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Sponsoring Party: Public Counsel

Case No.: ER-2024-0261

SURREBUTTAL TESTIMONY

OF

DAVID MURRAY

Submitted on Behalf of the Office of the Public Counsel

**THE EMPIRE DISTRICT ELECTRIC COMPANY
D/B/A LIBERTY**

FILE NO. ER-2024-0261

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September 17, 2025

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OF
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THE EMPIRE DISTRICT ELECTRIC COMPANY D/B/A LIBERTY
FILE NO. ER-2024-0261

1 **Q. What is your name and what is your business address?**

2 A. My name is David Murray and my business address is P.O. Box 2230, Jefferson City,
3 Missouri 65102.

4 **Q. Are you the same David Murray who previously filed Direct and Rebuttal Testimony in**
5 **this case?**

6 A. Yes.

7 **Q. Why are you testifying in surrebuttal?**

8 A. I am responding to the rebuttal testimony of Daniels S. Dane, who sponsored testimony on
9 behalf of The Empire District Electric Company (“Empire”). Mr. Dane disagrees with my
10 recommended ratemaking capital structure, cost of long-term debt, and recommended
11 authorized return on common equity (“ROE”).

12 Mr. Dane also updated his cost of common equity (“COE”) analysis with more recent
13 market data. As part of his updated recommended rate of return (“ROR”), Mr. Dane also
14 updated his recommended capital structure and cost of long-term debt through March 31,
15 2025.

16 **Q. Do you need to update your recommended ROR for financial data through the**
17 **ordered true-up cutoff date, March 31, 2025?**

18 A. No. Because March 31, 2025, information was available at the time I filed direct testimony
19 in this case, my ROR recommendation already considered financial data through March
20 31, 2025.

1 **Q. How is your surrebuttal testimony organized?**

2 A. First, I address Mr. Dane's arguments related to an appropriate ratemaking capital structure
3 to set Empire's ROR. Mr. Dane provided his updated recommended capital structure
4 through the ordered true-up date, March 31, 2025. Mr. Dane's updated capital structure
5 provides additional proof as to the malleability of Algonquin Power & Utilities Corp.'s
6 ("APUC") internal capital structure assignment process for its operating utility companies.
7 Therefore, his update supports not adopting Empire's capital structure because it proves
8 that capital structure is not market-based, but rather a result of internal bookkeeping entries
9 that cannot be reconciled to actual third-party capital.

10 Second, I address Mr. Dane's updated cost of long-term debt. As with Empire's internally
11 assigned capital structure, Mr. Dane's updated recommended cost of long-term debt is
12 based on a hypothetical cost assignment process. In this case, the internal transaction has
13 not even been executed, and it is uncertain as to when it will be executed. The evidence
14 could not be clearer as to the illegitimacy of this process.

15 Finally, I'll address Mr. Dane's arguments related to how to assess whose COE estimates
16 are more consistent with those used by investors, whether third-party investors or APUC
17 itself. My discussion of the reasonableness of my COE estimates compared to sources
18 outside of utility ratemaking will lead into my response to Mr. Dane's specific criticisms
19 about my COE analysis.

20 **CAPITAL STRUCTURE**

21 DANIEL DANE'S UPDATED CAPITAL STRUCTURE

22 **Q. What is Mr. Dane's updated recommended ratemaking capital structure through**
23 **March 31, 2025?**

24 A. Mr. Dane recommends Empire's ROR be set based on Empire's *pro forma* capital structure
25 as of March 31, 2025, which he determined to consist of 53% common equity and 47%
26 long-term debt.

1 **Q. What is Mr. Dane's view of Empire's actual capital structure as of March 31, 2025?**

2 A. After removing short-term debt from his Schedule DSD-8 attached to his rebuttal
3 testimony, Mr. Dane's indicated common equity ratio is approximately 57.4%.

4 **Q. Is Mr. Dane's recommended capital structure consistent with APUC's internal**
5 **targets for desired authorized RORs?**

6 A. Yes. Mr. Dane's recommended common equity ratio is exactly consistent with APUC's
7 desired capital structure for purposes of setting Empire's ROR. However, to achieve this
8 explicit target, Mr. Dane had to make a *pro forma* adjustment to Empire's actual capital
9 structure as of March 31, 2025.

10 **Q. Why did Mr. Dane update his recommended capital structure through March 31,**
11 **2025?**

12 A. March 31, 2025, is the ordered true-up cutoff date for Empire's rate case.

13 **Q. Is it customary to utilize *pro forma* adjustments to capital structures as of true-up**
14 **cutoff dates?**

15 A. No. Utility companies typically request a true-up date to allow for an audit of actual
16 financial information due to an expected significant change in the cost of service between
17 the time the company files its rate case and toward the end of the procedural schedule. It
18 is common for utility companies to make *pro forma* adjustments to the initial test year
19 balances to reflect expected balances as of the anticipated true-up date. The intent of a
20 true-up date is to allow parties the opportunity to audit actual data through the true-up date
21 to ensure financial data is consistent with projections made in direct testimony. Therefore,
22 *pro forma* adjustments to financial data as of the true-up date are inappropriate.

23 **Q. What was your determination of Empire's actual capital structure as of March 31,**
24 **2025?**

25 A. After excluding tax equity, outstanding securitized debt, and "money pool" borrowings, I
26 determined Empire's long-term capital structure ratios were 57.51% common equity and
27 42.49% long-term debt.

1 **Q. How did Mr. Dane achieve a 53% common equity ratio?**

2 A. He simply made a *pro forma* adjustment to Empire's per books long-term debt balance to
3 assume Empire issues a promissory note to LUCo in the exact amount of \$246,415,000 on
4 June 30, 2025.

5 **Q. Are third-party corporate debt issuances normally this precise?**

6 A. No. As illustrated by LUCo's bond issuances in January 2024, market-based security
7 transactions are typically rounded by a larger amount, such as the nearest \$50 million in
8 LUCo's case.

9 **Q. Is Mr. Dane's *pro forma* adjustment an isolated adjustment?**

10 A. Yes. Since it is an adjustment based on a post March 31, 2025, ordered true-up cutoff date,
11 it is an isolated adjustment.

12 **Q. Has Liberty expressly stated in this case that it is proposing an isolated adjustment
13 for its capital structure?**

14 A. No, not to my knowledge.

15 **Q. Did Empire need \$246.415 million of financing on June 30, 2025?**

16 A. No. Empire had \$106.496 million of "money pool" balances outstanding as of June 30,
17 2025. Therefore, the *pro forma* adjustment Mr. Dane made to Empire's capital structure
18 is nothing more than a superficial adjustment made specifically to manipulate the figures
19 to land on a 53% common equity ratio.

20 **Q. Why did Empire need to make a *pro forma* adjustment for purposes of its
21 recommended capital structure at the March 31, 2025, true-up cutoff date?**

22 A. Because, as I have already testified in detail in my direct and rebuttal testimonies, APUC
23 failed to continuously balance and update Empire's books. But for ratemaking and tracking
24 internal financial performance, Empire's financial statements are of little consequence to
25 third-party investors because Empire no longer independently accesses capital markets.

1 **Q. Why does APUC target a 53% common equity ratio for Empire for purposes of**
2 **Empire’s requested ROR in this case?**

3 A. Good question. It certainly has nothing to do with a targeted common equity ratio for
4 purposes of achieving a certain credit rating. Companies that do not issue debt capital do
5 not need credit ratings. I can only surmise that APUC consistently requests a 53% common
6 equity ratio for Empire to set Empire’s ROR because this was the high-end of a range of
7 common equity ratios identified in the S&A filed in Case No. EO-2018-0092.

