long-term debt of 4.49 percent.[35]

Q. Please summarize Mr. Murray's adjustments to LUCo's actual cost of debt.

A. **[redacted]

[34] Direct Testimony of Christopher C. Walters, at p. 25.
[35] Direct Testimony of David Murray, at p. 22.
[36] *Id*., at pp. 21-22.

[redacted]

[redacted]**

Q. Do you agree with Mr. Murray's adjustments?

A. No, I do not. Because the cost of debt: (a) is directly observable; and (b) reflects the risk profile of the issuer, as well as other factors related to market conditions and timing, there is no need to make judgmental adjustments as Mr. Murray has done.

Q. Mr. Murray also tests the reasonableness of his proposed cost of debt by comparing it to other Missouri utilities' embedded costs of debt. Is that a useful comparison?

A. Only broadly. The embedded costs of debt for other utilities will reflect each utility's specific timing for accessing capital and the market conditions at those times, which can lead to significantly different costs of debt issuances, even for utilities of similar risk. This is evidenced by the non-linearity of the embedded costs of debt when compared to the respective credit ratings of his selected Missouri peers. For example, Mr. Murray states that Evergy Missouri West's (BBB+/Baa3) embedded cost of debt as of June 30, 2024 was 4.34 percent, while Evergy Metro's (A-/Baa1) embedded cost of debt was 4.45 percent. Even though Evergy Missouri West's credit ratings are two notches below Evergy Metro's, its embedded cost of debt is 11 basis points lower than its higher-rated peer. As a result, Mr. Murray's comparison does not constitute a particularly useful "test of reasonableness," especially in the eyes of debt and equity investors that consider a multitude of factors beyond only geography. Further, Mr. Murray's range of reasonableness based on his analysis of 4.30 percent to 4.45 percent supports the Company's proposed embedded cost of debt as of March 31, 2025 (i.e., 4.53 percent), which is only somewhat above that range.

Q. What do you conclude regarding the cost of debt?

A. I conclude that the Company's proposed cost of debt at March 31, 2025, reflects the actual timing and market conditions of the Company's debt issuances, as well as its risk profile. As such, I recommend the Commission reject Mr. Murray's proposed cost of debt in favor of the Company's embedded cost of debt of 4.53 percent.

VI. RESPONSE REGARDING ROE PENALTIES

Q. Please summarize the testimony of Mr. Busch as it relates to reducing the authorized ROE for Liberty.

A. Mr. Busch recommends that the Commission reduce the revenue requirement of Liberty by an amount equal to 100 basis points of its authorized ROE to penalize the Company and its shareholders for what Staff characterizes as issues and complaints related to the new customer billing system. Mr. Busch's recommendation is in addition to Staff's proposed disallowance of approximately $60 million in plant from rate base for Liberty's investment in the customer information system, as well as Staff's additional proposed disallowances related to incentive compensation expense. As an alternative, if the Commission does not agree with Staff's 100 basis points of ROE equivalent approach, Staff recommends the Commission "only authorize an ROE that matches the low end of the ROE scale."[37]

Q. Why does Staff recommend penalizing Liberty by reducing the Company's earnings by the equivalent of 100 basis points in authorized ROE?

A. Mr. Busch appears to believe that investors would perceive a 100 basis point ROE penalty differently than they would if the Commission were to simply authorize an ROE for Liberty that is 100 basis points lower than the return it would otherwise

[37] Direct Testimony of James A. Busch, at p. 12.

approve, absent concerns over the customer billing system. However, in my opinion, investors would not draw this distinction. Rather, investors in Liberty and credit rating agencies would consider the end result of the Commission's order in this case, which, if Staff's recommendations were adopted, would be that Liberty would have a significant earnings and cash flow impairment and would be granted an authorized ROE that is significantly lower than other similar risk companies. In addition, under Staff's proposed penalty structure, the 100 basis points would not be a one-time cost but rather would be in place until rates go into effect from the Company's next rate case. This would be the equivalent of authorizing an 8.50 percent ROE in this case, before consideration of the other disallowances Staff has proposed. In addition, the annual revenue decrease of approximately $18 million[38] associated with this penalty would directly affect the Company's cash flows and credit metrics, likely raising significant concerns from ratings agencies.

Q. Can you put the 100 basis points of ROE penalty in perspective?

A. Yes. Staff estimates that the 100 basis points of ROE penalty equates to approximately $18 million. That revenue impact would flow directly to net income. For perspective, the Company's proposed net income is approximately $142 million per year.[39] The ROE penalty, plus the revenue impact of Staff's other proposed disallowances that would exceed $4 million per year,[40] would reduce net income by approximately 15.6

[38] *Id*., at p. 8.
[39] Calculated as rate base times the ROE times the equity ratio ($2,669.5 million * 10.00 percent * 53.00 percent). Rate base is sourced from CTE-1 True Up Workpaper.
[40] $4 million is the rate base impact alone and does not consider other proposed disallowances. $4 million is calculated based on Staff's rate base reduction of $58.95 million times the rate of return ($58.95 million * 7.43 percent). The rate base reduction is sourced from Staff's work paper regarding the proposed Customer First disallowance.

percent *per year*.[41] That percentage, of course, is before any other adjustments the Commission may require in its decision in this proceeding.

Q. Are there industry examples that demonstrate the market's reaction to ROE penalties?

A. Yes. For instance, in 2023, the Connecticut Public Utilities Regulatory Authority ("PURA") imposed a 47 basis point reduction to The United Illuminating Company's ("UI's") authorized ROE, resulting in an ROE of 8.63 percent. PURA explained as follows:

> *Having found that a 9.10% ROE is reasonable for a similarly situated electric utility providing expert, efficient, and prudent management of the utility franchise, the Authority considered whether to adjust the ROE for the Company's actual management of its franchise and concludes that a cumulative 47 basis point reduction to the Company's allowed ROE is necessary to reflect the Company's deficient performance in managing certain parts of its utility franchise and to incentivize the Company to improve its performance.*[42]

Despite PURA's bifurcation of the base ROE and the penalty reduction, the investment community did not consider this distinction in its overall evaluation of the regulatory climate in Connecticut. For instance, in S&P Capital IQ's database of regulatory decisions, which all three ROE experts have relied on in this proceeding, the ROE for UI is 8.63 percent, not the pre-penalty amount of 9.10 percent. This is shown in the S&P Capital IQ snapshot below:

Figure 77: Snapshot from S&P Capital IQ on UI Rate Case Outcome

State	Company	Increase Authorized zed?	Return on Original Cost Rate (%)	Return on Equity (%)	Common Equity to Total Capital (%)
Connecticut	The United Illuminating Co.		6.48	8.63	50.00

[41] ($17.7 million plus $4.4 million) divided by $142 million.
[42] Connecticut Public Utilities Regulatory Authority Decision in Docket No. 22-08-08, August 25, 2023, at p. 91.

In an article summarizing UI's rate case, S&P Capital IQ stated:

> *The PURA authorized UI an allowed return on equity (ROE) of 9.10% with a further 47-basis-point reduction to account for various management and operational performance issues, bringing the effective ROE to 8.63%. While ROEs authorized in Connecticut have historically been below the prevailing nationwide industry average, both the allowed ROE and the one after the imposition of penalties are considerably below the average if approved and are among the lowest authorized returns for energy utilities nationwide.*[43]

Q. Does OPC witness Murray also suggest a reduction in Liberty's authorized ROE for customer billing issues?

A. Yes, Mr. Murray indicates that his ROE recommendation of 9.25 percent is lower than his recent recommendation for other Missouri electric utilities such as Ameren Union Electric at 9.50 percent. He attributes this differential to the OPC's concerns over customer billing at Liberty. Similarly, OPC witness Dr. Geoff Marke also recommends an "explicit 25-point basis reduction to the ROE."[44] As such, OPC is proposing a ROE penalty of 25 basis points for Liberty, as compared with Mr. Busch's recommended penalty of 100 basis points.

