Exhibit No.:	____________
Issue(s):	Rate of Return (ROR)/ Return on Equity (ROE)/ Capital Structure
Witness/Type of Exhibit:	Murray/Surrebuttal And True-Up Direct
Sponsoring Party:	Public Counsel
Case No.:	ER-2019-0374

SURREBUTTAL TESTIMONY
TRUE-UP DIRECT TESTIMONY

OF

DAVID MURRAY

Filed on Behalf of the Office of the Public Counsel

THE EMPIRE DISTRICT ELECTRIC COMPANY

FILE NO. ER-2019-0374

** **

Denotes Confidential Information that has been Redacted

March 27, 2020

NON-PROPRIETARY

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

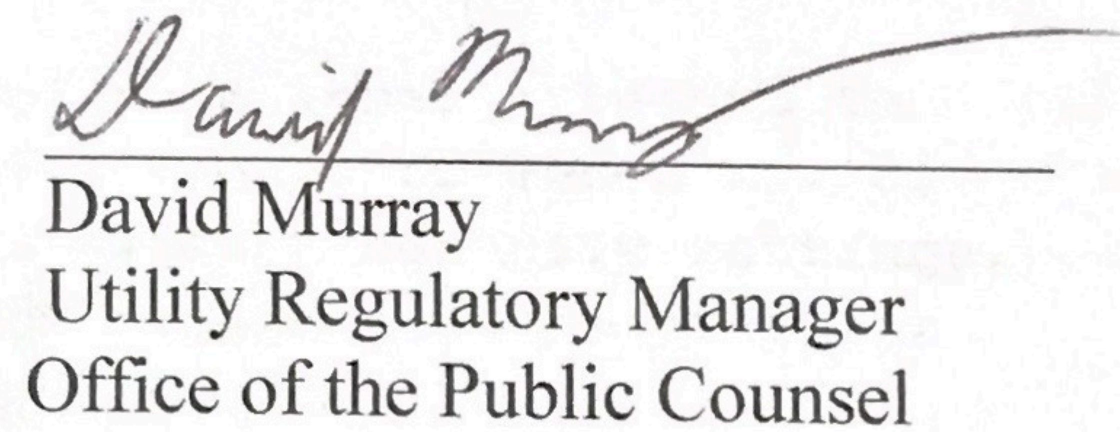
In the Matter of The Empire District Electric Company's Request for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in its Missouri Service Area	)))))	Case No. ER-2019-0374

VERIFICATION OF DAVID MURRAY

David Murray, under penalty of perjury, states:

1. Attached hereto and made a part hereof for all purposes is my surrebuttal and true up direct testimony in the above-captioned case.

3. My answer to each question in the attached surrebuttal and true up direct testimony is true and correct to the best of my knowledge, information, and belief.



David Murray
Utility Regulatory Manager
Office of the Public Counsel

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SURREBUTTAL/TRUE-UP DIRECT TESTIMONY

OF

DAVID MURRAY

THE EMPIRE DISTRICT ELECTRIC COMPANY

FILE NO. ER-2019-0374

1 **Q. Please state your name and 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. What it the purpose of your surrebuttal testimony?**

8 A. The purpose of this testimony is to respond to Robert B. Hevert's and Peter Chari's rebuttal
9 testimonies as they relate to Empire's rate of return ("ROR") and capital structure. I also
10 briefly address some aspects of Mark T. Timpe's rebuttal testimony regarding the affiliate
11 note The Empire District Electric Company ("Empire") issued to Liberty Utilities
12 Company ("LUCo") in order to effectuate a transfer of $90 million from LUCo to Empire
13 to retire Empire's first mortgage bonds.

14 **UTILITY CAPITAL MARKET REACTION TO COVID-19**

15 **Q. Has the recent uncertainty in the capital markets caused by the global pandemic,**
16 **COVID-19, and oversupply in the oil commodity market caused you to change any of**
17 **your recommendations?**

18 A. Yes. Although I hesitate to recommend a higher ROE for Empire due to APUC not
19 managing LUCo's capital structure more conservatively (more equity cushion for unstable
20 markets such as we are experiencing now), the recent valuation levels of utility stocks and
21 bonds show an increased cost of capital since the fall of 2019 when I performed my cost
22 of capital analysis. I have not performed a full update to my cost of equity study, but based

1 on my analysis of recent utility stock and bond price levels as compared to past periods, I
2 consider a 25 basis point increase to my recommended allowed ROE to be fair and
3 reasonable. Therefore, my allowed ROE recommendation is now 9.5%, assuming it is
4 applied to my recommended capital structure of 46% common equity 54% long-term debt.
5 Considering that Empire is planning to file another rate case shortly after this one is
6 completed, we will have much more certainty as to whether utility capital costs will resume
7 their long-term declining trend by that time. Although utility bond costs and equity costs
8 increased during the last couple of weeks while long-term United States Treasury ("UST")
9 Bond yields remained quite low, over the long-term utility stock and bond prices are highly
10 correlated to long-term United States Treasury ("UST") Bonds. 10-year UST Bonds had
11 reached all-time lows of 0.54% as recently as March 9, 2020. This compared to 10-year
12 UST yields of around 2% in 2015. Therefore, if the secular decline in utility costs of capital
13 resumes when markets stabilize, then this should be reflected in Empire's allowed ROR in
14 its next rate case.

15 **Q. Do unsettled capital markets such as we are experiencing now require even more**
16 **scrutiny and diligence in using relevant capital market information from pure-play**
17 **regulated utility companies?**

18 A. Yes. During unsettled times such as now, it becomes even more evident as to why utility
19 regulators and commissions should place a significant amount of weight on utility company
20 and utility industry-specific capital market information. It is also very important to ensure
21 that the utility capital market data introduced, analyzed and relied upon is related to pure-
22 play regulated utility companies with very little commodity exposure. For example, during
23 the last contraction and uncertainty involving energy companies in late 2015 and early
24 2016, yields on the Moody's 'Baa' Utility Bond Index implied a much larger increase in
25 utility bond costs than was actually the case for pure-play regulated utilities. In the KCP&L
26 Greater Missouri Operations rate case at that time (Case No. ER-2016-0156), I discovered
27 that approximately half of the bonds in the Moody's 'Baa' Public Utility's bond index were
28 diversified energy companies. Companies with commodity exposure to the energy markets
29 are typically impacted to a much larger degree than pure-play utility companies during

1 periods of economic uncertainty.[1] Consequently, it is especially important during unsettled
2 economic and financial periods to review capital market information related specifically to
3 pure-play regulated utility companies. At the time I prepared this testimony, I attempted
4 to determine the current constituent bonds underlying the Moody's 'Baa' Public Utility
5 bond index, but was unable to do so. I will continue to pursue this information from
6 Moody's, and hopefully be able to provide this information at the hearing.