8 **Q. Has APUC consistently adjusted its Missouri operating utilities’ balance sheets**
9 **shortly before, or even after, they filed rate cases in attempt to support their requested**
10 **RORs?**

11 A. Yes. This has been a pattern not only for Empire, but Empire’s Missouri affiliates, Liberty
12 Utilities (Midstates Natural Gas Corp. (“Liberty Midstates”) and Liberty Utilities
13 (Missouri Water) Corp. (“Liberty Water”). As I testified in past Liberty Midstates’ rate
14 cases, APUC either forgot that the Liberty Midstates’ promissory notes issued to LUCo
15 had already matured or simply extended the maturity by a few months to allow time to
16 prepare an application to the Commission to obtain authority to execute another affiliate
17 promissory note.¹ Because the notes were affiliate notes, the lapses and extensions of
18 maturity dates had no financial consequence to either LUCo nor Liberty Midstates. These
19 examples continue to illustrate the illegitimacy of the capital structures assigned to APUC’s
20 Missouri utility operating companies.

21 *CASE NO. EM-2016-0213 FINANCING CONDITIONS*

22 **Q. Do you agree with Mr. Dane’s testimony that the Financing Conditions imposed on**
23 **Empire when the Commission conditionally approved APUC’s indirect acquisition of**
24 **Empire “requires” the use of the most “economical” capital structure between**
25 **Empire, LUCo, and APUC?²**

26 A. No. Financing Condition No. 5 states as follows:

¹ Case No. GR-2024-0106, Murray Rebuttal Testimony, p. 2, ln. 19 – p. 3, ln. 11.

² Dane Rebuttal, p. 5, ln. 21 – p. 6, ln. 7.

1 If Empire's per books capital structure is different from that of the entity or
2 entities in which Empire relies for its financing needs, Empire shall be
3 required to provide evidence in subsequent rate cases as to why Empire's
4 per book capital structure is the most economical for purposes of
5 determining a fair and reasonable allowed rate of return for purposes of
6 determining Empire's revenue requirement.

7 The condition clearly states that if Empire's capital structure is different from the entities
8 on which Empire relies for financing, *Empire* is required to provide evidence
9 demonstrating why Empire's capital structure is the most economical. The condition did
10 not mandate a specific ratemaking approach, but rather required *Empire* to proffer evidence
11 demonstrating that Empire's capital structure is the most economical.

12 **Q. Did you rely heavily on this condition in Empire's 2019 rate case to support your**
13 **recommended capital structure, which the Commission adopted?**

14 A. Yes. Even though other parties were not the subject of this condition, because Empire's
15 direct testimony in the 2019 rate case did not provide a comparison of its capital structure
16 to that of the entities on which it relied for financing, I provided this evidence in my direct
17 testimony in Empire's 2019 rate case.

18 **Q. Did you not recommend LUCo's adjusted capital structure in the 2019 rate case**
19 **because it was the most economical?**

20 A. This was certainly one of the most important factors I considered, but as my testimony in
21 the 2019 rate case reflects, I also concluded that Empire's capital structure was no longer
22 market-based or consequential because Empire no longer directly accessed capital markets.

23 **Q. Do you agree with Mr. Dane's representation of APUC's, LUCo's, and Empire's**
24 **capital structure as of March 31, 2025?**

25 A. No. Before diving into the details of Mr. Dane's representation of each company's capital
26 structure, an immediate red flag is the fact that Mr. Dane's Schedule DSD-8 indicates that
27 LUCo has a higher common equity balance (\$5.776 million) than its parent company,
28 APUC (\$4.965 million). While it is common for utility parent companies to have lower
29 common equity ratios than their subsidiaries due to the issuance of holding company debt,

1 it is less common for a subsidiary to have an absolute value of common equity that is higher
2 than that of its parent company.

3 **Q. Have you attached your analysis of APUC's, LUCo's, and Empire's capital structures**
4 **as of March 31, 2025, as a schedule to this testimony?**

5 A. Yes. Please see Schedule DM-S-1 attached to my testimony.

6 **Q. Aside from APUC's manipulation of Empire's capital structure by its election to**
7 **classify capital infusions as debt or equity, do you have issues with Mr. Dane's**
8 **representation of Empire's March 31, 2025, capital structure?**

9 A. Yes. My main issue with Mr. Dane's representation of Empire's March 31, 2025, capital
10 structure is that it depends on a *pro forma* isolated adjustment post March 31, 2025, to
11 reclassify affiliate "money pool" balances and other unidentified capital to an affiliate long-
12 term promissory note. Without this *pro forma* isolated adjustment, Empire's actual
13 common equity ratio as of March 31, 2025, is around 57.5%.

14 **Q. Do you wish to point out anything else about Mr. Dane's representation of Empire's**
15 **March 31, 2025, capital structure?**

16 A. Yes. I wish to highlight that Mr. Dane excluded the minority interest (*i.e.* tax equity)
17 balance of \$377.593 million from Empire's common equity. While I agree that the tax
18 equity should not be included in the capital structure because the tax equity has a direct
19 interest in Empire Wind Holdings, LLC ("EWH"), which receives compensation from the
20 tax attributes of the wind projects rather than a ROR on rate base, Mr. Dane fails to exclude
21 tax equity in his determination of LUCo's and APUC's capital structures.

22 **Q. Using Empire's actual March 31, 2025, capital structure and Empire's actual cost of**
23 **long-term debt as of March 31, 2025, what ROR is implied?**

24 A. 7.12% on an after-tax basis and 8.78% on a pre-tax basis (*see* Schedule DM-S-2).

1 **Q. Do you have issues with Mr. Dane's representation of LUCo's March 31, 2025, actual**
2 **capital structure?**

3 A. Yes. Mr. Dane includes tax equity in the common equity balance, despite excluding it
4 from his representation of Empire's capital structure. Tax equity is not equivalent to
5 common equity in terms of its financial interests. Common equity investors, which in this
6 situation is APUC, receive residual claim to LUCo's earnings after LUCo's and its
7 subsidiaries' debt investors receive their contractually required debt service payments. The
8 tax equity investors purchased direct financial interests in the tax benefits of EWH, not
9 LUCo's earnings. Therefore, these equity interests should not be treated the same as
10 common equity. Because the tax equity investors do not receive a return from LUCo's
11 ownership interests, I completely removed tax equity in my *pro forma* adjustments.

12 **Q. Are LUCo's debt investors subordinated to the tax equity investors?**

13 A. Yes. The tax equity investors own Class A membership interests in EWH, which is a direct
14 subsidiary of Empire.³ In return for contributing *** _____ *** of the capital to fund the
15 purchase price of the wind projects, JP Morgan and Wells Fargo required an internal rate
16 of return ("IRR") of *** _____ *** through the "Flip Date."⁴

17 **Q. What is the "Flip Date?"**

18 A. It is the expected date at which the tax equity investors are expected to achieve their
19 required IRR. At the time of the closing of the tax equity agreement, the Flip Date was
20 expected to occur approximately 10 years after the date of the funding of the tax equity
21 investors' capital contribution commitment.

³ Case No. ER-2021-0312, Todd Mooney Direct, p. 11, lns. 17-20

⁴ *Id.*, p. 14.

1 **Q. Are JP Morgan and Wells Fargo to receive the majority of the anticipated financial**
2 **benefits from their investment in EWH before Empire does?**

3 A. Yes.⁵ Because the tax equity investors bought shares with a direct financial interest in
4 EWH, Empire's, LUCo's, and APUC's debt and common equity investors are subordinated
5 to the tax equity investors that have direct ownership in EWH.

6 **Q. Is this type of situation different from other capital, such as preferred stock, that is**
7 **typically classified as a minority or non-controlling equity interests at a corporate**
8 **ownership level?**

9 A. Yes. In my experience with other utility companies' capital structures, preferred stock
10 issued to raise general corporate capital is often classified as non-controlling or minority
11 interest because this capital has no voting rights and its dividends must be paid before the
12 company can pay dividends to its common equity investors. However, this capital is
13 normally invested in the corporation rather than at a project level.