Q. How did credit rating agencies and investors respond to these types of ROE penalties?

A. Regardless of whether a penalty is a direct ROE reduction or an imputed earnings reduction, credit rating agencies and investors focus on the end result of rate case decisions and are sensitive to not only deterioration in the creditworthiness of the subject company but also to perceived deterioration in the regulatory environment, which can affect all jurisdictional utilities, not just the subject utility. To this latter

[43] S&P Capital IQ, "Conn. regulators slash United Illuminating's proposed rate hike, order penalties," August 30, 2023.
[44] Direct Testimony of Geoff Marke, at p. 56.

point, as described earlier, the above-described decision for UI, as well as other Connecticut decisions for UI affiliates The Connecticut Natural Gas Company and Southern Connecticut Gas Company, caused S&P to downgrade the Connecticut operating companies of Eversource, *an unaffiliated utility*. In a report describing that downgrade, S&P focused specifically on the Connecticut regulatory construct:

> *We revised downward our assessment of Connecticut's regulatory construct for Eversource's Connecticut utilities. The assets of CL&P and Yankee Gas that are regulated by Connecticut's Public Utilities Regulatory Authority (PURA) account for about 25% of Eversource's consolidated EBITDA. In recent rate orders for Avangrid subsidiaries Connecticut Natural Gas and Southern Connecticut Gas, the PURA ordered material base rate decreases reflecting reduced depreciation expense, below-average authorized returns on equity (ROE) of 9.15%, and significant reductions in proforma rate base. Additionally, we have assessed PURA's rate orders over the past two years, which were materially lower than we assumed under our base-case forecasts, as not credit supportive.*

Q. Are there negative credit implications for Liberty of an 8.50 percent ROE, or the equivalent thereof?

A. Yes. Mr. Busch states that a 100 basis point reduction in ROE (or the imputed revenue requirement equivalent) equates to approximately $18 million annually in decreased revenues per year for Liberty,[45] which will directly affect the cash flows of the Company until at least the rates from its next rate case become effective. This is in addition to the revenue impacts of Staff's other proposed adjustments related to Customer First. This will directly reduce the credit metrics of the Company during that period and also increase the potential that Liberty will require additional financing to fund its operations and capital plan. Either or both of these outcomes (i.e., worsening credit metrics and/or required for additional capital) will have the potential to raise the

[45] Direct Testimony of James A. Busch, at p. 8.

cost of borrowing for Liberty, which negatively affects the Company and customers alike.

Q. What is your conclusion regarding the proposed ROE penalties in this proceeding?

A. Such penalties will go beyond "get[ting] Liberty's attention"[46] and have more far-reaching impacts on the cost of capital not just for Liberty, but also for other Missouri utilities. The rebuttal testimony of Company witness John Reed provides an alternative proposal, which provides a more constructive focused approach to addressing perceived performance issues related to the Customer First system that would likely avoid the concerns I have addressed in this section of my rebuttal testimony.

VII. RESPONSE TO STAFF WITNESS MR. WALTERS

Q. Please summarize Mr. Walters' ROE analyses and recommendation for Liberty in this proceeding.

A. Mr. Walters uses the same proxy group that I used in my direct testimony and analyzed the ROE using three specifications of the DCF model, 12 variants of the CAPM, and a Risk Premium analysis. The results of his models range from 7.71 percent (the mean results of his "Current S&P Beta" CAPM analysis) to 10.63 percent (the mean results of his Constant Growth DCF model using analyst growth rates). Mr. Walters narrows this range of results to between 9.00 percent and 10.00 percent, and from within that range he selects a point estimate for Liberty of 9.50 percent.[47]

[46] *Ibid*.
[47] Direct Testimony of Christopher C. Walters, at p. 60.

Q. Please summarize your response to Mr. Walters' analyses and recommendations.

A. While there are several similarities between mine and Mr. Walters' ROE analyses, Mr. Walters makes certain unreasonable assumptions and relies on certain flawed specifications of models that result in an unreasonably low ROE recommendation. Incorporation of more appropriate assumptions and the exclusion of flawed specifications of models results in an ROE that is within my recommended range of results, albeit higher than my ROE recommendation. Specifically, a simple average of the mean results of Mr. Walters' Constant Growth DCF model using analyst growth rates (i.e., 10.63 percent), his CAPM analysis using current Value Line betas (i.e., 10.36 percent), and his Risk Premium analysis using projected Treasury bond yields (i.e., 9.98 percent) is 10.32 percent. This is generally consistent with the results of my analysis and demonstrates that Liberty's requested ROE of 10.00 percent is reasonable, if not conservative. I discuss areas in which I disagree with certain of Mr. Walters' other model specifications and assumptions below.

Q. What are the principal areas in which you disagree with Mr. Walters?

A. The principal areas in which I disagree with Mr. Walters include: (1) certain assumptions used in and specifications of his DCF models, particularly Mr. Walters' inputs to the sustainable growth DCF method and the Multi-Stage DCF model; (2) certain of the inputs to Mr. Walters' CAPM analysis, including his unadjusted beta coefficients from S&P and his projected market risk premium ("MRP") from Kroll; (3) the assumptions and methods underlying his Risk Premium analyses; and (4) Mr. Walters' characterization of how elevated capital spending in the utility industry affects the credit ratings for regulated utilities and the implications for the cost of capital.

A. Application of the DCF Model

Q. How do the results of Mr. Walters' Constant Growth DCF model compare to his 9.50 percent ROE recommendation for Liberty?

A. The results of Mr. Walters' Constant Growth DCF model using analyst's consensus earnings growth rates (i.e., 10.63 percent (mean) and 10.32 percent (median)) significantly exceed his ROE recommendation of 9.50 percent but are generally consistent with my Constant Growth DCF analysis and well within my recommended ROE range of 9.75 to 11.00 percent. Mr. Walters, however, contends that the average near-term EPS growth rate for the proxy group companies is not sustainable over the long-term because "a utility's growth rate cannot exceed the growth rate of the economy in which it provides services in perpetuity."[48] According to Mr. Walters, the long-term projected Gross Domestic Product ("GDP") growth rate is 4.14 percent. Therefore, he essentially disregards the results of his Constant Growth DCF analysis using analyst growth rates in setting his range of 9.00 to 10.00 percent, and his ROE recommendation of 9.50 percent.

Q. Mr. Walters' Constant Growth DCF results are within your recommended ROE range and generally supportive of your 10.00 percent recommendation. Is it reasonable to rely on the Constant Growth DCF model, as you have done?

A. Yes. As I discussed in my direct testimony, regulated utilities tend to be established, dividend-paying companies.[49] This stability indicates that earnings growth is likely to also be stable over time, although not necessarily capped at GDP growth, as both Mr. Walters and Mr. Murray assume in their Multi-Stage DCF models. Steady growth in

[48] Direct Testimony of Christopher C. Walters, at p. 35.
[49] Direct Testimony of Daniel S. Dane, at pp. 13-14.

the industry above GDP growth is indicated in Figure CCW-2 of Mr. Walters' direct testimony, which shows utility capital expenditures ("CapEx") over a 13-year period, in which CapEx has grown in a nearly linear manner from approximately $85 billion in 2014 to an expected $234 billion in 2027, a compound annual growth rate exceeding 8.50 percent. While CapEx growth is not the same as earnings growth, CapEx ultimately impacts the earnings base of utilities. This has resulted in long-term growth in earnings per share ("EPS") for utilities exceeding GDP, as discussed below.