7 **Q. What has happened to Missouri's pure-play regulated electric utility company bond**
8 **yields in recent days?**

9 A. They have been quite volatile based on information I reviewed on over-the-counter (OTC)
10 trades of Ameren Missouri and Kansas City Power & Light ("KCPL") bonds.
11 Unfortunately, Empire's legacy bonds are not traded often, so there is very little data to
12 derive any insight from these securities. Additionally, there is not any market data
13 available on Liberty Utility Company's bonds (current bond platform used to raise debt
14 financing for Empire), so I cannot review these for insight on its bond market pricing.

15 Ameren Missouri's OTC bond yield on its 2049 bonds increased from approximately
16 2.75% on March 10 to 4.40% on March 18, an increase of 1.65%. The last OTC trade
17 executed on March 25 traded at a yield of 3.74%. While an improvement from highs just
18 a few days earlier, the yield on this bond still trades about 0.5% higher than the original
19 coupon of 3.25% when the bond was issued on October 1, 2019 Ameren Missouri's OTC
20 bond yields on its 2048 bonds increased from approximately 3.08% on March 10 to 4.75%
21 on March 19, an increase of 1.67%. The last OTC trade executed on March 25 traded at a
22 yield of 3.85%, a decrease of 0.9% from the high. KCPL's OTC trades showed the same
23 volatility. OTC yields on KCPL's 2049 bonds increased from 3.31% on March 12 to
24 4.53% on March 20. The last OTC trade executed on March 25 traded at a yield of 3.95%.
25 OTC yields on KCPL's 2048 bonds increased from 3.27% on March 13 to 4.3% on March
26 24. However, just a day later, March 25, the bonds had two OTC trades, with one at a yield
27 of 3.4% and the other at a yield of 3.72%.

[1] Case No. ER-2016-0156, Staff Cost of Service Report, July 15, 2016, pp. 16-17.

1 **Q. How do Missouri utilities' OTC bond yields compare to activity in broader bond**
2 **indices, such as Moody's Public Utility Bond indices and Moody's Corporate Bond**
3 **indices?**

4 A. Unfortunately, I do not have access to the most current data on the Moody's Public Utility
5 Bond indices, but I do have access to yield data through March 18, which shows the
6 dramatic increase in yields that started around March 9, 2020. In the graph below, I
7 compare changes in 'A'-rated and 'Baa'-rated Moody's Public Utility Bond indices to
8 Moody's overall corporate bond indices for 'A'-rated and 'Baa'-rated corporate bonds.
9 The 'A'-rated Public Utilities and Corporate Bond index have very similar yields. 'Baa'-
10 rated corporates are slightly higher than 'Baa'-rated utilities.

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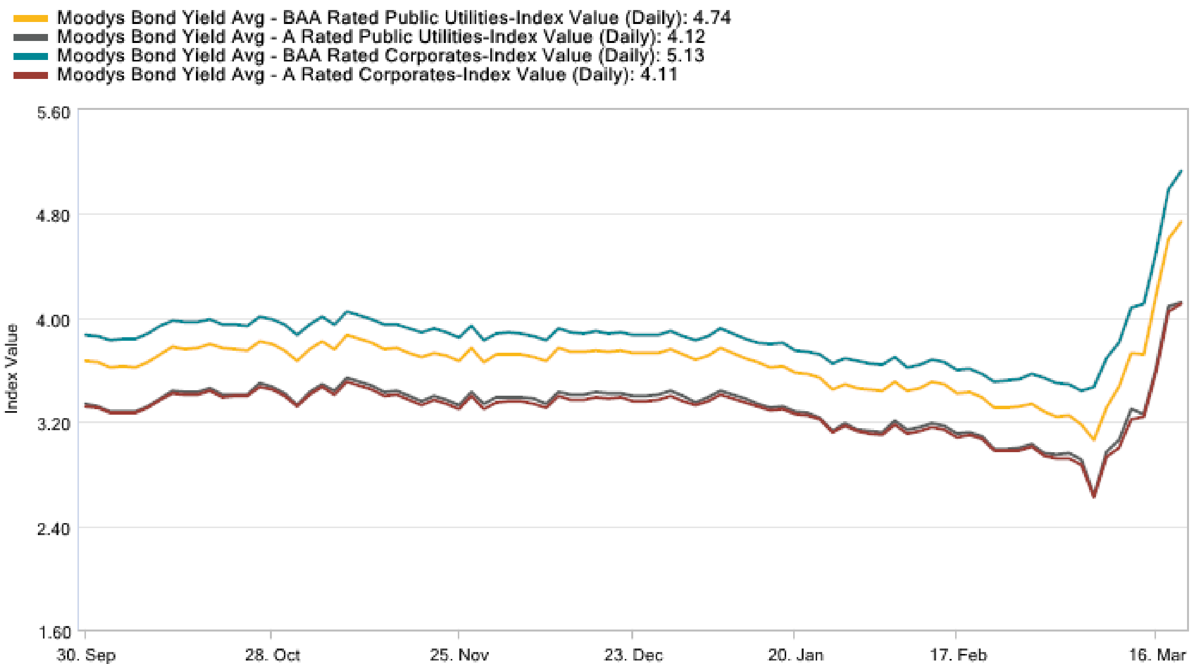

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13 Although there are some slight differences in the absolute yields, the trends should not be
14 that disparate between general corporate bond indices compared to the utility bond indices.
15 Because more updated information is available on the Moody's corporate bond indices for
16 'Baa' and 'Aaa' rated bonds, I provide this information below:

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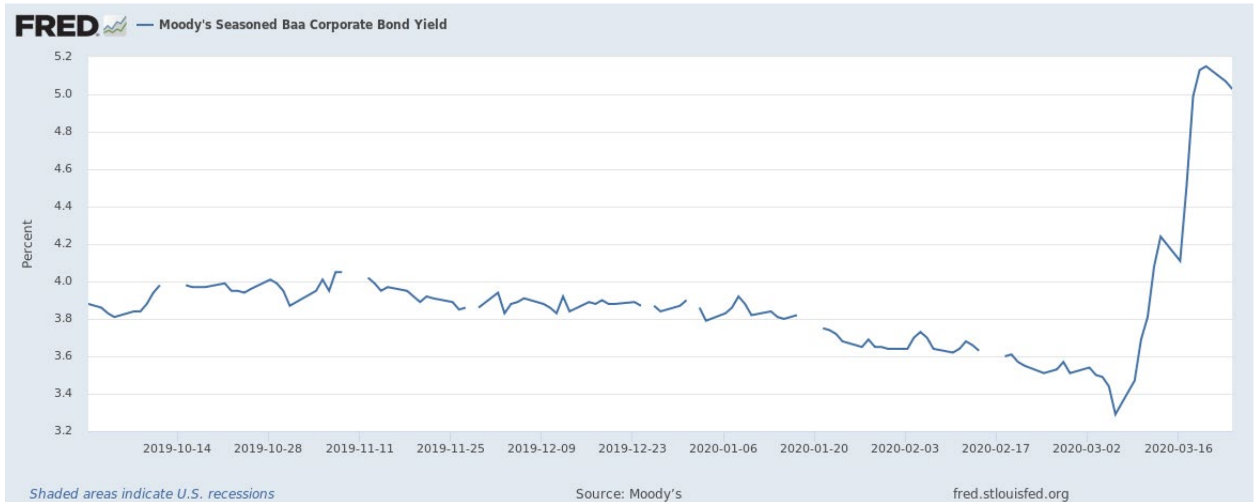