14 **Q. What does Mr. Dane's consolidation of the tax equity with LUCo's common equity**
15 **imply about the order of investor claims to cash flows produced by LUCo's regulated**
16 **utilities?**

17 A. That it is equally subordinated ("pari-passu") to LUCo's consolidated debt obligations.

18 **Q. Is it?**

19 A. No.

⁵ Case No. EO-2018-0092, Todd Mooney Direct, p. 8, l. 13 – p. 10, l. 2.

1 **Q. In past proceedings, have Empire witnesses compared the Neosho Ridge, Kings Point**
2 **and North Fork Ridge wind generation facilities (hereinafter referred to as “Wind**
3 **Facilities”) to other generation facilities Empire partially owns for purposes of**
4 **ratemaking?**

5 A. Yes. In Case No. EO-2018-0092, Company witness Kris Krygier indicated the ratemaking
6 for the Wind Facilities should be similar to ratemaking for Empire’s partial ownership in
7 Iatan and Plum Point.⁶

8 **Q. How is Empire’s ownership in Iatan and Plum Point accounted for on its consolidated**
9 **balance sheet?**

10 A. Only the amounts of Empire’s ownership interest in these plants are recorded on Empire’s
11 balance sheet as plant-in-service. Therefore, only the capital Empire issued to fund its
12 purchase of its ownership share in these generation facilities is recorded on Empire’s
13 balance sheet.⁷

14 **Q. If the Wind Facilities were accounted for in the same fashion, how would this impact**
15 **Empire’s, LUCo’s, and APUC’s consolidated balance sheets?**

16 A. The portion of the plant funded by the tax equity investor would not be recorded on
17 Empire’s, LUCo’s or APUC’s consolidated balance sheets. The tax equity supporting this
18 portion of the asset also would not be recorded on their balance sheets.

19 **Q. Is Mr. Dane’s representation of APUC’s common equity balance correct?**

20 A. No. Similar to his calculation of LUCo’s common equity balance, Mr. Dane included
21 \$455.5 million of tax equity in his calculation of APUC’s common equity balance. For the
22 same reasons I explained for LUCo’s capital structure, the minority interest should not be
23 aggregated with APUC’s common equity balance.

⁶ Case No. EO-2018-0092, Kris Krygier Direct Testimony, p.7, Ins. 23-32.

⁷ Note 10 to The Empire District Electric Company’s 2020 Audited Financial Statements.

1 **Q. Do you agree with Mr. Dane's adjustments to LUCo's capital structure to assess**
2 **LUCo's *pro forma* common equity ratio?**

3 A. No. Mr. Dane's *pro forma* adjustment of \$628.5 million is based on adjustments made in
4 Empire's 2021 rate case. After reviewing LUCo's affiliate borrowings from Liberty
5 Utilities Finance GP1, I determined that \$151.187 million of affiliate long-term promissory
6 notes should be netted from the \$760 million of the off-balance sheet debt LUCo
7 guarantees. This results in a net increase of \$608.813 million to LUCo's debt balance and
8 a corresponding deduction to LUCo's common equity balance.

9 **Q. Would this correction cause Mr. Dane's determination of LUCo's effective common**
10 **equity ratio to be higher than that shown in Schedule DSD-8 attached to his rebuttal**
11 **testimony?**

12 A. Yes. But for reasons I have already testified in my direct and rebuttal testimony, LUCo's
13 common equity ratio is currently skewed high due to affiliate equity contributions, which
14 were not offset by the expected assumption of debt if LUCo had closed on its planned
15 acquisition of Kentucky Power.

16 **Q. Do you agree with Mr. Dane's *pro forma* adjustments to APUC's capital structure?**

17 A. No. While I agree with Mr. Dane's 50% equity and 50% debt assignment to APUC's 60-
18 year subordinated notes, I do not agree with Mr. Dane's adjustment for preferred stock.
19 Mr. Dane added 50% of APUC's preferred stock balance to APUC's long-term debt, but
20 he did not add 50% of APUC's preferred stock to APUC's common equity balance.

21 **Q. Did Mr. Dane follow the methodology that you used in Empire's 2019 rate case when**
22 **he made these adjustments?**

23 A. Yes. While his adjustments were generally consistent with the approach I used in Empire's
24 2019 rate case, I discovered additional details about inter-company debt that should be
25 considered. I also realized that my original adjustment for preferred stock in the 2019 rate
26 case did not assign the preferred stock to both common equity and long-term debt
27 consistent with rating agencies' methodologies.

1 **Q. Why did you make *pro forma* adjustments to LUCo's and APUC's capital structures**
2 **in Empire's 2019 rate case?**

3 A. I did so because Empire's capital structure was limited to common equity and debt
4 (including no off-balance sheet debt). APUC's and LUCo's capital structures were not as
5 simple. Therefore, to compare capital structures across companies, I adjusted APUC's
6 more complicated and nuanced capital structure to compare the implied leverage
7 underlying its capital structure to that of Empire's per books capital structure. For purposes
8 of LUCo's capital structure, my *pro forma* adjustments captured LUCo's actual amount of
9 financial risk caused by LUCo's guarantees of off-balance sheet debt.

10 **Q. In Empire's 2019 rate case, on what basis did you determine that LUCo had the most**
11 **economic capital structure compared to APUC and Empire?**

12 A. Based on its higher proportion of leverage and LUCo's cost of long-term debt.

13 **Q. On what basis did you determine that APUC did not have the most economical capital**
14 **structure?**

15 A. After adjusting APUC's preferred stock and 60-year subordinated notes to assign 50%
16 equity interest and 50% debt to these hybrid securities, I determined that APUC's capital
17 structure was less leveraged than LUCo's capital structure.

18 **Q. Do APUC's preferred stock and 60-year subordinated notes have explicit costs**
19 **assigned to them?**

20 A. Yes.

21 **Q. Why didn't you determine APUC's ROR based on the costs assigned to APUC's**
22 **preferred stock and subordinated notes?**

23 A. Because of the complexity of APUC's capital structure at the time, I decided the best
24 approach was to attempt to compare implied common equity ratios across companies rather
25 than determining APUC's cost of capital based on its numerous types and complexities of
26 securities capitalizing its balance sheet.

1 **Q. Based on your analysis of Empire's, LUCo's, and APUC's capital structures for this**
2 **case, which one is currently the most economical?**

3 A. APUC's capital structure is currently the most economical based on my estimate of an
4 implied common equity ratio of 50.46%. Applying APUC's embedded cost of long-term
5 debt (excluding the 60-year subordinated notes and Empire's securitization debt) of 4.67%
6 to the remaining 49.54% of the capital structure and a 9.25% ROE to the 50.46% common
7 equity ratio, the pre-tax ROR is 8.44% (*see* Schedule DM-S-3). This compares to a pre-
8 tax ROR of 8.75% using LUCo's actual capital structure and adjusted cost of long-term
9 debt at March 31, 2025 (*see* Schedule DM-S-4), and a pre-tax ROR of 8.78% using
10 Empire's March 31, 2025, capital structure (*see* Schedule DM-S-2).

11 **Q. What is the pre-tax ROR using APUC's detailed capital structure components, such**
12 **as preferred stock and the 60-year subordinated notes?**

13 A. 8.12% (*see* Schedule DM-S-5).

14 **Q. Are you changing the pre-tax ROR of 7.83% you recommended in your direct**
15 **testimony?**

16 A. No. Empire's ratepayers did not request to be affiliated/owned by a company that decided
17 to consolidate its financing functions and issuances at a corporate level. This convoluted
18 situation has proven to be problematic for purposes of estimating a fair and reasonable
19 ROR as if Empire remained a stand-alone pure play utility company with a transparent and
20 market-based cost of debt and capital structure. My recommended 45% ratemaking
21 common equity ratio is consistent with the leverage APUC considered to be reasonable for
22 its regulated utilities if they were insulated from APUC's other financing and business
23 activities. Because Empire's ratepayers are captive to APUC's ownership and its
24 aggressive financing and investment decisions, Empire's ratepayers should not pay for a
25 cost of capital higher than the lowest reasonable estimate based on fair and logical
26 imputation methods.