Q. Are there expectations that the growth in industry capital expenditures will extend beyond the next five years?

A. Yes. For instance, consultancy Deloitte recently stated:

> *Driven in part by the urgent need to modernize aging infrastructure, integrate renewable energy sources, and enhance grid resilience, the U.S. power sector is expected to* ***require sustained capital investments over the next two to three decades****. Investments could total as much as U.S.$1.4 trillion from 2025 to 2030—and* ***possibly with similar expenditures until about 2050****.*[50]

Q. Please discuss your concerns with Mr. Walters' other DCF analyses.

A. The output of Mr. Walters' Multi-Stage DCF and Sustainable Growth DCF results are removed from any reasonable estimate of Liberty's ROE. Return estimates of 8.59 percent and 9.30 percent, respectively, are well below the average authorized ROE for integrated electric utilities since January 2024 of 9.82 percent. In particular, the mean results of Mr. Walters' Multi-Stage DCF model of 8.59 percent are lower than almost any authorized ROE for an electric utility since 1980.[51] As such, these results do not meet the *Hope* and *Bluefield* standards for a fair return (discussed in my direct testimony) and should be given no weight.

[50] Deloitte, "Growth, investment supercharge U.S. power sector," March 27, 2025. **Emphasis added**.
[51] Source: Regulatory Research Associates, accessed July 17, 2025.

Q. Please explain your specific disagreement with Mr. Walters' application of the Constant Growth DCF using sustainable growth rates.

A. Mr. Walters' specification of the sustainable growth rate, which Mr. Walters uses to replace analysts' earnings growth rate projections in the Constant Growth DCF model, multiplies the retention ratio (i.e., the percentage of earnings that are not paid out as dividends) by an assumed ROE and also assumes some growth from the issuance of new shares. The sustainable growth rate (or retention growth rate) calculation, therefore, assumes that future earnings will increase as companies retain more earnings (as demonstrated by an increase in the earnings retention ratio). In other words, this analysis assumes that a higher retention ratio means higher earnings growth. That is counter to academic research, however, that shows the opposite. Specifically, academic research has shown that this relationship may not hold for a given company based on management decisions associated with the dividend payout rate. For example, two articles published in the *Financial Analysts Journal* discussed the theory that high dividend payouts (*i.e.*, *low* retention ratios) are associated with low future earnings growth.[52] Each of those articles cited a 2003 study[53] that analyzed 130 years of data and found a direct positive relationship between future earnings growth and high payout ratios (i.e., low retention ratios), not low payout ratios (i.e., high retention ratios).[54] Given that all three studies found that there is a negative relationship between

[52] Ping Zhou, William Ruland, *Dividend Payout and Future Earnings Growth*, Financial Analysts Journal, Vol. 62, No. 3, 2006. *See* also Owain ap Gwilym, James Seaton, Karina Suddason, Stephen Thomas, *International Evidence on the Payout Ratio, Earnings, Dividends and Returns*, Financial Analysts Journal, Vol. 62, No. 1, 2006.
[53] Robert Arnott, Clifford Asness, *Surprise: Higher Dividends = Higher Earnings Growth*, Financial Analysts Journal, Vol. 59, No. 1, January/February 2003.
[54] Since the payout ratio is the inverse of the retention ratio, the authors found that future earnings growth is negatively related to the retention ratio.

earnings growth and retention ratios, the theory underlying Mr. Walters' sustainable growth rates does not hold and that specification of the model should be dismissed.

Further, the retention growth approach is circular because it requires an estimate of the return on equity. As shown at page 1 of Schedule CCW-D6, Mr. Walters assumes an ROE of 11.42 percent for the proxy group companies in his sustainable growth rate calculation, far above his 9.50 percent ROE recommendation for Liberty.

Q. Please explain your disagreement with Mr. Walters' Multi-Stage DCF model.

A. Mr. Walters' Multi-Stage DCF model assumes different growth rates in different future periods. This specification begins with analyst earnings growth rate projections for five years, followed by a transition period, and ending with a long-term growth rate equal to Mr. Walters' estimation of nominal GDP growth. Mr. Walters' Muti-Stage DCF analysis is based on the assumption that analysts' projected EPS growth rates are "unsustainable" because, he asserts, a utility stock cannot grow at a faster pace than the growth in the overall economy.[55] As discussed below in my response to Mr. Murray, the premise that utility earnings growth is constrained by U.S. GDP growth rate has not proven true.[56] One key concern related to Mr. Walters' Multi-Stage DCF model is his use of a long-term growth rate that is much lower than the historical average GDP growth rate in the U.S.

[55] Direct Testimony of Christopher C. Walters, at p. 35.
[56] Mr. Walters uses a long-term growth rate of 4.14 percent, based on projected real GDP growth and projected inflation, as reported by Blue Chip. As a preliminary matter, I note that the projected GDP growth rate according to Blue Chip is 4.24 percent based on long-term data in the June 2, 2025 edition of that publication. Blue Chip Financial Forecasts, Vol. 44, No. 6, June 2, 2025, at p. 14.

Q. Does Mr. Walters' appear to have given substantial weight to his Multi-Stage DCF results?

A. No. Mr. Walters reports that his Multi-Stage DCF average and median results are 8.59 percent and 8.38 percent, respectively.[57] His recommended ROE range, however, is 9.00 percent to 10.00 percent. This implies that Mr. Walters' Multi-Stage DCF specification does not provide results that are representative of a fair return for Liberty and he has essentially disregarded those results.

Q. Setting aside your concerns with the Multi-Stage DCF approach, have you performed such an analysis in preparing your rebuttal testimony?

A. Yes. In response to Mr. Walters and Mr. Murray, I have included a Multi-Stage DCF model in my updated ROE analysis. I performed this analysis using a more appropriate estimation of long-term GDP growth based on guidance from Morningstar. Specifically, I have used a long-term growth rate of 5.44 percent, which is based on the historical average of real GDP growth from 1929-2024 plus projected inflation. The historical performance of growth in real GDP is an appropriate indicator of future performance, as Morningstar notes:

> *Growth in real GDP (with only a few exceptions) has been reasonably stable over time; therefore, its historical performance is a good estimate of expected long-term (future) performance.*
>
> *By combining the inflation estimate with the real growth rate estimate, a long-term estimate of nominal growth is formed.*[58]

When that single change is incorporated, it results in DCF results ranging from 9.62 percent to 9.69 percent. While I disagree that the addition of a Multi-Stage DCF model is warranted (in particular because both Mr. Walters and Mr. Murray appear to

[57] Direct Testimony of Christopher C. Walters, at p. 42.
[58] Ibbotson and Associates, Stocks, Bonds, Bills and Inflation, 1926-2012, 2013 Valuation Yearbook, at p. 52.

give little weight to that model and its results), if more reasonably applied it provides results that are somewhat corroborative of the low end of the recommended ROE range.

Q. What is your conclusion regarding Mr. Walters' DCF analyses in this proceeding?

A. My primary conclusion is that the results of Mr. Walters' Constant Growth DCF analysis using analysts' earnings growth rates are consistent with my DCF analysis and support my ROE recommendation of 10.00 percent for Liberty. The other DCF models presented by Mr. Walters are based on flawed assumptions and, in the case of the Multi-Stage DCF model, produce mean ROE estimates that are almost 125 basis points below average recently authorized ROEs for integrated electric utilities.