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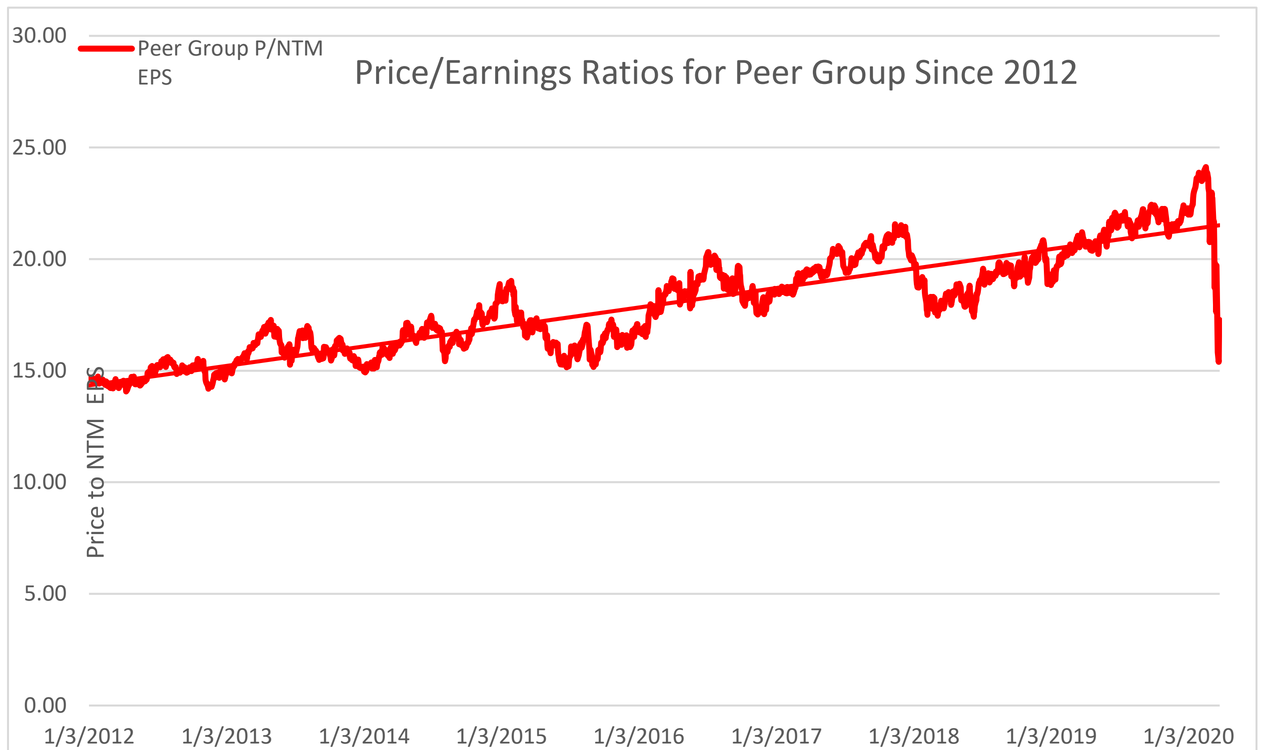
4 As can be seen in the above charts, as of March 24, corporate bond yields were higher than
5 they were during the fall of 2019, which captures the capital market information I analyzed
6 for purposes of deciding my 9.25% allowed ROE recommendation should be increased to
7 9.50% for this case. It is important to note that the bond yields in the above charts do not
8 fully capture the Federal Reserve's ("Fed") intervention into the bond markets early the
9 week of March 23. The Fed recognized the problems with the corporate bond markets and
10 announced it would provide liquidity necessary to facilitate trades. It also resumed buying
11 long-term bonds. The impact of this intervention shows up in the lower yields executed
12 on March 25 for OTC trades on Ameren Missouri's and KCPL's bonds.

1 **Q. What has happened to utility equity valuation levels in the past couple of weeks?**

2 A. They have decreased significantly. As can be seen in the following graph, P/NTM EPS
3 levels for the utility industry have contracted to levels not seen since 2015. There is little
4 doubt that much of the contraction in utility stock prices has been caused by an increase in
5 the equity risk premium for utility stocks. However, some of this may also be due to
6 concern about potential contraction in load due to an anticipated recession. This would
7 seem to be a natural concern if various businesses are at least temporarily closed. However,
8 this still shouldn't impact the long-term fundamentals of the industry, but the ability for
9 utility companies to ramp up capital spending without offsetting reduction in operating
10 expenses to ensure no or minimal rate increases will be pressured.

11



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1 **Q. Do you know how the utility stock price contractions have impacted utility dividend**
2 **yields?**

3 A. Yes. They have also increased significantly. See the below graph that shows the impact
4 on the dividend yields of the same proxy group used in the above P/E ratio graph:

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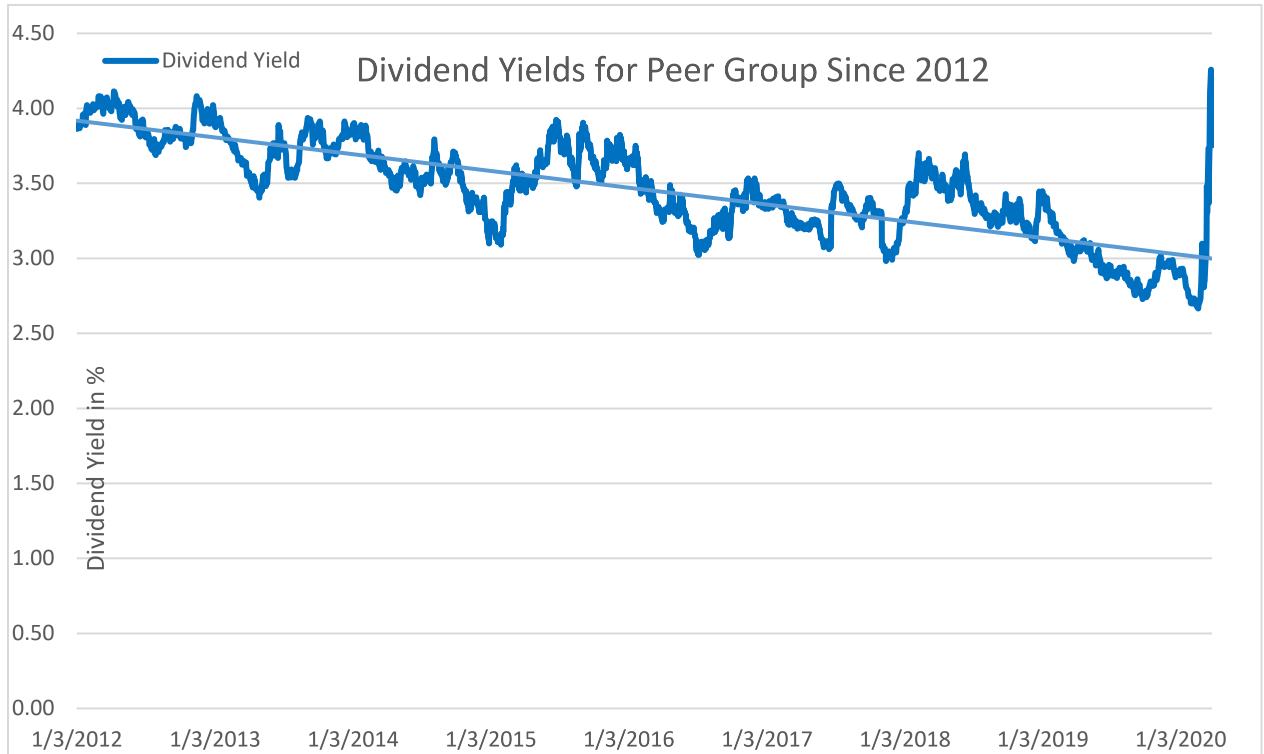

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7 Dividend yields increased by approximately 125 basis points from March 10 through
8 March 23. During the market rally on March 24 and 25, utility stock prices increased,
9 which resulted in a dividend yield decrease of 50 basis points since March 23.

10 **Q. How do recent utility dividend yields compare to the dividend yields you analyzed for**
11 **purposes of developing your original recommended allowed ROE for Empire in this**
12 **case?**

13 A. The average dividend yield for the three-months ended December 31, 2019, was 2.9%,
14 compared to a March 2020 averaged dividend yield of around 3.4%. Although this
15 indicates a relative risk premium increase since the fall of 2019, the average March 2020

1 dividend yield is generally consistent with dividend yields during late 2014 and early 2015,
2 which is the capital market period the Commission evaluated when it decided an
3 approximate 9.5% allowed ROE was reasonable for Missouri's regulated electric utility
4 companies. Given the all-time low yields on long-term UST's in the current market
5 environment, it is likely that after financial markets stabilize over the next few months,
6 utility's cost of capital will resume their prolonged and secular declining trend. However,
7 due to significant concerns about ongoing availability of liquidity, and the depth and length
8 of a future recession, it is apparent from the below graph that although 10-year UST yields
9 remain very low, they have been very volatile since they reached their all-time low of
10 0.54% on March 9, 2020.

11

12

13

14 **CAPITAL STRUCTURE**

15 **Q. Did the parties provide a very meaningful response to your direct testimony on capital**
16 **structure?**

17 A. No. Empire's lack of response to my thorough analysis of how Empire's capital structure
18 is being managed as compared to APUC, but especially as compared to LUCo, is extremely
19 disappointing. However, at least Staff witness Peter Chari attempted to address my

1 analysis as it relates to the specifics of how Empire's capital structure compares to LUCo's
2 capital structure.

3 **Q. Did the parties discuss capital structure during the technical conference held on**
4 **March 18, 2019?**

5 A. Yes. Empire, Staff, and the OPC discussed capital structure during the March 18, 2020,
6 technical conference. While there were other parties at the technical conference, we were
7 the primary parties that discussed the various capital structure recommendations. During
8 the technical conference, Empire acknowledged that the $395 million of LUCo off-
9 balance-sheet debt was in fact used for investment in LUCo's regulated utility assets.
10 Empire acknowledged, and Staff does not dispute, that LUCo unconditionally guarantees
11 this debt. It is my understanding that because it was established that the $395 million was
12 used for investment in LUCo's regulated utility assets, Staff plans to accept that this
13 amount should be considered for purposes of determining the most economical capital
14 structure in this case. As I have indicated in my direct and rebuttal testimonies, LUCo's
15 adjusted capital structure is the capital structure that the Commission should use to
16 determine a fair and reasonable ROR for Empire for setting rates to charge ratepayers in
17 this case.

18 **Q. Did you receive affirmation from someone representing Empire at the technical**
19 **conference that Liberty Utilities Finance GP1 (LUF) is the primary debt platform for**
20 **providing debt financing to LUCo's regulated utility assets?**

21 A. Yes. Mark Timpe confirmed that LUCo's primary platform for issuing debt for its
22 regulated utility affiliates is through LUF.

23 **Q. What other facts do you believe the parties agreed to during the March 18, 2019**
24 **technical conference?**

25 A. I believe the parties accepted the following to be true regarding Empire, LUCo, LUF and
26 the use of LUCo/LUF as the debt financing platform for LUCo's North American regulated
27 utility subsidiaries:

1. Empire has no plans to issue debt to third-party investors on a going-forward basis;

2. LUCo and/or LUF consolidate all of the long-term debt needs of LUCo's regulated utility subsidiaries at the LUCo level and will continue to do so going forward; and

3. LUCo's credit ratings are directly impacted by not only the debt it receives through direct loans from LUF, but also the $395 million of debt it guarantees ($135 million issued by Liberty America and $260 million issued by LUF)

Q. Should Empire have provided a more substantive response to your testimony regarding the appropriate capital structure to use for purposes of setting rates?

A. Yes.

Q. Why?

A. Financing Condition A.5 in Case No. EM-2016-0213 is very explicit about comparing and contrasting Empire's capital structure to that of the "entity or entities in [*sic*] which Empire relies for its financing needs" to determine why "Empire's per books capital structure is the most economical for purposes of determining a fair and reasonable allowed rate of return for purposes of determining Empire's revenue requirement." The burden for doing so was squarely placed on Empire "to provide evidence in subsequent rate cases" to justify why Empire's capital structure is different from the entities on which it relies for financing. Empire has failed to provide ***any*** evidence in direct or in rebuttal to justify why Empire's capital structure is less leveraged than LUCo's. Although I provided a detailed comparison of the capital structures in my direct testimony, Empire still failed to provide a response in its rebuttal testimony.