1 **Q. Does your recommended ratemaking capital structure for Empire comply with**
2 **Missouri's securitization statute that mandates the exclusion of securitization debt**
3 **from the authorized ROR?**

4 A. Yes. I neither directly nor indirectly included the Empire securitized debt in my
5 determination of a fair and reasonable ratemaking capital structure and cost of long-term
6 debt to charge Empire's ratepayers.

7 **Q. Did any company witnesses address your direct testimony related to concerns about**
8 **APUC's capital assignment process for its operating utility subsidiaries?**

9 A. No. Despite my detailed critique in my direct testimony about APUC's inconsistent capital
10 assignment process, no company witness responded to my concerns. Mr. Dane simply
11 defends his opinion that Empire's capital structure is more economical. Of course, Mr.
12 Dane made another *pro forma* adjustment to Empire's actual capital structure as of the true-
13 up date in his effort to accomplish his goal of showing Empire's capital structure is more
14 economical.

15 **Q. What was Empire's capital structure as of June 30, 2025?**

16 A. After excluding tax equity, securitized debt, and money pool borrowings, Empire's per
17 books common equity ratio is 58.73%. Therefore, even as of three months post the ordered
18 true-up date in this case, APUC still has not updated Empire's internally assigned capital
19 structure.

20 **UPDATED COST OF DEBT**

21 **Q. Did Mr. Dane update his recommended cost of long-term debt in rebuttal?**

22 A. Yes. Mr. Dane recommends a 4.53% cost of long-term debt be applied to the 47% long-
23 term debt ratio in his recommended capital structure.

1 **Q. Did Mr. Dane provide workpapers to support his updated 4.53% cost of long-term**
2 **debt recommendation?**

3 A. No. According to footnote 3 of Schedule DSD-8, the *pro forma* debt adjustment reflects a
4 “budgeted” debt issuance as of June 30, 2025. Therefore, this promissory note had not
5 been issued at the time Mr. Dane prepared his rebuttal testimony. Mr. Dane’s footnote also
6 indicates that Empire plans to file a “Financing Petition” for this promissory note during
7 the Summer of 2025.

8 **Q. Is this pro forma debt adjustment an isolated adjustment?**

9 A. Yes, because it is premised on a “budgeted” debt issuance as of June 30, 2025, and the
10 true-up cutoff date is March 31, 2025.

11 **Q. Has Empire explicitly stated that it is proposing an isolated adjustment for its cost of**
12 **long-term debt?**

13 A. Not beyond what Mr. Dane says in footnote 3 of Schedule DSD-8.

14 **Q. Does the Company’s true-up revenue requirement information that it provided to**
15 **parties on June 30, 2025, reflect Mr. Dane’s updated cost of long-term debt?**

16 A. Yes, but this information has yet to be filed in this case.

17 **Q. Did you inquire of the specific details that caused Empire to increase its requested**
18 **cost of long-term debt to 4.53% from 4.22%?**

19 A. Yes, I issued data requests to Empire requesting the embedded cost of long-term debt
20 calculation and specific details assumed for the “budgeted” debt issuance.

21 **Q. Did Empire specify when it plans to execute this affiliate promissory note?**

22 A. Very generally. In response to OPC Data Request No. 3032 (*see* Schedule DM-S-6),
23 Empire indicated that it planned to execute this note with LUCo sometime in 2025.

24 **Q. What cost did APUC assign to the budgeted promissory note?**

25 A. 6.339% (*see* p. 7 of Schedule DM-S-7).

1 **Q. What is the basis for the coupon rate assigned to the budgeted promissory note?**

2 A. CIBC, APUC's investment banking advisor, provided indicative pricing information for
3 the hypothetical scenario that LUCo issued debt on June 23, 2025.

4 **Q. Has LUCo issued debt since January 12, 2024?**

5 A. No.

6 **Q. What is the basis for the coupon rate applied to the June 12, 2024, \$300 million**
7 **affiliate note between LUCo and Empire?**

8 A. The actual spread on notes LUCo issued on January 12, 2024.

9 **Q. What policies does APUC use to determine whether to apply an actual spread or an**
10 **indicative spread to promissory notes between LUCo and its subsidiaries, including**
11 **Empire?**

12 A. I do not know. As I testified in my rebuttal testimony, the pricing of Empire's Missouri
13 affiliates, Liberty Midstates and Liberty Water, promissory notes was based on indicative
14 pricing estimates even though their affiliate notes were issued in close proximity to when
15 Empire issued its \$300 million of promissory notes to LUCo.

16 **Q. If Empire does not know when this note will be executed, how does it know what cost**
17 **will be assigned to the note?**

18 A. It does not know what cost will ultimately be assigned to the note. In response to OPC
19 Data Request No. 3031, Empire stated that the cost will be determined on the date the note
20 is executed, which is unknown at this time.

21 **Q. Did Public Counsel urge the Commission to adopt a later true-up date to capture the**
22 **most recent known and measurable information, but still allow sufficient time to**
23 **process this case?**

24 A. Yes. Public Counsel argued the Commission should order a June 30, 2025, true-up date
25 considering Empire's books should be updated and closed by the anticipated true-up
26 testimony filing of September 15, 2025.

1 **Q. What true-up cutoff date did the Commission order?**

2 A. In its Order Establishing True-Up Period the Commission ordered a March 31, 2025, true-
3 up cutoff date. The Commission's order also allowed for the possibility of discrete
4 adjustments, "provided they are known and measurable."

5 **Q. Given your experiences in other rate cases and your understanding of rate case**
6 **procedures, when do utility companies estimate the amounts and costs of their debt**
7 **issuances?**

8 A. When they file their applications for a rate increase. Often, because a utility company
9 anticipates further investment and the issuance of capital to fund those investments, a
10 company will estimate the amount and cost of debt that will be issued *prior* to the true-up
11 date. The objective of an audit of true-up data is to ensure that the utility company's
12 projections are updated for actual investments and transactions expected to be made in time
13 to be considered in the true-up. The objective of a true-up is NOT to continue to make *pro*
14 *forma* adjustments to data as of the true-up date because this information is not known and
15 measurable.

16 **Q. Did this happen in the most recent Liberty Midstates general rate case?**

17 A. Yes. APUC has a desired ratemaking common equity ratio of approximately 53%. To
18 achieve this, it must execute long-term promissory notes to ensure its long-term debt ratio
19 is approximately 47% as of the test period or updated test period. Typically, APUC does
20 not realize the operating utility's capital structure is inconsistent with this target until it
21 begins preparing the utility's application for a rate increase. Therefore, it scrambles,
22 through either "refinancing" past due affiliate promissory notes or making *pro forma*
23 adjustments for affiliate notes that should have been planned and executed in advance of
24 anticipated test periods and updated test periods in rate cases. Although better planning
25 and execution would still result in a fictional capital structure, at least it would illustrate
26 better preparation and organization of its operating utility companies' books.

1 **Q. If APUC kept its Missouri operating subsidiary balance sheets and promissory notes**
2 **consistently updated, would you support using an operating subsidiary capital**
3 **structure and cost of debt?**

4 A. No, absolutely not. While better organized and updated books would certainly be
5 welcome, APUC's Missouri operating subsidiaries' capital structures would still not be
6 market-based. If APUC consistently managed its internal common equity ratios to 53%,
7 while the entities that issue third-party capital (LUCo and APUC) had different levels of
8 leverage in their capital structures, the 53% common equity ratio would have no relevance
9 to debt investors' required rates of return.