B. Risk Premium Method

Q. Please describe Mr. Walters' Risk Premium analyses.

A. Mr. Walters develops two Risk Premium-based approaches. Both approaches are based on his calculation of the risk premium as the difference between the average annual authorized equity returns for electric utilities and a measure of long-term bond yields for each year between 1986 and 2024. The first long-term yield measure is the 30-year Treasury yield, and the second long-term yield measure is the Moody's A-rated and Baa-rated utility bond yields.[59]

In developing his Risk Premium estimates, Mr. Walters reviews annual risk premiums, as well as risk premiums over five-year and ten-year rolling averages. For his Risk Premium analysis using Treasury bond yields, he combines his projected 30-year Treasury bond yield of 4.40 percent with a Treasury bond risk premium of 5.58 percent, which produces an ROE estimate of 9.98 percent. Using the same approach for his utility bond yield analysis, Mr. Walters calculates annual risk premiums, as well

[59] Direct Testimony of Christopher C. Walters, at pp. 43-44.

as risk premiums over five-year and ten-year rolling averages. Adding his 4.26 percent average risk premium estimate to the three-month average A-rated utility bond yield of 5.79 percent, Mr. Walters derives an ROE estimate of 10.05 percent.[60] Adding the same 4.26 percent average risk premium to the three-month average Baa-rated utility bond yield of 5.97 percent produces a return estimate of 10.23 percent. As summarized in Table CCW-9 of his direct testimony, Mr. Walters' derives ROE estimates of 9.98 percent to 10.23 percent for Liberty based on the Risk Premium approach.

Q. What are your specific concerns with Mr. Walters' Risk Premium analysis?

A. Although Mr. Walters' Risk Premium analysis produces return estimates of 10.00 percent or higher, my concern is that his analysis understates the required risk premium in the current market because it fails to fully reflect the inverse relationship between the equity risk premium and bond yields (whether measured by Treasury or utility bond yields).

Academic research has shown that the equity risk premium is inversely related to interest rates. For example, in a March 1998 article titled *Interest Rate Risk and Utility Risk Premia During 1982-93* in Managerial and Decision Economics, Dr. S. Keith Berry used a regression approach to analyze the relationship between authorized returns on equity for regulated utilities and utility bond yields. The author found that there was an inverse relationship between utility risk premia and interest rates.[61] Similarly, in a Spring 1986 article in Financial Management, Dr. Robert S. Harris also showed that there was an inverse relationship between utility risk premia and interest

[60] *Id*., at p. 47.
[61] S. Keith Berry, Interest Rate Risk and Utility Risk Premia during 1982-93, Managerial and Decision Economics, Vol. 19, No. 2 (March, 1998), at p. 7.

rates.[62] That is, as interest rates decline, the equity risk premium will increase. It is for this reason that the Bond Yield Plus Risk Premium approach I applied in my direct testimony and updated with my rebuttal testimony relies on a statistical regression to impute ROE results based on current bond yield expectations.

Q. Please summarize your conclusions with regard to Mr. Walters' Risk Premium analyses.

A. Mr. Walters' Risk Premium analyses likely understate the required return for Liberty because they do not fully reflect the inverse relationship between interest rates and the equity risk premium. However, Mr. Walters' Risk Premium model produces return estimates that are generally consistent with his Constant Growth DCF model using analysts' EPS growth rates and his CAPM analysis using current Value Line Betas (discussed below). In addition, his Risk Premium analysis supports Liberty's requested ROE of 10.00 percent.

C. Capital Asset Pricing Model

Q. Please briefly summarize Mr. Walters' CAPM analysis and results.

A. Mr. Walters' CAPM analysis produces twelve ROE estimates ranging from 7.27 percent to 11.16 percent, as shown in Schedule CCW-D15, page 1. Mr. Walters' projected risk-free rate of 4.40 percent, and his normalized risk-free rate of 4.72 percent are below the 30-day average Treasury bond yield of 4.92 percent as of June 30, 2025, but reflect the market's expectation that long-term interest rates will decline to some degree as monetary policy works to bring inflation down toward the Federal Reserve's 2.00 percent target. Mr. Walters derives three MRP estimates: 1) a forward-looking

[62] Robert S. Harris, Using Analysts' Growth Forecasts to Estimate Shareholders Required Rates of Return, Financial Management, Spring 1986, at p. 66.

estimate of 7.95 percent based on expected returns on the S&P 500 less the risk-free rate; 2) a long-term historical average of 7.20 percent; and 3) Kroll's projected MRP of 5.50 percent. Mr. Walters' forward-looking MRP estimate is derived by estimating the expected total return on the S&P 500 and subtracting the risk free rate, while his historical MRP is based on the expected market return for large company stocks of 11.60 percent less the risk-free rate of 4.40 percent.[63] Mr. Walters employs four values for his Beta coefficient: 1) the current average Value Line beta of 0.85; 2) the historical average Value Line beta of 0.79; 3) the unadjusted beta from S&P Global Market Intelligence of 0.46; and 4) the adjusted beta from S&P Global Market Intelligence of 0.71.

Q. What are the areas of Mr. Walters' CAPM analysis that you disagree with?

A. My primary concern is with Mr. Walters' beta coefficients, especially the three-year unadjusted betas from S&P Global Market Intelligence. In addition, I do not agree with Mr. Walters' use of the projected MRP from Kroll because it does not reflect the inverse relationship between interest rates and the equity risk premium. I discuss each of these concerns in more detail in this section of my rebuttal.

Q. Please summarize the beta coefficients that Mr. Walters uses in his CAPM analysis.

A. Mr. Walters contends that the current Value Line beta coefficients are distorted due to the effect of the COVID-19 pandemic on utility share prices in February and March 2020.[64] For that reason, Mr. Walters considers alternative beta coefficients, including the historical average Value Line betas since 2014, as well as three-year betas from

[63] Direct Testimony of Christopher C. Walters, at pp. 53-58.
[64] *Id*., at p. 51.

S&P Global Market Intelligence (both raw unadjusted betas and betas that are adjusted using Value Line's methodology).

Q. Do you agree with the beta coefficients Mr. Walters uses in his CAPM analysis?

A. Not entirely. I agree with the use of Value Line's current beta coefficients and with Mr. Walters' observation that betas were distorted to some degree by volatility in share prices during the early months of COVID. However, I do not agree with Mr. Walters that three-year unadjusted betas from S&P are representative of investors' forward-looking view of betas for regulated utilities. As shown in Schedule CCW-15D, the current average Value Line beta for the proxy group companies is 0.85 and the historical average Value Line beta over the last ten years is 0.79, as compared to Mr. Walters' three-year raw beta estimate of 0.46 from S&P.

Q. Please explain your concerns with Mr. Walters' use of unadjusted three-year betas from S&P.

A. Average betas of 0.46 do not reflect the level of risk associated with an investment in the electric utility industry. As Mr. Walters' Schedule CCW-15D shows, the average Value Line beta for utilities since 2014 is 0.79. That period includes the early months of COVID, but it also includes a variety of economic environments and external events that affect how investors perceive the risk of the utility industry relative to the broad market, which is what beta is designed to measure in the CAPM. With regard to the use of raw betas, Professor Marshall Blume demonstrated in the early 1970s that the beta coefficients for all stocks tend to move toward the market mean of 1.0 over time. This finding included stocks with lower than average betas, such as utilities. The most persuasive evidence against using unadjusted betas is that they produce CAPM results as low as 7.27 percent, which is more than 170 basis points below the low end of Mr.