1 **Q. Did any Company witnesses address the ratemaking capital structure Empire is**
2 **requesting the Commission use in this case?**

3 A. Yes. Mr. Hevert addressed it in a very general context as compared to his proxy group.
4 However, he offered no testimony on how Empire's capital structure compares to the entity
5 on which it relies for financing. Nor did any other Empire witness.

6 **Q. Is it Staff's position that Empire's proposed capital structure complies with the**
7 **merger case Financing Conditions regarding capital structure?**

8 A. It was, but as I indicated earlier in this testimony, it is my understanding based on
9 discussions at the ordered March, 18, 2020, technical conference that Mr. Chari, for Staff,
10 no longer accepts this to be the case.

11 **Q. How does Mr. Chari define "more economical capital structure"?**

12 A. Mr. Chari testified that all else equal, the higher the equity ratio, the less economical the
13 capital structure.[2]

14 **Q. Do you know why Mr. Chari initially concluded that Empire's capital structure was**
15 **more economical than LUCo's?**[3]

16 A. Yes. Mr. Chari accepted LUCo's per books balance sheet as providing an accurate and
17 reliable representation of LUCo's capitalization ratios. He indicated that because LUCo's
18 per books common equity ratio as of September 30, 2019, was 53.00% as compared to
19 Empire's 52.90%, this was sufficient to accept Empire's capital structure as more
20 economical.[4]

[2] Chari Rebuttal, p. 14, ll. 15-16.
[3] *Id.,* p. 12, ll. 14-25.
[4] Staff Cost of Service Report, p. 12, ll. 15-25.

1 **Q. Does LUCo's per books capital structure accurately report the amount of debt its**
2 **assets support?**

3 A. No.

4 **Q. Why not?**

5 A. Because it fails to adjust for the fact that LUCo unconditionally guarantees other debt not
6 shown on its books.

7 **Q. How much additional debt do LUCo's regulated utility subsidiaries' support?**

8 A. $395 million.

9 **Q. Mr. Chari answers the following question on lines 14-15 on page 15 of his rebuttal**
10 **testimony, which assumes that LUF issued all of this $395 million of debt[5]: "Q. Does**
11 **Staff agree with Mr. Murray's inclusion of the $395 million from LUF in the capital**
12 **structure for the purpose of ratemaking?" Is this assumption of facts not in evidence**
13 **accurate?**

14 A. No. LUF issued $260 million and Liberty Utilities (America) Hold Co. Inc. issued $135
15 million.

16 **Q. Does it matter whether LUF issued all of the $395 million of debt for purposes of**
17 **determining the amount of debt LUCo's assets support?**

18 A. No. The material and relevant issue to determining the appropriate adjustments to make to
19 LUCo's actual capital structure is to determine the total amount of debt LUCo guarantees.
20 This amount is $395 million.

21 **Q. What is the purpose of LUF in Algonquin's holding company structure?**

22 A. LUF is used as the primary consolidated long-term debt platform for LUCo's investment
23 in its subsidiaries—all regulated utilities. Although LUF issues debt directly to third-party

[5] *Id.,* p. 15, ll. 3-4.

1 debt investors, the debt investors rely primarily on LUCo's credit profile to determine the
2 price they are willing to pay for LUF's debt. LUF loans the debt proceeds to its affiliates
3 (primarily LUCo) based on the terms it paid to third-party investors.

4 **Q. To what other affiliates does LUF provide debt financing?**

5 A. I do not know the precise entity, but LUF loaned the aforementioned $260 million to one
6 of the following intermediaries between LUCo and APUC in APUC's holding company
7 structure: Liberty Utilities (Canada) Corp., Liberty Utilities (America) Co., Liberty
8 Utilities (America) Holdings LLC and Liberty Utilities (America) Holdco Inc. For ease of
9 reference, I am providing an excerpt of page 2 of Schedule DM-D-2 attached to my direct
10 testimony below:

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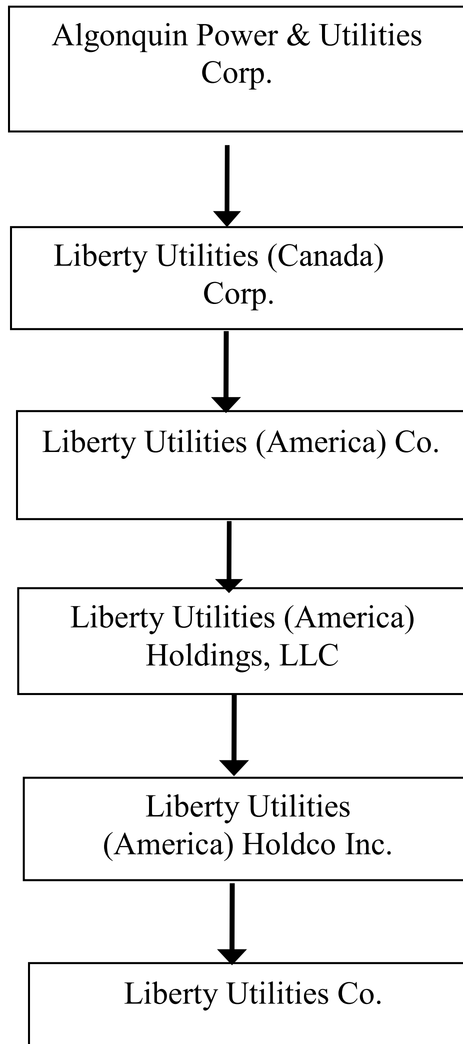


1 **Q. Did you try to determine to which specific entity LUF loaned the $260 million?**

2 A. Yes. By OPC Data Request No. 3021 I requested all affiliate loan agreements for all of
3 the companies that may be involved in raising financing to capitalize LUCo's capital
4 structure, but Empire objected based on Liberty-Empire not being a party to the loan and
5 that the information sought was irrelevant to this case (see Schedule DM-S-1).

6 **Q. Why did you request this information?**

7 A. The determination of a fair and reasonable capital structure under Empire's new ownership
8 was directly considered in Case No. EM-2016-0213. Any transactions that influence or
9 impact the entities on which Empire relies on for financing can have a direct impact on the
10 ROR charged to Empire's ratepayers. For example, the affiliate note Empire requests be
11 included in its recommended capital structure is a function of LUCo's capital costs.