10 **RETURN ON COMMON EQUITY**

11 RELEVANCE OF CORPORATE RECORDS

12 **Q. What is your response to Mr. Dane's claim that APUC's estimate of its COE shown**
13 **on Schedule DM-D-10 attached to your direct testimony may be ambiguous?**⁸

14 A. First, it is clear that ** _____
15 _____
16 _____
17 _____
18 _____
19 _____
20 _____
21 _____
22 _____ **

23 Considering this analysis was performed right before APUC's March 2023 announcement
24 it would reduce its dividend by 40% and its August 2024 announcement that it would
25 reduce its dividend by another 40% (cumulative reduction in dividends of 64.05%), if

⁸ Dane Rebuttal, p. 12, ln. 5 – p. 13, ln. 7.

⁹ On September 5, 2025, OPC submitted Data Request No. 3037 to request the underlying workpapers for these figures.

1 investors expected APUC's dividend to grow at this higher rate for the long-term, then they
2 were woefully surprised by APUC's significant dividend reductions.

3 **Q. If APUC's BOD had approved a **** _____
4 _____ ****?**

5 A. According to the table on page 2 of Schedule DM-D-10, the ** _____
6 _____ **

7 **Q. Is this high of a **** _____

8 _____

9 — _____

10 _____

11 _____

12 _____

13 _____

14 — _____

15 — _____

16 _____

17 _____

18 _____

19 _____

20 _____

21 _____

¹⁰ Murray Direct, p. 49, ln. 15 – p. 51, ln. 3.

1	—	_____
2		_____
3	—	_____
4		_____
5		_____
6	—	_____
7		_____
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21		_____
22		_____
23	—	_____
24		_____
25	—	_____
26		_____
27		_____

1 _____ ** Empire objected to this data request and
2 appears unwilling to voluntarily provide a response (*see* Schedule DM-S-9).

3 **Q.** ** _____
4 _____
5 _____

6 – _____
7 _____ **

8 **Q.** Does ** _____ ** support Mr. Dane’s argument that the
9 Commission should authorize Empire a higher ROE in this case as compared to
10 Empire’s 2019 rate case because of the increase in the cost of capital since then?¹¹

11 **A.** No. ** _____
12 _____

13 _____ ** In fact, in some corporate finance treatises, the ** _____ ** rate is used
14 interchangeably with the cost of capital.¹² This is due to the well-accepted capital
15 budgeting principle, which is proven through fundamental valuation analysis, that
16 companies should not invest in projects that are expected to earn less than their cost of
17 capital.

18 **Q.** Why would ** _____ ** if the cost of capital has increased
19 significantly over the last few years?

20 **A.** Because the cost of capital was extremely low at the time of Empire’s 2019 rate case. This
21 means that the spread between ** _____
22 _____ ** I estimated Empire’s COE to be in the range of 5.5% to 6.5% in
23 Empire’s 2019 rate case, which was corroborated by the ** _____ **
24 used in 2020 to estimate the fair value of Empire’s assets.¹³ If ** _____

¹¹ Dane Rebuttal, p. 10, ln. 6 – p. 12, ln. 4.

¹² Eugene F. Brigham and Joel F. Houston, “Fundamentals of Financial Management,” Eight Edition, The Dryden Press, 1998, p. 398.

¹³ Case No. ER-2021-0312, Empire’s Response to OPC Data Request No. 3002.

1
2 **

3 **Q. Did you submit follow-up data requests to discover ****
4 **_____ ** for capital budgeting purposes during 2019 to 2020?**

5 A. Yes. As can be seen in Schedule DM-S-9 attached to my testimony, Empire also objected
6 to these data requests (3043 and 3044) and appears unwilling to voluntarily provide
7 responses.

8 **Q. ****
9 **_____**

10 **_____**
11 **_____ ****

12 **Q. What is Mr. Dane's relationship with APUC's Board of Directors?**

13 A. I do not know. I do know that he is not an APUC employee. However, I do not know if
14 he or his firm, Concentric Energy Advisors ("Concentric"), has ever advised APUC's
15 BOD. I issued a data request inquiring about Concentric's consulting services to APUC,
16 but Empire objected to providing information beyond services procured on behalf of
17 Empire.

18 **Q. Why did you seek information about Mr. Dane's and Concentric's relationships with**
19 **APUC?**

20 A. Because Mr. Dane responded to my data requests when I inquired about APUC's BOD's
21 responsibilities and authorizations. Unless Mr. Dane was employed by APUC or provided
22 consulting services to APUC's BOD, I do not know the basis for his knowledge and
23 authority to respond to my inquiries into APUC's corporate governance activities.

24 **Q. What is your basis for testifying that ** _____ ****

25 A. My review of selected APUC BOD materials Empire made available for my review in
26 response to my data requests. Because of Mr. Dane's answer to my data request to the

1 contrary, I reread my notes from my audit of the selected materials and performed a second
2 review of specific BOD documents I received in response to data requests in the Liberty
3 Midstates rate case. After reviewing this information again, I confirmed that the materials
4 state that ** _____
5 _____ ** Specifically, the following is stated on page 1 of Schedule DM-D-9 attached
6 to my direct testimony:

7 *** _____
8 _____
9 _____ ***

10 ** _____
11 _____
12 _____
13 _____

14 **

15 *** _____
16 _____
17 _____
18 _____ ***

19 ** _____
20 _____ **

21 **Q. Mr. Dane's responses to your data requests related to APUC's ** _____**

22 _____

23 _____ ** **On what bases does**
24 **he make this argument?**

25 **A.** Many, but I don't agree with most of them. Please see Schedule DM-S-10 for Mr. Dane's
26 bases. I will address each of his three arguments in the order he made them.

27 ** _____ of

28 _____

29 _____

30 _____

_____ ** APUC's capital budget decision making process goes to the heart of the principles established in *Hope* and *Bluefield*. In fact, Mr. Dane testified as follows in his direct testimony:

Further, the return on equity established in this proceeding should allow Empire to attract capital on a stand-alone basis and **within the APUC corporate structure.** (emphasis added).¹⁴

Mr. Dane's testimony is at odds with his explanation that ** _____
____ ** should not be considered, or at least understood, in setting a fair and reasonable ROR consistent with the *Hope* and *Bluefield* standards.

Second, Mr. Dane attempts to differentiate ** _____

¹⁴ Dane Direct, p. 10, lns. 18-20.

1 _____
2 _____ ity
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____ **

10 **Q. Do some ROR witnesses exclude the utility's parent company from their proxy**
11 **group?**

12 A. Yes, but certainly not all ROR witnesses. Ann E. Bulkley, a recent ROR witness for many
13 Missouri utility companies, typically excludes the utility parent company from her proxy
14 group. However, in recent rate cases since 2022, Staff witnesses have included the utility's
15 parent company in their proxy group.¹⁵ Additionally, Spire Missouri's ROR witness in
16 2021 included Spire Inc. in his proxy group.¹⁶

17 **Q. What explanation did Ms. Bulkley give for not including Evergy Inc. in her proxy**
18 **group in Evergy Missouri West's recent general rate case?**

19 A. Ms. Ann E. Bulkley testified as follows:

20 In order to avoid the circular logic that otherwise would occur, it is
21 my practice to exclude the subject company, or its parent holding
22 company, from the proxy group.¹⁷

23 Ms. Bulkley testifies similarly in the other rate cases in Missouri in which she has
24 sponsored ROR testimony.

¹⁵ Case No. WR-2024-0320, Kelli Malki Direct Testimony, p. 39, Ins. 1-6 and Case No. ER-2022-0337, Seoung Joun Won Direct Testimony, p. 29, Table 2.

¹⁶ Case No. GR-2021-0108, Dylan W. D'Ascendis Direct Testimony, p. 14, Table 3.

¹⁷ Case No. ER-2024-0189, Ann E. Bulkley Direct, p. 30, Ins. 17-19.