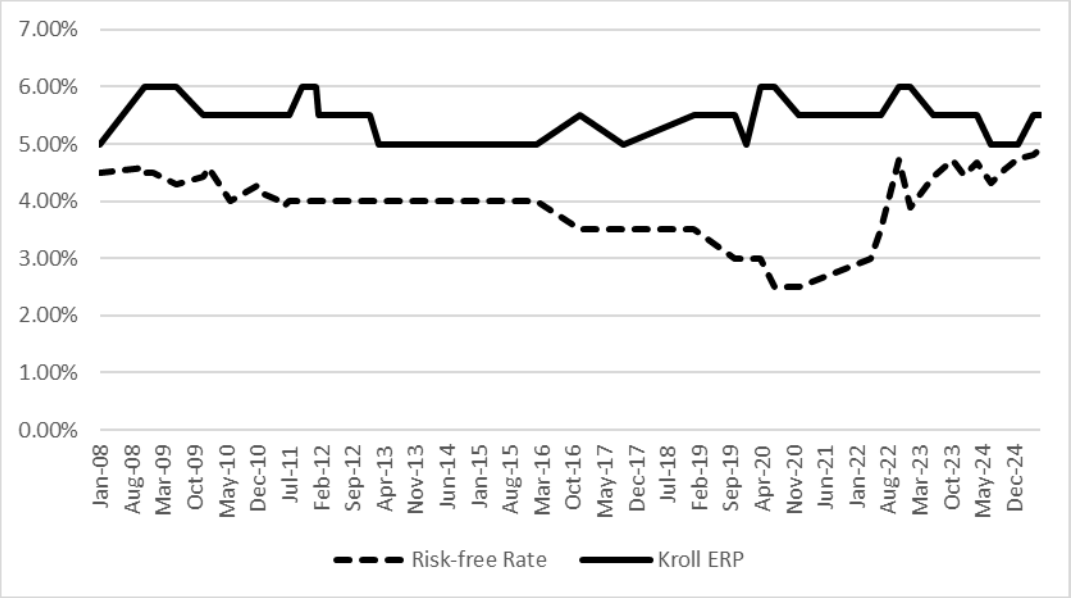
Walters' recommended ROE range and more than 250 basis points lower than the average authorized ROE for integrated electric utilities since January 2024. That result, which Mr. Walters correctly appears to ignore in his ROE recommendations, is simply not reasonable and does not meet the *Hope* and *Bluefield* standards for a just and reasonable return.

Q. Please explain why you disagree with Mr. Walters' use of Kroll's projected market risk premium of 5.50 percent.[65]

A. Mr. Walters states that the Kroll MRP he has used in his CAPM utilizes a "normalized" risk-free rate.[66] My primary concern is that it is not clear that Kroll develops its 5.50 percent MRP in relation to that "normalized" risk-free rate. Generally, the MRP is calculated as the difference between the expected market return and risk-free rate; therefore, it is a function of the expected market return and risk-free rate at a given point in time. Consequently, the MRP and risk-free rate are not independent of each other, they are interrelated. In fact, academic studies have shown that the two are inversely related.[67] As the risk-free rate decreases, the MRP increases and vice versa. However, as shown in Figure 8 below, there is no clear relationship between Kroll's MRP and normalized risk-free rate. Whereas academic studies indicate that the two lines should move in opposite directions, Figure 8 shows they do not.

[65] *Id*., at pp. 57-58.
[66] *Ibid*.
[67] *See, e.g.*, Robert S. Harris and Felicia C. Marston, Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts, Financial Management, (Summer 1992), at pp. 63-70.

Figure 88: Kroll Recommended Equity Risk Premium and Risk-Free Rate (2008-2024)[68]



The conclusion that there is no clear relationship between the two variables provided by Kroll (i.e., the MRP and the "normalized" risk-free rate) is supported by statistical analysis. The R-squared (a measure of the strength of the relationship between two variables) is -0.001 percent, which indicates that Kroll's risk-free rate explains less than 1.00 percent of the change in the MRP. This runs counter to the fundamental financial principle that the MRP is a function of the risk-free rate.

Q. What is your conclusion with respect to Mr. Walters' CAPM analysis?

A. My conclusion is that Mr. Walters' CAPM results are generally reasonable in the scenarios where he uses current Value Line betas, Value Line historical betas, or 3-year adjusted Betas from S&P Market Intelligence. The range of these results is from 9.54 percent to 11.16 percent, with a midpoint return estimate of 10.35 percent. However, it is not reasonable to use raw betas that do not reflect the tendency of beta to move towards the market mean of 1.0 over time, as determined by Professor Blume. Mr.

[68] Sources: Kroll Cost of Capital Navigator, Federal Reserve Bank of St. Louis FRED Economic Data.

Walters' CAPM results using unadjusted betas from S&P Global Market Intelligence range from 7.27 percent to 8.10 percent. These return estimates are not consistent with authorized ROEs for integrated electric utilities since January 2024 and are not a reasonable estimate of the investor-required return for Liberty in this proceeding.

Q. Please summarize your conclusions concerning Mr. Walters' ROE analyses and recommendations.

A. Focusing on the results of Mr. Walters' Constant Growth DCF model, his CAPM analysis using Value Line betas, and his Risk Premium analysis using projected Treasury bond yields, the average results of Mr. Walters' ROE analyses are 10.32 percent. These results are within my recommended ROE range for Liberty, and three of his models provide ROE estimates above Liberty's requested ROE of 10.00 percent. The other models Mr. Walters has presented (including the Multi-Stage DCF model, Sustainable Growth DCF model, and the CAPM using three-year unadjusted betas from S&P Global market Intelligence) produce return estimates that are substantially lower than both his recommended range as well as the average authorized ROE for integrated electric utilities in the U.S. since January 2024. The results of these models should not be given any weight by the Commission because they do not reflect investors' return expectations for a company with business and financial risk characteristics similar to Liberty.

D. Market Conditions and Utility Risk Profiles

Q. Mr. Walters refers to several reports from S&P, Moody's, and Fitch, concluding that the current rating outlook for regulated utilities is under pressure primarily due to affordability concerns.[69] Do you agree with Mr. Walters' conclusion?

A. No, I do not. While I agree that credit reporting agencies cite the impacts of the higher level of rate requests on customer bills as an ongoing concern in the utility industry, the issue of affordability is a consequence of growing challenges utilities face and spending priorities that need to be recovered through rates in a cost of service ratemaking framework. The risk from a credit perspective is that, due to affordability concerns, utility rates will be established by regulators at levels that do not reasonably reflect the cost of service, including the cost of capital. These challenges are primarily due to record capital investment required to replace aging infrastructure, respond to growing demand, and manage physical risks of assets due to climate risk.[70,71]

For example, in its updated credit outlook for 2025, S&P notes that one of its key assumptions for the year includes high cash flow deficits, "which could harm financial performance if not funded in a credit-supportive manner."[72] Furthermore, S&P notes that the number of credit downgrades outpaced upgrades in 2024 (for the fifth consecutive year) and have been mostly attributable to rising wildfire risks, robust capital spending, and challenging regulatory constructs. These risks are expected to persist in 2025, further pressuring the industry's credit quality.[73]

[69] Direct Testimony of Christopher C. Walters, at pp. 18-21.
[70] S&P Global Ratings, "Industry Credit Outlook 2025 North America Regulated Utilities: Capex and climate change pressures credit quality," January 14, 2025.
[71] FitchRatings, "Neutral Outlook for North American Utilities in 2025," December 5, 2024.
[72] S&P Global Ratings, "Industry Credit Outlook 2025 North America Regulated Utilities: Capex and climate change pressures credit quality," January 14, 2025.
[73] S&P Global Ratings, "Industry Credit Outlook 2025 North America Regulated Utilities: Capex and climate change pressures credit quality," January 14, 2025.

Q. Does S&P's assessment that utility regulation is generally credit supportive alleviate the risk of increased capital spending?

A. No, it does not. S&P's regulatory assessment as it applies in its credit rating process only reflects the perspective of debt investors and the effect of the regulatory environment on a utility's ability to meet its debt obligations. Further, S&P considers the simple presence of regulation to be credit supportive, relative to other corporate sectors that are not subject to regulation. That is why every jurisdiction is considered by S&P to be "credit supportive" at a minimum.

Q. Do you have any comments on Mr. Walters' observation that utility credit ratings have been trending higher since 2009?[74]

A. Although Mr. Walters asserts that utility credit ratings have been trending higher since 2009, he also testifies that there have been more credit downgrades than credit upgrades from S&P in the past two years. While Mr. Walters attributes these credit downgrades to affordability concerns, he neglects to mention that when customer rates are increasing, regulators may look for ways to defer cost recovery for utilities, to disallow more costs, and to authorize lower returns. None of these options is conducive for a utility to maintain sufficient credit metrics so that it can continue to raise capital to fund the significant capital investments that are required as part of the energy transition.