12 **Q. Do you need to know exactly which entity received the $260 million of loan proceeds**
13 **from LUF for purposes of recommending what capital structure the Commission**
14 **should use for Empire in this case?**

15 A. No. Because I know the proceeds from loans provided to any one of these entities was
16 used to invest in LUCo's equity, for purposes of determining LUCo's effective leverage,
17 the specific affiliate that received the proceeds does not matter.

18 **Q. If you did not need this information to form your position, then why did you seek it?**

19 A. I wanted to provide the Commission with additional evidence to corroborate the facts I
20 established through my financial investigation.

21 **Q. In his rebuttal testimony, on page 15 at lines 16-23, Mr. Chari testifies that a reason**
22 **to not include the $395 million of debt in LUCo's capital structure is because it may**
23 **have been used for non-regulated investments. Do you agree that this is a good reason**
24 **to ignore the $395 million of debt for purposes of setting Empire's ROR?**

1 A. No. This would be particularly egregious because APUC would be directly impairing its
2 regulated utilities' debt capacity to support its non-regulated investments. This would be
3 a clear detriment to Empire because LUCo's debt costs would be higher due to its support
4 of APUC's non-regulated investments.

5 **Q. Without the affiliate loan agreements executed to transfer capital among its various**
6 **intermediate holding companies, how were you able to conclude the $395 million was**
7 **eventually used for LUCo investments?**

8 A. I compared the timing of the issuance of the loans to LUCo's financial statements,
9 specifically its quarterly cash flow statements, and I was able to match an amount of cash
10 flow from equity contributions that was either exactly the same or similar to the amount of
11 funds raised through the debt issuances.

12 **Q. Can you provide examples?**

13 A. Yes. LUF issued $90 million of debt on April 30, 2015. LUCo's June 30, 2015 Statement
14 of Cash Flows shows that LUCo received a $100 million equity infusion during the period
15 April 1, 2015 through June 30, 2015 (see p. 6 of Confidential Schedule DM-S-2).

16 LUF issued $70 million of debt on July 15, 2015. LUCo's September 30, 2015 Statement
17 of Cash Flows shows that LUCo received a $73.573 million equity infusion during the
18 period July 1, 2015 through September 30, 2015 (see p. 6 of Schedule DM-S-3).

19 LUF issued $100 million of debt on March 24, 2017. The proceeds from this debt reduced
20 the outstanding balance on the Liberty Utilities (America) Hold Co. credit facility to $135
21 million from $235 million (see Note 7.(b) to APUC's March 31, 2017 Unaudited Interim
22 Consolidated Financial Statements).

23 **Q. How was the original $235 million of debt Liberty Utilities (America) Hold Co. issued**
24 **used?**

25 A. It was used for LUCo investments.

1 **Q. How do you know?**

2 A. Liberty Utilities (America) Hold Co. issued this debt on March 9, 2016. LUCo's March
3 31, 2016 Statement of Cash Flows shows that LUCo received a $235 million equity
4 infusion during the period January 1, 2016 through March 30, 2016 (see p. 6 of Schedule
5 DM-S-4).

6 **Q. Is LUCo's credit quality enhanced by having other indirect holding companies**
7 **borrow the $395 million instead of LUCo doing so directly?**

8 A. No. Ultimately, LUCo guaranteed all of the $395 million in intermediate holding company
9 debt that it either received from LUF or that its subsidiary Liberty Utilities (America) Hold
10 Co. borrowed. Whether the debt financing is directly loaned to LUCo as an affiliate
11 promissory note, or loaned to an intermediate company and then provided to LUCo as an
12 equity infusion, the impact of the debt obligation on LUCo's credit profile is the same. I
13 see no rational reason to not have this debt directly recorded on LUCo's balance sheet,
14 other than to make it appear that LUCo is using less leverage than it is actually is using.

15 **Q. What is the impact of applying LUCo's corporate debt costs to LUCo's per books**
16 **capital structure, which has a higher equity ratio than LUCo's adjusted capital**
17 **structure upon which its creditor's rely?**

18 A. LUCo's debt costs are a consequence of its more leveraged, adjusted capital structure, not
19 the per books capital structure. If LUCo had an effective capital structure consistent with
20 its per books capital structure, it would have a stronger credit profile, which would allow
21 for lower debt costs and more financial flexibility. But this is not the case. Therefore, if
22 one were to accept LUCo's per books capital structure as legitimate for ratemaking, the
23 cost of debt would need to be adjusted downward. However, because LUCo's cost of debt
24 is a function of the all of the debt it guarantees, then simply adjusting LUCo's capital
25 structure to reflect such, allows for a matching of the debt costs to the true capital structure
26 in which they reside.

1 **Q. Do rating agencies recognize the practical effect on LUCo's credit profile of its**
2 **guarantee of the $395 million of off balance sheet debt?**

3 A. Yes. Please see page 9 of Schedule DM-D-5 I attached to my direct testimony. As Fitch
4 Ratings shows in the "Simplified Group Structure Diagram" on page 9 of that schedule,
5 LUCo's adjusted debt balance is $2.405 billion as of December 31, 2018. LUCo's per
6 books debt balance as of December 31, 2018 was approximately $1.997 billion (see
7 Schedule DM-S-5 attached to this testimony). As can be seen in my schedule, when I
8 properly reflect the $395 million of debt that LUCo guarantees and uses for its investment
9 in its regulated utility assets, the debt balance in my capital structure recommendation
10 approximates Fitch's adjusted debt balance of $2.405 billion (see page 11 of Schedule DM-
11 D-5 for the additional $13 million of lease-equivalent debt Fitch included in its adjusted
12 debt balance).

13 DBRS, a Canadian rating agency company, also recognizes the fact that LUCo is
14 responsible for this debt through its guarantees. Therefore, they include this debt in the
15 various credit metrics they calculate for LUF. Because LUF's debt is guaranteed by LUCo,
16 its credit profile is based on DBRS assessment of LUCo's risk profile. As can be seen on
17 page 6 of Schedule DM-S-6, DBRS estimates LUCo's total long-term debt responsibility
18 at $2,244.5 million as of September 30, 2018. In order to ensure I captured all of the debt
19 LUCo has guaranteed, I reconciled the total long-term debt DBRS assigned to LUCo to the
20 financial information Empire provided to me in response to OPC DR No. 3004. As can be
21 seen in Schedule DM-S-7, when I include LUCo's guarantees of the LUF debt and the
22 Liberty Utilities (America) Holdco Inc. debt, my calculated LUCo debt responsibility is
23 the same as DBRS shows on page 6 of its report.