1 **Q.** ** _____
2 _____
3 — _____
4 _____
5 _____
6 _____
7 _____ r a
8 _____
9 _____
10 — _____
11 — _____
12 _____
13 _____
14 _____
15 _____
16 _____
17 _____
18 _____
19 _____
20 _____
21 _____
22 _____ his
23 _____
24 — _____
25 — _____
26 _____
27 _____
28 _____
29 _____

____ ** For example, at the peak of recent increases in long-term bond yields in October 2023, Bank of America stated the following about the relationship of utility authorized ROEs compared to the utility industry's COE:

On a spot basis with 9.5-9.6% after-tax authorized ROEs in 3Q23, this is meaningfully higher than the cost of equity from the capital asset pricing model for most utilities in the 8.5-9.0% range. The 5% 30Yr US Treasury has compressed returns for utilities which have back-levered but we do not foresee a meaningful increase in allowed ROEs back above 10%. We continue to believe that California will not increase the allowed rate of return for the electric utilities due to the continuation of the extraordinary event from covid and the related policy responses.¹⁸ (bold in the original).

Q. Did Mr. Dane provide any additional reasons for why he views **_____

¹⁸ Julien Dumoulin-Smith, et. al, "Utilities in a 5% Treasury World: Who has a plan to withstand the pain? 3Q Preview," Bank of America Securities, October 20, 2023.

¹⁹ Dane Rebuttal, p. 13, lns. 3-5.

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____ **

9 **Q. Considering Mr. Dane's attempt to dismiss APUC's own **** _____
10 _____
11 _____ **** what do you**
12 **conclude?**

13 A. That this evidence illustrates the farce associated with the claimed premise for setting
14 utility companies' ROR based on their cost of capital. The main difference between the
15 cost of capital used to discount future estimated cash flows and the cost of capital estimated
16 for purposes of ratemaking relates to the cost of debt. Utility ratemaking uses a before-tax
17 embedded cost of long-term debt to set the authorize ROR because the objective of
18 ratemaking is to set rates based on a utility's actual cost of service. Therefore, if debt was
19 issued in 2020 to 2021 at a cost of 3% rather than current higher rates, the revenue
20 requirement is set to allow recovery of the historical cost of debt used to fund the historical
21 investment. However, in context of estimating the current market value of an enterprise,
22 investors estimate future after-tax cash flows, which must be discounted by the *current*
23 *after-tax* cost of capital, which means the tax deductibility of interest payments on debt
24 needs to be factored into the discount rate.

25 However, the cost of common equity is no different whether used for valuation or in utility
26 ratemaking. Whether an investor or a utility ROR witness, the methodologies used to
27 estimate the current cost of equity are the same and have the same objective. If the investor
28 is APUC, through its capital allocation decisions, or a third-party investor purchasing a
29 utility company's stock, their objective is to earn a return that is no lower than the cost of

capital, but preferably higher. The ROR witness is simply trying to estimate what those investors' required returns are. If a ROR witness, such as Mr. Dane, estimates a COE that is over 200 basis points higher than those used by investors putting capital at risk, then it is perverse to ignore this information to perpetuate the status quo. However, if there is good reason for APUC to set a ** _____ ** then this would be a more productive debate.

Q. Mr. Dane testifies that your recommended ratemaking capital structure would impose greater financial risk on Empire than rating agencies attribute to APUC.²⁰ Do you agree?

A. No.

The primary credit metric assessed by credit rating agencies is the comparison of a company's cash flows to the amount of debt in its capital structure. The three primary rating agencies—S&P Global Ratings, Moody's Ratings and Fitch Ratings—each have their own calculation methodologies and nomenclature to describe this comparison. S&P Global Ratings refers to its ratio as the funds-from-operations to debt ratio ("FFO/debt"); Moody's Ratings refers to its ratio as the cash-flow-from-operations-pre-working capital to debt ratio ("CFO Pre-WC/Debt:"); and Fitch Ratings refers to its ratio as FFO leverage, which is the inverse of the FFO/debt ratio (*i.e.* Debt/FFO).

For purposes of my comparison and explanation, I will provide information more consistent with S&P's FFO/debt ratio. Before APUC started to experience financial difficulties at the end of 2022, its FFO/debt ratio had been in the 14% to 15% range, which was consistent with APUC's publicly-communicated target of 15%. In 2023 and 2024, APUC's FFO/debt ratio declined to 11.16% and 10.45%, respectively.²¹ Empire's FFO/debt ratio over this same period has been consistently in the low 20% range, which is more consistent with S&P's benchmarks for an 'A'/'A-' credit rating. S&P Global Ratings communicated that because APUC divested most of its non-regulated operations, it would allow APUC's FFO/debt ratio to remain in the 11% to 13% range without downgrading its

²⁰ Dane Rebuttal, p. 21, line 5 – line 13.

²¹ S&P Global Ratings CreditStats Direct.

1 credit rating from 'BBB' to 'BBB-.' Looked at another way, if APUC had an FFO/debt
2 ratio similar to that of Empire's and it maintained a low business risk profile based on being
3 a pure-play regulated utility holding company, its credit profile would be more consistent
4 with an 'A'/'A-' rating. If APUC had an 'A'/'A-' credit rating, then S&P would assign the
5 same credit rating to Empire based on its "Group Influence" ratings methodology.

6 **Q. If the Commission adopted your more leveraged capital structure recommendation**
7 **as compared to Mr. Dane's recommended common equity ratio of 53%, how much**
8 **would this reduce Empire's revenue requirement?**

9 A. Applying the same ROE to both capital structures, Empire's revenue requirement would
10 be approximately \$16 million lower/year. Even after deducting \$16 million from Empire's
11 FFO in 2023 and 2024, its FFO/debt ratio would not have declined below 20%.
12 Consequently, Mr. Dane's suggestion that adoption of my recommended ratemaking
13 capital structure would cause Empire to have greater financial risk than APUC is incorrect.

14 **Q. What do you conclude from your comparison?**

15 A. APUC's much lower FFO/debt ratios compared to Empire's FFO/debt ratios will continue
16 to cause Empire to be owned by a financially weaker parent company. Because Empire no
17 longer issues its own debt, which could be rated as high as an 'A'/'A-' if it issued secured
18 debt, and it is owned by a financially weaker parent company, Empire's ratepayers should
19 only be charged for a common equity ratio consistent with this weaker credit profile, which
20 before APUC's financial difficulties, was in the 45% area. This is especially appropriate
21 considering Empire is being charged for debt costs that are more consistent with 'BBB'/
22 'BBB-' credit ratings.

23 **DANIEL DANE'S SPECIFIC CRITICISMS OF MY RECOMMENDED ROE**

24 **Q. What are Mr. Dane's primary criticisms of your recommended ROE?**

25 A. He suggests that because my recommended ROE is not at parity with my COE estimates,
26 my recommendation is not supported. Mr. Dane alleges that the reason my COE estimates
27 are not at parity with authorized ROEs is because my assumptions are inconsistent with

investors' assumptions and expectations. He claims that I abandon my COE estimates and recommend a ROE higher than my estimates because I recognize my results are unreasonable. He states that because I do so, my recommended authorized ROE is not supported by cost of capital evidence.

Q. Mr. Dane alleges that you did not consider the increase in the cost of capital since 2020 in arriving at your recommended ROE.²² Did you?