Q. In his direct testimony, did Mr. Walters address Liberty's business and financial risks relative to the proxy group?

A. No. Mr. Walters discusses his assessment of Liberty's risk level by focusing on S&P's and Moody's ratings and commentary. However, Mr. Walters fails to consider Liberty's *relative* risk when compared to the proxy group from which he derives his

[74] Direct Testimony of Christopher Walters, at p. 8.

ROE estimates. My direct testimony contains such a relative risk analysis,[75] from which I concluded that Liberty was above average when compared to the proxy group, warranting an ROE above the midpoint of the range of results. Applying that same approach to Mr. Walters' range of ROE estimates (i.e., 9.00 percent to 10.00 percent) would produce an ROE that is closer to the Company's proposed 10.00 percent ROE in this proceeding.

VIII. RESPONSE TO OPC WITNESS MR. MURRAY

Q. Please summarize Mr. Murray's ROE analyses and recommendation for Liberty.

A. OPC witness Murray's return estimates for Liberty range from 7.10 percent (the low end of his Risk Premium analysis using data from Alliance Bernstein) to 9.23 percent (the high end of his Risk Premium analysis using current bond yield data from Moody's plus a risk premium of 300 basis points). Mr. Murray testifies that the range of reasonable results for Liberty is from 9.00 percent to 9.50 percent, and from within that range he selects a point estimate of 9.25 percent.[76] Mr. Murray also considers the national average authorized ROEs for electric utilities, which he reports as 9.75 percent over the past twelve months. Mr. Murray's Multi-Stage DCF results range from 7.80 percent to 8.30 percent; his CAPM results range from 7.80 percent to 9.00 percent, and his Risk Premium results range from 7.10 percent to 9.23 percent.

Q. Is Mr. Murray's ROE recommendation based on the results of his ROE models?

A. No, it is not. Instead, Mr. Murray subjectively establishes a range that he suggests the Commission consider of 9.00 percent to 9.50 percent.[77] However, he provides no basis for that range in his testimony or workpapers. From within that range, Mr. Murray

[75] Direct Testimony of Daniel S. Dane, at pp. 35-43.
[76] Direct Testimony of David Murray, at p. 2.
[77] *Id*., at p. 26.

recommends an authorized ROE of 9.25 percent, assuming that the Commission accepts his proposed 45.00 percent equity ratio.[78] While Mr. Murray suggests that he considers his cost of equity estimates, the results of Mr. Murray's models do not support his recommended range. Mr. Murray's recommendation of 9.25 percent is 95 to 145 basis points above the results of his Multi-Stage DCF model and 25 to 145 basis points higher than the results of his CAPM analyses.

Mr. Murray also states that his recommendation takes into consideration the Commission's authorized ROE for Liberty in July 2020 of 9.25 percent, the average authorized returns for electric utilities in the past twelve months of 9.75 percent, and concerns over Liberty's customer billing system. However, Mr. Murray fails to consider that interest rates on government and utility bonds have increased substantially since 2020, as shown in Figure 4 of my rebuttal testimony.

Q. How does Mr. Murray factor his ROE model results into his recommendation?

A. Only the high end result of Mr. Murray's Risk Premium analysis is remotely close to his ROE recommendation for Liberty. He essentially discards the results of his Multi-Stage DCF model and his CAPM analysis, both of which produce return estimates well below his ultimate recommendation. In recommending an authorized ROE of 9.25 percent for Liberty, Mr. Murray defaults to the incorrect concept that authorized ROEs are significantly greater than the actual cost of equity in order to claim that he has at least considered his model results. Ultimately, Mr. Murray cannot rely on his Multi-Stage DCF or CAPM analysis due to the unreasonably low results of those models.

[78] *Id*., at p. 54.

Q. What are your primary conclusions regarding Mr. Murray's analyses and conclusions?

A. While I disagree with many of the assumptions and methodologies relied on by Mr. Murray, as discussed in this section of my rebuttal testimony, it is important to recognize that, because Mr. Murray's DCF and CAPM models produce results that are as much as 145 basis points below his recommended ROE of 9.25 percent, it is unreasonable to suggest that he has relied on the results of his models other than the high end of his Risk Premium analysis. Mr. Murray's ROE recommendation is essentially based on his unsupported view of the appropriate authorized ROE for Liberty rather than on current market data.

Q. Mr. Murray states that the increase in utility stock valuations over the past year indicates a reduced cost of equity.[79] Is that necessarily so?

A. No. The simplified DCF model equation, which I provided in my direct testimony, is reproduced below.

$$k = \frac{D(1+g)}{P_0} + g$$

In this model, all else equal, increases in the stock price (i.e., P_0) result in a decrease to the calculated *k* (i.e., the ROE). However, all else is *not* equal, and increases in either the expected dividend (*D*) or the growth rate (*g*) (or both) have an offsetting impact to increases in the stock price. For instance, as shown in my Constant Growth DCF exhibits (Direct Schedule DSD-4 and **Rebuttal Schedule DSD-4**), while the dividend yield (i.e., the expected dividend divided by the stock price) for the proxy group decreased between the analyses I performed and the update for my rebuttal

[79] Direct Testimony of David Murray, at p. 3.

testimony, decreasing the 30-day stock price analysis for example from 3.76 percent to 3.61 percent, the average analysts expected earnings growth rate increased from 6.28 percent to 6.51 percent. That is reasonably expected given the quickly changing landscape for electric utilities in the U.S., including significant growth to meet increasing electricity demand from data centers and electrification. The impact of these two changes (i.e., a decreasing dividend yield and an increasing growth rate) is an ROE estimate that remains supportive of the Company's 10.00 percent ROE request.

A. Proxy Group Composition

Q. Please describe Mr. Murray's proxy group.

A. Mr. Murray does not apply screening criteria to select a proxy group of companies that are comparable in risk to Liberty. Rather, he relies on all the electric utility companies in the Edison Electric Institute universe. As a result, Mr. Murray includes companies that do not have investment grade credit ratings (e.g., Hawaiian Electric and PG&E Corp.), companies that do not own regulated generation (e.g., Consolidated Edison, Eversource Energy, Exelon Corp.), and companies that are involved in mergers, acquisitions, or other transformative transactions that affect the share price of the company (e.g., TXNM Energy, Allete Energy, and Edison International).

Q. Please explain the purpose of a proxy group.

A. In cost of capital analysis, the purpose of a proxy group is to identify a group of companies with similar business and financial risk characteristics as the company for which the return is being established, in this case Liberty. By applying screening criteria, it is possible to find companies that are similar to Liberty for inclusion in the proxy group, while excluding companies with different risk profiles. Mr. Murray does

not apply any screening criteria, and therefore his proxy group is not necessarily risk comparable to Liberty.

Q. What is your conclusion as it relates to the composition of the proxy group for Liberty?

A. Although I do not necessarily agree with the inclusion of all the companies in Mr. Murray's proxy group, my conclusion is that differences in our respective proxy groups are not the main driver for the differences in our analytical results. Therefore, I have limited my response to Mr. Murray on this point.