1 **Q. What has Empire provided in this case to show how it is complying with Financing**
2 **Condition 5?**

3 A. Nothing. Not only has Empire not provided anything in direct or rebuttal about its
4 intercompany financing arrangements, it also has not cooperated with OPC's discovery
5 requests for documents/information related to APUC's financing strategies and/or plans.[6]

6 **Q. Has the Commission recently disregarded holding company debt for purposes of**
7 **determining an authorized capital structure?**

8 A. Yes. The Commission did so in the Spire Missouri's rate cases in 2017, Case Nos. GR-
9 2017-0215 and GR-2017-0216. However, as Staff's ROR witness in those cases I
10 recommended that the Commission use Spire's consolidated capital structure based on my
11 opinion that Spire's regulated utility subsidiaries' cash flows enabled Spire to utilize this
12 debt capacity.

13 **Q. Is this case different?**

14 A. Yes. A key difference in this case is that LUCo guarantees the intermediate holding
15 company debt, whereas Spire Missouri did not guarantee the Spire holding company debt.
16 The Commission, in supporting its decision not to adopt my recommended use of Spire
17 Inc.'s consolidated capital structure, stated the following in its Report and Order:

18
19 7. Spire Missouri has an independently determined capital structure in that its debt
20 is secured by its own assets and not the assets of Spire Inc. or any of Spire Inc.'s
21 other subsidiaries. Additionally, Spire Missouri's assets do not guarantee the long-
22 term debt of its parent or of any of Spire Inc.'s other public utilities or of Spire
23 Marketing or Spire STL Pipeline. Further, the Commission must approve any long
24 term debt issuances made by Spire Missouri.
25
26 8. Spire Missouri's stand-alone capital structure supports its own bond rating. [footnote
27 from original omitted]
28

[6] Empire objected to the following OPC data requests, DR Nos. 3019 – 3028, 3036, 3038, 3039, and 3046 (see Schedule DM-S-8.

First, considering the Commission's above findings, it is important to emphasize that APUC's corporate financing strategy is to consolidate Empire's and its North American regulated affiliates' financing needs at the LUCo level and issue debt through LUCo's financing subsidiary, LUF. In fact, although Empire's current financial profile warrants a secured debt rating as high as an 'A,' which may have allowed Empire to access low-cost mortgage debt markets, APUC decided instead to refinance Empire's $90 million mortgage bonds with capital LUCo provided. While there certainly may be corporate efficiencies and even potentially economies of scale for Empire to have its financing needs consolidated with the rest of its affiliates, the simple fact of the matter is that Empire has not shown that. Because I am trying to address this situation after the fact in the context of this rate case, my recommendation designed to rectify this situation to ensure fair capital costs are charged to Empire's ratepayers is to set Empire's allowed ROR based on LUCo's adjusted capital structure. LUCo's adjusted capital structure is the most consequential capital structure for ongoing debt costs, and matches the costs of this debt to the capital structure it supports. Although Empire still has a Moody's stand-alone credit rating, this rating is no longer consequential to Empire's ongoing access to capital because APUC is no longer financing Empire as an independent entity.

Second, LUCo unconditionally guarantees the debt issued by the intermediate holding companies I identified on page 2 of Schedule DM-D-2 attached to my Direct Testimony (also, see chart above). Spire Missouri did not guarantee Spire's holding company debt. Fitch and DBRS specifically recognize the fact that LUCo guarantees the debt of its subsidiaries when it is assessing LUCo's financial risk and assigning a credit rating to the debt LUCo guarantees. LUCo's guarantee of the intermediate holding companies' debt causes increased financial risk and therefore higher costs on subsequently issued debt assigned directly to LUCo and/or Empire. I am not aware of any commercially justified reason to issue this debt at the intermediate holding company levels other than to attempt to support higher equity ratios for purposes of ratemaking.

1 **Q. Are there other Commission decisions that can assist with making an informed**
2 **decision on an appropriate capital structure for setting Empire's allowed ROR in this**
3 **case?**

4 A. Yes. Empire is now an affiliate of both Liberty Midstates and Liberty Utilities (Missouri
5 Water) LLC ("Liberty Water"). In Case Nos GR-2014-0083 and WR-2018-0170, the
6 Commission used LUCo's capital structure to set the allowed ROR for Liberty Midstates
7 and Liberty Water, respectively. The main differences between these cases and this case
8 is that Liberty Midstates and Liberty Water do not have any legacy third-party debt on their
9 books, and neither company is assigned a credit rating by any rating agencies. Otherwise,
10 all of the companies now rely on the LUCo debt platform for all of their debt financing
11 needs, and APUC is the conduit for accessing the third-party equity markets.

12 **Q. Does Empire acknowledge the sole purpose of these intermediate holding companies**
13 **is to provide financing to LUCo?**

14 A. Yes. These entities do not hold any assets other than the direct or indirect equity
15 investments that LUCo holds. These entities were created for the purpose of receiving debt
16 proceeds to be recorded as equity investments on LUCo's books (see Schedule DM-D-3
17 attached to my direct testimony).

18 **Q. Do Empire's or Staff's witnesses acknowledge the fact that their recommended**
19 **common equity ratios for Empire are higher than Empire's requested common equity**
20 **ratio in its last rate case, when it was still a standalone company?**

21 A. No.

22 **Q. Did you?**

23 A. Yes, in my direct testimony. In Empire's last rate case as a standalone company it
24 recommended a common equity ratio of approximately 49%.[7]

[7] Murray Direct, p. 11, ll. 16-23.

1 **Q. Is this important?**

2 A. Yes, because not only have Empire's witnesses not explained why Empire's capital
3 structure is less economical as compared to LUCo's, but they have not even explained why
4 Empire's current capital structure needs more equity than when Empire was a standalone
5 company.

6 **Q. Have you calculated how much more costly Empire's book capital structure is**
7 **compared to your recommended adjusted LUCo capital structure?**

8 A. Yes. Assuming a 9.50% allowed ROE and Staff's recommended rate base as of September
9 30, 2019, the revenue requirement generated by my ROR recommendation as compared to
10 that generated using Empire's capital structure is $8.6 million lower. Put another way,
11 Empire's more equity-rich capital structure would cost ratepayers $8.6 million more per
12 year. Empire has provided no justification as to why its ratepayers should pay higher rates
13 to support a less cost efficient capital structure than that of LUCo, which is the current
14 platform used to provide debt financing proceeds used to finance Empire's utility capital
15 infrastructure expenditures.