A. Yes. The basis for my decision to recommend Empire's authorized ROE be set at 9.25% is a function of two primary factors: (1) a reduction of 25 basis points from my recent recommended ROEs for Ameren Missouri and Evergy Missouri West because of Empire's customer service and billing problems, and (2) that despite the cost of capital during Empire's 2019 rate case being at all-time lows, I did not recommend a steep reduction to Empire's authorized ROE in the 2019 rate case. I estimated Empire's COE was as low as in the 5.5% to 6.5% range at that time²³, meaning a 9.25% recommended ROE allowed a margin of approximately 325 basis points over the COE. While the cost of capital in general, and the COE specifically, have increased since 2020, the COE is still below my recommended ROE. **

**

Q. Does Mr. Dane provide any corroborating information from the investment community to refute your position that authorized ROEs are higher than the COE?²⁴

A. No.

Q. Did you?

A. Yes. I have been providing corroborating information from the investment community for at least the last fifteen years, including in my direct and rebuttal testimony in this case.²⁵

²² Dane Rebuttal, p. 54, lns. 10-12.

²³ Murray Direct, p. 36, ln. 13 – p. 37, ln. 6.

²⁴ Dane Rebuttal, p. 54, lns. 17-20.

²⁵ Murray Direct, p. 38, lns. 3-10 and Murray Rebuttal, p. 30, ln. 23 – p. 31, ln. 2.

1 **Q. Did Mr. Dane provide any corroborating information from APUC's capital**
2 **budgeting process to support his position that the investors use a COE at or above**
3 **authorized ROEs?**

4 A. Only his view that APUC may have estimated its COE to be ** _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____ **

11 **Q. What is Mr. Dane's basis for disputing your conclusion that utilities' COE has**
12 **declined since July 1, 2024, due to the increase in utility stock prices?**²⁶

13 A. He suggests that I did not consider the offsetting increase in expected growth for the electric
14 utility industry due to increased demand caused by data centers and electrification.

15 **Q. Did you consider this higher growth in your assessment of the electric utility**
16 **industry's COE?**

17 A. Yes. I acknowledged this fact in my direct testimony.²⁷ Additionally, my multi-stage DCF
18 COE analysis directly incorporates equity analysts' consensus projections of 3-5 year
19 CAGR in EPS. However, my DCF analysis only captures these higher growth rates for the
20 period for which they are intended—the next 3-5 years. Mr. Dane assumes these higher
21 short-term growth rates will continue indefinitely into the future in his constant-growth
22 DCF COE estimates.

23 I also recognized that in early 2025 Evercore ISI increased its perpetual growth rates for
24 the electric utility industry to 2.5% to 4.5% from 1.25% to 3.5%. Therefore, I analyzed
25 two perpetual growth rate scenarios—a 3% perpetual growth rate and a 3.5% perpetual
26 growth rate. Even assuming higher near-term and perpetual growth rates, my COE

²⁶ Dane Rebuttal, p. 55, l. 11 – p. 56, ln. 7.

²⁷ Murray Direct, p. 35, ln. 8 – p. 36, ln. 4.

1 estimate for the electric utility industry is approximately 20 to 45 basis points lower than
2 my COE estimate in the 2024 Evergy Missouri West rate case, where I assumed a 3%
3 perpetual growth rate.²⁸

4 **Q. Are you aware of any investor sources that cover APUC, which identify assumed**
5 **perpetual growth rates in a DCF/DDM analysis?**

6 A. Yes. The National Bank of Canada Financial Markets (“NBCFM”) in performing its DCF
7 and DDM analyses in 2025, assumed perpetual growth rates in the range of 3.5% to 4.0%.²⁹

8 **Q. What is your response to Mr. Dane’s criticism of your broad-based proxy group?³⁰**

9 A. As Mr. Dane acknowledges, the differences in our proxy groups are not the main cause for
10 the differences in our COE estimates. Although I analyzed a broad proxy group, I also
11 considered results of subsets of that broad proxy group, which have operations that are
12 more consistent with a pure-play regulated utilities. My broad proxy group includes all the
13 companies Mr. Dane used for his proxy group in his rebuttal testimony. My multi-stage
14 DCF COE estimates for Mr. Dane’s proxy group are in the range of 8% to 8.15%.

15 **Q. What are Mr. Dane’s primary criticisms of your CAPM analysis?**

16 A. Mr. Dane’s main criticisms relate to my beta estimates for my electric utility proxy group
17 and my market risk premium estimates. Mr. Dane also claims I should have considered
18 forecasted interest rates in my CAPM analysis. I do not agree. However, because current
19 and forecasted interest rates are not significantly different, I am not addressing this
20 criticism any further.

21 **Q. What concern does Mr. Dane have about your beta estimates?**

22 A. Mr. Dane suggests that because I relied on Value Line published betas in my past
23 testimonies, I should continue to rely on Value Line published betas.

²⁸ Case No. ER-2024-0189, Murray Direct Testimony, Schedule DM-D-3.

²⁹ Rupert Merer, et. al., “Investor update provides visibility on three-year earnings reset, moving to Sector Perform,”
National Bank of Canada – Financial Markets, June 3, 2025.

³⁰ Dane Rebuttal, p. 57, lns. 3-8.

1 **Q. When did you stop relying solely on Value Line published betas for your CAPM**
2 **analyses?**

3 A. Over a decade ago in the Ameren Missouri electric rate case, Case No. ER-2014-0258.

4 **Q. Why did you stop relying solely on Value Line published betas for your CAPM**
5 **analyses?**

6 A. At that time I was employed by Staff. SNL, which acquired the Regulatory Research
7 Associates (“RRA”), offered not only RRA authorized return information as part of its
8 services, but also easy and efficient access to the utility companies’ financial and capital
9 market data. Staff decided to subscribe to this service as it also included access to
10 information, such as natural gas pricing, which could benefit other Staff members as well.
11 SNL’s, now S&P Global, database included daily stock prices for utility stocks and the
12 S&P 500. Therefore, the return data used to calculate betas was readily available. In fact,
13 S&P Global offered a beta calculation template, which allowed users to specify beta
14 calculation parameters, such as the length of the look-back period (5 years if following
15 Value Line’s methodology and return interval (daily, weekly, monthly, etc.). I personally
16 considered continuing the Value Line subscription to be a waste of public funds.
17 Therefore, I started using SNL’s template to calculate betas.

18 **Q. Can you verify the data underlying Value Line’s beta calculations?**

19 A. No.

20 **Q. Can you verify the data underlying the S&P Global beta template?**

21 A. Yes.

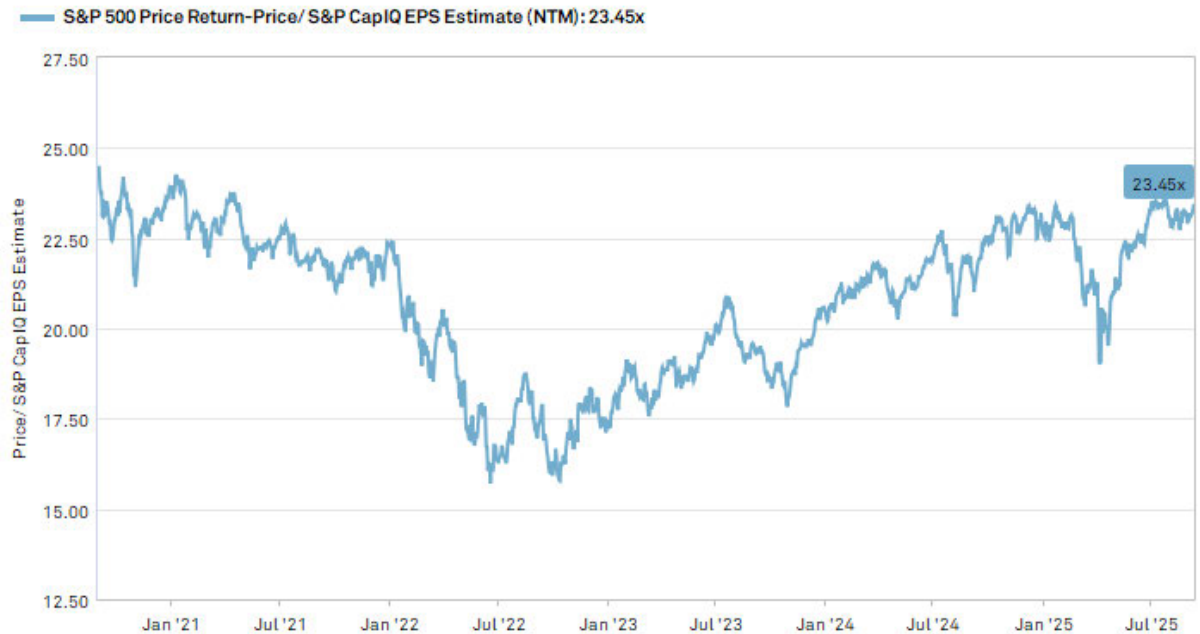
22 **Q. Has the ability to do so proven valuable in recent years?**