B. Multi-Stage DCF Analysis

Q. Please explain how Mr. Murray conducts his Multi-Stage DCF analysis.

A. Mr. Murray's Multi-Stage DCF analysis includes three stages, the first two of which have defined time horizons, while the third stage assumes cash flows in perpetuity. In the first stage, Mr. Murray relies on analyst estimates of annual dividends per share ("DPS"), to the extent they were available from 2025-2029. In the final year of the first stage (i.e., 2029), Mr. Murray calculates the estimated dividend payout ratio based on the analysts' estimated annual DPS and earnings per share ("EPS"). His second stage then models an equal percentage change in the dividend payout ratio from the end of the first stage until the terminal year (i.e., 2039), where Mr. Murray assumes a payout ratio that assumes reinvestment of retained earnings that achieves a 9.75 percent book ROE.[80] The third stage begins in 2039 and assumes a terminal growth rate of either 3.00 percent or 3.50 percent. Mr. Murray's Multi-Stage DCF results are 7.80 percent to 8.10 percent, depending on the terminal growth rate he uses.[81]

[80] *Id*., at pp. 44-46.
[81] *Id*., at pp. 43-44.

Q. Does Mr. Murray's Multi-Stage DCF analysis indicate a higher cost of equity for electric utilities than in Liberty's previous rate cases?

A. Yes. Although I do not agree with Mr. Murray's application of the Multi-Stage DCF model, his own analysis demonstrates that the cost of equity has increased as compared to the Multi-Stage DCF analysis he presented in Liberty's 2019 and 2021 rate cases. For example, Mr. Murray states that the results of his Multi-Stage DCF model are 55 to 110 basis points higher than his cost of equity estimates of 7.0 percent to 7.25 percent in Liberty's 2022 rate case.[82] Similarly, Mr. Murray's Multi-Stage DCF model results are 105 to 160 basis points higher than his estimates in Liberty's 2019 rate case. Despite the change in his Multi-Stage DCF model results, Mr. Murray recommends an ROE of 9.25 percent for Liberty, which is the same as the Company's authorized ROE of 9.25 percent in the 2019 rate case.

Q. Are the results of Mr. Murray's Multi-Stage DCF model reasonable?

A. No. The results of Mr. Murray's Multi-Stage DCF analysis are so low as to be unreasonable and are not reasonably reflective of the cost of equity for a vertically-integrated electric utility such as Liberty. Not a single jurisdiction has authorized an ROE for an integrated electric utility as low as the results of Mr. Murray's Multi-Stage DCF model. The *Hope* and *Bluefield* decisions, which Mr. Murray acknowledges are legal standards to be upheld, require the authorized return to be just and reasonable, as well as comparable to other returns available to investors in companies with similar risk. Mr. Murray's Multi-Stage DCF results clearly violate this standard.

[82] *Id*., at pp. 45-46.

Q. Please summarize Mr. Murray's opinion regarding the difference between authorized ROEs and the cost of equity.

A. Mr. Murray attempts to reconcile the difference between the results of his ROE estimation models and his recommendation by suggesting that average allowed ROEs have been greater than the cost of equity. According to Mr. Murray, the results of the modern financial models must be reconciled with the principles of *Hope* and *Bluefield*, which require the return to be just and reasonable and commensurate with the return available to investors in assets of similar risk.[83] Thus, Mr. Murray develops a zone of reasonableness based on recent authorized returns and prior Commission guidance.

Q. Do you agree with Mr. Murray that authorized ROEs overstate the actual cost of equity for electric utilities?

A. No, I do not. Such a conclusion would rest on a finding that regulators across the U.S., including the Commission, have systematically overstated the ROE for the utilities under their jurisdiction. Rather, regulators, who routinely cite the *Hope* and *Bluefield* standards and conclude that their decisions meet the fair return standard, have authorized ROEs well in excess of Mr. Murray's cost of equity estimates.

Q. Do you agree with the long-term growth rate used in Mr. Murray's Multi-Stage DCF model?

A. No, I do not. See my rebuttal of Mr. Walters for further discussion of a more reasonable approach to estimating the long-term growth rate in the Multi-Stage DCF model.In addition, the perpetual growth rates of 3.00 or 3.50 percent that Mr. Murray relies on are not consistent with the historical EPS and DPS growth rates for the companies in my proxy group. Figure 9 demonstrates that the median EPS growth rate for the

[83] *Id*., at pp. 25.

companies in my proxy group (excluding Edison International and TXNM, Inc.) from 2009-2024 (i.e., a 15-year period) has been 5.01 percent, while the median historical DPS growth rate for these same companies has been 4.59 percent. These growth rates are significantly higher than the perpetual growth rates used by Mr. Murray.

Figure 99: Historical EPS and DPS Growth Rates for Electric Utilities

	EPS Growth 2009-2024	DPS Growth 2009-2024
Average	4.67%	4.74%
Median	5.01%	4.59%

Q. What is the effect of Mr. Murray's long-term growth rate assumption on his Multi-Stage DCF results?

A. Mr. Murray has acknowledged in previous testimony on behalf of Staff that the "[c]ost of equity estimates using multi-stage DCF methodologies are **extremely sensitive** to the assumed perpetual growth rate."[84] As I have demonstrated above, investors expect the long-term growth rate for Mr. Murray's proxy group to exceed by a significant amount the 3.00 and 3.50 percent growth rates he has relied on in his Multi-Stage DCF model. If Mr. Murray were to assume a more reasonable long-term growth rate, such as the 5.44 percent GDP growth rate I used in the Multi-Stage DCF model in my rebuttal testimony, he would have obtained a much higher ROE estimate for the proxy group.

Q. Please summarize your conclusions regarding Mr. Murray's Multi-Stage DCF analysis.

A. My conclusion is that Mr. Murray's Multi-Stage DCF model does not provide reasonable return estimates for electric utilities such as Liberty and produces results

[84] Case No. ER-2014-0258, Staff Cost of Service Report (December 5, 2014), at p. 34.

that are much lower than recently authorized ROEs for integrated electric utilities. Mr. Murray seems to agree, and abandons his Multi-Stage DCF analysis due to the unreasonably low results.

C. Capital Asset Pricing Model

Q. Please summarize Mr. Murray's CAPM analysis.

A. Mr. Murray develops four separate CAPM analyses, as shown in Schedule DM-D-8. He uses the following inputs: 1) a risk-free rate of 4.76 percent based on the average monthly yield on the 20-year Treasury bond since March 1, 2025; 2) four estimates of adjusted betas ranging from 0.623 to 0.700; and 3) an MRP of between 5.00 and 6.00 percent. The results of Mr. Murray's CAPM analyses range from 7.88 percent to 8.96 percent. Ultimately, Mr. Murray concludes that his CAPM analyses support a cost of equity range of 7.8 percent to 9.0 percent.[85]

Q. Do you agree with the risk-free rate that Mr. Murray uses in his CAPM analysis?

A. While I do not specifically dispute the risk-free rate of 4.76 percent that Mr. Murray relies on in his CAPM analyses, I do not agree with Mr. Murray's sole reliance on the historical average Treasury bond yields because the cost of equity is intended to be forward-looking. Therefore, it is important to also consider, as I have, forecast interest rates that are expected to prevail during the period when the Company's rates will be in effect.

Q. What beta coefficients does Mr. Murray rely on?

A. Mr. Murray calculates raw beta coefficients for the companies in his electric utility proxy group using a template provided by S&P Market Intelligence and then attempts

[85] Direct Testimony of David Murray, at p. 48.

to adjust those betas using the Blume formula. That analysis suggests a beta of 0.623 to 0.700, depending on the proxy group.[86]

Q. What is your response to Mr. Murray's recalculation of the beta coefficients?

A. Mr. Murray has consistently relied on Value Line as the source of his beta coefficients in his CAPM analysis for many years. He offers no explanation as to why he has decided not to rely on Value Line and to instead recalculate his own estimates of beta in this proceeding. In addition, while Mr. Murray indicates that he calculated the beta coefficients for his proxy group companies based on Value Line's approach, his Electric Utilities average beta of 0.700 is much lower than the Electric Utilities average Value Line Beta coefficient of 0.801 as of June 30, 2025, demonstrating that beta coefficients for electric utilities have not moderated to the extent indicated by Mr. Murray. As such, the results of his CAPM analyses are understated.

Q. What is your concern about Mr. Murray's MRP estimates?

A. Mr. Murray's range of MRPs from 5.00 percent to 6.00 percent is understated relative to both historical average MRP data from Kroll and the forward-looking MRP, as calculated in my direct and rebuttal testimony. First, from a practical standpoint, the results of six of Mr. Murray's eight CAPM estimates (as shown in Schedule DM-D-8) are significantly below any return that has been authorized by a U.S. regulatory jurisdiction for an integrated electric utility in at least 40 years. The primary reason for the unreasonably low results from Mr. Murray's CAPM analysis is his selection of the MRP. Based on historical data from Kroll, the market risk premium from 1926-2024

[86] See Schedule DM-D-8.

was 7.31 percent.[87] However, the MRP range used by Mr. Murray of 5.00 percent to 6.00 percent suggests that the forward-looking MRP is 131 to 231 basis points *lower* than the historical average. Likewise, I calculated the forward-looking MRP for the companies in the S&P 500 Index with positive earnings growth rates that are less than 20 percent. My analysis indicates a forward-looking MRP between 6.61 percent and 7.13 percent, as shown in **Rebuttal Schedule DSD-5.4**, which is 61 to 213 basis points higher than Mr. Murray's MRP range.

Q. What is your conclusion regarding Mr. Murray's CAPM analysis?

A. My conclusion is that Mr. Murray's CAPM results of 7.80 percent to 9.00 percent are not reasonable estimates of the authorized ROE for Liberty. Similar to his Multi-Stage DCF analysis, flawed input assumptions in Mr. Murray's CAPM have resulted in the incorrect conclusion that the cost of equity is well below recently authorized ROEs for vertically-integrated electric utilities. As such, the results of Mr. Murray's CAPM analysis are not representative of the forward-looking cost of equity for Liberty in this proceeding.

D. Risk Premium Methodology

Q. Please summarize Mr. Murray's Risk Premium analysis.

A. Mr. Murray uses recent average yields on Moody's Baa-rated utility bonds of 6.23 percent and an estimated risk premium of 3.00 percent to 4.00 percent. Mr. Murray selects the low end of the risk premium range of 3.00 percent because he contends that investors view utilities as bond "surrogates/substitutes."[88] This results in a Risk

[87] The market risk premium from 1926-2024 is calculated as the average return on large company stocks from 1926-2024 minus the average income only return on long-term government bonds from 1926-2024 (i.e., 12.30 percent – 4.99 percent = 7.31 percent). Source: Kroll Cost of Capital Navigator.
[88] Direct Testimony of David Murray, at p. 48.

Premium estimate of 9.23 percent. Mr. Murray's recommended ROE of 9.25 percent is consistent with the results of his Risk Premium approach.

Q. Do you agree with this methodology?

A. As discussed in my response to Mr. Walters, Mr. Murray's Risk Premium approach relies on a single estimate of the MRP and does not take into consideration the inverse relationship between interest rates and the equity risk premium. Because Mr. Murray's Risk Premium analysis is based on a static MRP of only 3.00 percent, it does not reflect that inverse relationship, and does not provide a sufficient risk premium to compensate investors for the risks associated with owning common equity as compared to debt.

E. Conclusions on Mr. Murray's ROE Findings and Recommendations

Q. Please summarize your conclusions about the way in which Mr. Murray arrives at his recommended ROE for Liberty.

A. While I have responded at a high level to each of the methodologies presented by Mr. Murray, it is important to recognize that his ROE recommendation is not based on the results of either his DCF or CAPM models. Instead, Mr. Murray's ROE recommendation is based on his establishment of a "zone of reasonableness" of 9.00 percent to 9.50 percent. Mr. Murray's analyses, however, fail to support the range of reasonableness from which he selects his ROE recommendation. Mr. Murray states that he has developed his range based on recently authorized average ROEs for electric utilities, which he reports as 9.75 percent. Mr. Murray provides no evidence that Liberty has lower business risk than other electric utilities. He also reduces his ROE recommendation for Liberty by 25 basis points compared to his recent recommendations for Ameren Union Electric and Evergy as a penalty for performance related issues on the customer billing system. As discussed in Section VI and in the

rebuttal testimony of Company witness Reed, a performance penalty is not the appropriate regulatory policy response to the issues with Liberty's billing system. For all of these reasons, I believe the Commission should reject Mr. Murray's recommended ROE of 9.25 percent.

IX. SUMMARY AND RECOMMENDATIONS

Q. Please summarize your conclusions and recommendations regarding the appropriate ROE for Liberty in this proceeding.

A. I continue to support the results of the ROE analysis presented in my direct testimony, as updated in my rebuttal testimony, which produce a reasonable range of ROE estimates for Liberty of 9.75 percent to 11.00 percent. While the results of financial models provide a starting point, my ROE recommendation also reflects other considerations, including company-specific risk factors, capital market conditions and the capital attraction standard. Considering the financial and business risk factors facing Liberty, and the expectation that interest rates will remain above recent historical levels due to market uncertainty, the Company's proposed ROE of 10.00 percent is reasonable if not conservative. In summary:

- Nothing in Mr. Walters' or Mr. Murray's testimony has caused me to change my range of results or my ROE recommendation for Liberty.
- Recently authorized ROEs for integrated electric utility companies support an authorized ROE for Liberty that is higher than that recommended by Staff and OPC, especially when one considers the relative risk of Liberty and those companies.
- Mr. Walters' and Mr. Murray's ROE recommendations are lower than my range of reasonable results of 9.75 percent to 11.00. Neither witness adequately takes

into consideration the effect of inflation and higher interest rates on the models used to estimate the cost of equity. In addition, Mr. Walters and Mr. Murray fail to consider the company-specific risk factors that distinguish Liberty from the proxy group companies and which support an authorized return above the proxy group average.

- I disagree with Staff's and OPC's proposal to reduce Liberty's earnings for the performance of the Company's new customer billing system by imposing an ROE penalty on Liberty. This is not a constructive way to address Liberty's performance, and would cause investors to perceive the regulatory environment in Missouri as unfavorable and not supportive of credit quality. If this were to occur this will negatively impact the cost of capital and ability to attract capital not just for the Company, but also for other utilities in Missouri. The imposition of an ROE penalty would disincentivize investment in Missouri at a critical juncture for the electric utility industry.

Q. What is your recommendation regarding a reasonable capital structure for Liberty?

A. Mr. Walters has adopted the Company's proposed capital structure in his cost of capital analysis. OPC, on the other hand, recommends a hypothetical capital structure with a common equity ratio of 45.0 percent that is arbitrary, not based on any factual or empirical basis, and misaligned with authorized capital structures for other U.S. vertically-integrated operating utilities. I recommend that Mr. Murray's capital structure recommendation be rejected by the Commission.

I continue to support the reasonableness of the Company's proposed actual pro forma capital structure, revised for True-up period of March 31, 2025, to reflect its

actual capitalization of 53.00 percent common equity and 47.00 percent long-term debt. The proposed common equity ratio of 53.0 percent is the "most economical" when compared to the capital structure of APUC and LUCO, and is reasonable when compared to the range of actual and authorized equity ratios for the operating companies held by proxy group.

Q. What is your recommendation regarding a reasonable cost of debt for Liberty?

A. Mr. Walters has adopted the Company's proposed cost of debt in his cost of capital analysis. OPC recommends a cost of debt based on adjustments to LUCo's cost of debt. Because those adjustments are subjective, and further because the cost of debt is observable and reflects the business and financial risks of the issuing company, as well as market conditions at the time of issuance, I recommend Mr. Murray's proposed cost of debt be rejected in favor of the Company's proposed cost of debt.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

VERIFICATION

I, Daniel S. Dane, under penalty of perjury, on this 18th day of August, 2025, declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Daniel S. Dane