23 A. Yes. The facts and circumstances in this case illustrate the value of taking a deeper dive
24 into five-year historical beta calculations. Mr. Dane filed his direct testimony in this case
25 on November 6, 2024. Therefore, the Value Line published betas Mr. Dane used were
26 based on market data for the last five years. This five-year period fully captured the
27 synchronized contraction of all stocks at the onset of the Covid-19 pandemic. This

1 synchronized contraction caused betas of companies to suddenly converge to 1.0, despite
2 this not being consistent with past betas for these companies. Value Line's mechanical
3 methodology does not adjust for these anomalies. Therefore, Value Line's calculated betas
4 would only return to "normal" when this data rolls off their calculations. This started to
5 occur between the time Mr. Dane filed his direct testimony and his rebuttal testimony in
6 this case. The average Value Line beta at the time Mr. Dane filed direct testimony was
7 0.95. The average Value Line beta at the time Mr. Dane filed his rebuttal testimony was
8 approximately 0.80. Blindly accepting Value Line's beta calculations would cause one to
9 erroneously conclude that utility stock investors' required risk premiums declined by 15%
10 in a few months, despite the updated beta being more similar to utility stocks typical
11 correlations to broader market changes.

12 **Q. What are Mr. Dane's concerns about your market risk premium estimates?**

13 A. Primarily that they are too low. Despite Mr. Dane relying on Kroll's published historical
14 return information to determine his higher market risk premium estimates, he dismisses my
15 use of Kroll's recommended forward-looking market risk premium estimate of 5.5%. Mr.
16 Dane consistently testifies that the COE should be based on forward-looking expectations
17 (e.g. projected interest rates for the CAPM and consensus analysts' estimates for growth
18 rates in his constant-growth DCF), but he does not embrace forward-looking market risk
19 premium estimates. Kroll increased its market risk premium estimate to 5.5% from 5.0%
20 on April 15, 2025. Kroll's change coincided with the market contraction and volatility that
21 occurred after the U.S. Administration's announcement of its "reciprocal" tariffs.
22 However, since that time, the S&P 500's volatility and valuation levels have returned to
23 levels prior to the announcement of the "reciprocal" tariffs. Not surprisingly, on September
24 2, 2025, Kroll reduced its recommended market risk premium back to 5%. The following
25 chart shows the S&P 500's P/E ratios since January 1, 2020:



A recent Wall Street Journal article stated the following about recent valuation levels for the S&P 500:

Price-to-earnings ratios aren't quite at records—thanks to juicy profit margins at many of the index's most valuable companies—but they still sit at the extreme end of history. The S&P 500 currently trades at 22.5 times its projected earnings over the next 12 months, compared with the average of 16.8 times since 2000.³¹

Additionally, my market risk premium estimates are consistent with those used by equity analysts who cover APUC. For example, NBCFM used a 5% market risk premium when estimating a fair price to pay for APUC's stock in an August 12, 2024, report.³²

Considering that by most measures, the U.S. stock market's valuation levels are at near-record highs, Mr. Dane's suggestion that investors currently require market risk premiums consistent with long-term historical averages is incredulous.

³¹ Jack Pitcher, "U.S. Stocks Are Now Pricier Than They Were in the Dot-Com Era: The S&P 500 has never been this expensive, or more concentrated in fewer companies," *Wall Street Journal*, August 31, 2025.

³² Rupert Merer, et. al., "AQN's turnaround is underway, move to OP," National Bank of Canada – Financial Markets, August 12, 2024.

1 **Q. What is your response to Mr. Dane’s criticism of your bond-yield-plus-risk premium**
2 **COE estimate**

3 A. Mr. Dane’s criticism is mis-directed. The BYPRP estimate I provided is based on the CFA
4 Institute Program’s curriculum. The CFA Program’s suggestion is based on historical
5 experience from the United States’ capital markets. The intent of the CFA Program’s
6 suggested rough estimate is to assess whether analysts’ using more complicated COE
7 estimation methodologies are “in the ballpark” when considering typical risk premium over
8 a company’s cost of debt. I suggest that my COE estimates are much more “in the ballpark”
9 when considering this benchmark as well as all the other corroborating COE estimates I
10 provided.

11 **SUMMARY AND CONCLUSIONS**

12 **Q. Would you summarize your main conclusions?**

13 A. Yes. Nothing has changed since Empire’s 2019 rate case that should cause the Commission
14 to reverse its decision to reject Empire’s internally assigned capital structure to set its ROR.
15 However, due to significant business and financial changes impacting APUC’s and
16 LUCo’s capital structures, setting a fair and reasonable ratemaking capital structure cannot
17 be reduced to a calculation in this case. APUC’s business and financing strategies are still
18 in a state of transition with many moving parts. When APUC’s and LUCo’s financial
19 situations were more stable, APUC freely communicated to investors that an appropriate
20 capital structure to finance its regulated utility assets should be in the range of 45% to 50%
21 common equity. While LUCo’s actual capital structure has a higher common equity ratio
22 than its past target, the Commission needs to consider APUC’s current conflict of interest
23 as it relates to requesting a fair and reasonable ratemaking capital structure while it is trying
24 to stabilize itself financially. LUCo’s cost of debt has been impacted by events that are not
25 remotely related to Empire’s business risk—APUC’s and LUCo’s aggressive growth and
26 financial strategies. For this reason, the Commission should ensure that Empire’s
27 ratepayers are only paying for a conservative (*i.e.* lower) estimate of Empire’s cost of
28 capital. Adopting my recommendation achieves this goal.

1 My COE estimates are corroborated by many third-party sources that are not entrenched in
2 the utility ratemaking process. In fact, ** _____ **
3 support the premise of the arguments I have been making for many years—that the cost of
4 capital is lower than authorized returns. However, because I recognize that unless all utility
5 regulatory jurisdictions reduce authorized ROEs in tandem, it is impractical for Missouri
6 to be the outlier, especially if Missouri’s current utility regulatory policy is to error on the
7 side of attracting capital. I encourage the Commission to understand that authorizing a
8 ROR higher than Missouri’s utilities’ cost of capital meets the *Hope* and *Bluefield* capital
9 attraction standard.

10 **Q. Does this conclude your surrebuttal testimony?**

11 **A.** Yes.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**


In the Matter of the Request of The)	
Empire District Electric Company d/b/a)	
Liberty for Authority to File Tariffs)	<u>Case No. ER-2024-0261</u>
Increasing Rates for Electric Service)	
Provided to Customers in Its Missouri)	
Service Area)	

AFFIDAVIT OF DAVID MURRAY

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

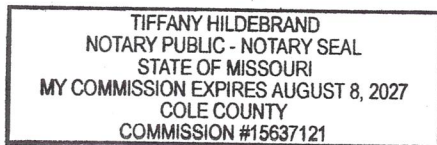
David Murray, of lawful age and being first duly sworn, deposes and states:


1. My name is David Murray. I am a Utility Regulatory Manager for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.



David Murray
Utility Regulatory Manager

Subscribed and sworn to me this 11th day of September 2025.





Tiffany Hildebrand
Notary Public

My Commission expires August 8, 2027.