16 **Q. Do any of Empire's witnesses attempt to legitimize Empire's affiliate financing**
17 **transactions as being strategically important and consequential?**

18 A. Yes. Mr. Timpe explains why the terms and conditions associated with the $90 million
19 promissory note Empire issued to LUCo are beneficial to Empire and the logic of financing
20 long-term assets with long-term financing. If Mr. Timpe's logic was consequential to
21 Empire's financial condition as an independent entity, then Empire should have issued a
22 30-year promissory note to LUCo rather than a 15-year note because this would allow for
23 an even longer duration of liabilities as compared to assets. In fact, it is not clear to me
24 why APUC decided to set the terms for the Empire affiliate debt based only on the 10-year
25 and 20-year LUCo/LUF 3rd party debt issued in March 2017. LUCo/LUF also issued 3-
26 year, 5-year, 7-year and 30-year 3rd party debt on the same date it issued the 10-year and
27 20-year debt. Based on Mr. Timpe's logic, APUC is not managing LUCo/LUF capital
28 structure prudently because it is subjecting LUCo to too much refinancing risk.

1 Regardless, the Commission should reject Mr. Timpe's argument because the affiliate
2 promissory notes are not consequential to Empire's financial flexibility. APUC's
3 management of LUCo's capital structure is most consequential to Empire's ability to attract
4 capital at reasonable costs.

5 **Q. Are you aware of any examples that show the inconsequential nature of notes issued**
6 **between the group comprised of LUCo and its subsidiaries?**

7 A. Yes. This situation was evident in the recent Liberty Midstates rate case, Case No. GR-
8 2018-0013. Liberty Midstates filed an Application for financing authority in Case No. GF-
9 2018-0091. In that October 3, 2017, Application, Liberty Midstates requested Commission
10 Authority to refinance an internal loan that matured on July 31, 2017. Being that this was
11 an affiliate note, there was no consequence to Liberty Midstates defaulting on this
12 promissory note. Because Liberty Midstates filed the finance case shortly after it filed its
13 rate case, it appears the reissuance of its promissory note was simply a matter of internal
14 recordkeeping. The terms of the original $11.1 million affiliate debt issued by Liberty
15 Midstates was based on the terms of a $50 million LUF debt issuance in 2012. Because
16 LUF did not have a recent third-party debt cost it could assign to the Liberty Midstates'
17 $11.1 million internal promissory note, LUCo assigned a term and cost to the affiliate loan
18 based on an internal method.

19 **Q. Why do you characterize the notes among these affiliates as being inconsequential?**

20 A. Because the terms don't have any meaning/consequence other than for internal record
21 keeping. As was evident from the Liberty Midstates' affiliate promissory note, there was
22 no financial consequence to Liberty Midstates defaulting on it because Liberty Midstates
23 is not independently financed.

24 ## COST OF DEBT

25 **Q. Did anyone rebut your cost of debt recommendation?**

26 A. Staff witness Mr. Chari did, but no one did for Empire.

1 **Q. What is Mr. Chari's primary issue with your cost of debt recommendation?**

2 A. Mr. Chari's primary issue is my use of LUCo's consolidated cost of debt in my
3 recommended ROR. He does not take issue with the methodology I used to calculate the
4 cost of debt.

5 **Q. Just to be clear, do you need to make adjustments to your cost of debt**
6 **recommendation due to affiliate transactions?**

7 A. No. My 4.65% recommended cost of debt does not include any affiliate notes. While it
8 does include debt that has been used to finance LUCo's other regulated utility operations,
9 in my opinion, matching the cost of debt to the capital structure that is actively managed
10 overrides the goal of attempting to reconcile uses of capital with sources of capital.

11 **RETURN ON COMMON EQUITY**

12 **Q. Did anyone rebut the ROE you recommend the Commission use when setting**
13 **Empire's rates in this case?**

14 A. Yes. Empire's ROR witness, Mr. Hevert, replied to my ROE recommendation on pages
15 34 to 56 of his rebuttal testimony.

16 **Q. Have the recent issues in the capital markets caused you to approach your response**
17 **to Mr. Hevert's rebuttal differently in this case than you would have otherwise and**
18 **as you recently did in Ameren Missouri's recent electric rate case, Case No. ER-2019-**
19 **0335?**

20 A. Yes. At the time Mr. Hevert and I filed rebuttal testimony in this case, the stock market
21 was starkly different than it is today. At the time I filed rebuttal testimony, during the week
22 in which I was finalizing my testimony, the broader stock markets had declined
23 significantly and had started to experience much greater volatility. Most importantly for
24 purposes of evaluating and understanding utility costs of capital, utility stock valuation
25 levels had reached all-time highs the week prior to filing rebuttal. Although utility P/E
26 levels had declined slightly at the time, they had not contracted nearly as much as the

1 broader markets. They certainly had not contracted as much as companies with material
2 exposure to energy commodities, which were hit even harder when Russia and Saudi
3 Arabia failed to reach an agreement on cutting oil production. This caused even more
4 instability as the COVID-19 pandemic started to cause mass shutdowns across this country,
5 all but ensuring an imminent recession.

6 Consequently, I will not address Mr. Hevert's debates on market risk premiums as it relates
7 to broad market indices, such as the S&P 500. I think the Commission is much better
8 served if I address the issues related specifically to the utility-industry and the context of
9 utility industry valuation levels now compared to when I performed my analysis and when
10 this Commission decided an allowed ROE of 9.5% was appropriate for Missouri's electric
11 utility companies about five years ago. This should arm the Commission with the most
12 relevant information to make an informed decision during these uncertain times.

13 Q. **Mr. Hevert describes your multi-stage DCF analysis on pages 34 to 35 of his rebuttal**
14 **testimony. Do you agree with his characterization of it?**

15 A No. Mr. Hevert indicates that the first two stages of my model were based on two 5-year
16 periods. Actually, the length of the first period of my multi-stage DCF analysis varied by
17 each company in my proxy group. For most of the companies in my proxy group, projected
18 annual DPS were available for at least 3 years. However, in each instance, I used equity
19 analysts' discrete projections of annual DPS for each of the companies. Therefore, my
20 DCF analysis is based on equity analysts' projections. For the second stage, I determined
21 the estimated payout ratio as of the last year in which a discrete DPS estimate was available
22 and then gradually converged the dividend payout ratio to 70% by the year 2029 (ten years
23 from the point of original investment). The dividend growth rate over that transition period
24 varied by each company and occurred over time horizons of 5-8 years. The growth rates
25 in dividends over these period were as high as 11.63% and as low as 2.21% with an average
26 of 6.96%.

1 **Q. Does Mr. Hevert express concern about whether you have sufficient support for a**
2 **perpetual growth rate in the 2% to 3% range?**

3 A Yes. Mr. Hevert discusses his concerns on pages 36 through 40 of his rebuttal testimony.

4 **Q. First, what perpetual growth rates did you use for purposes of your multi-stage DCF**
5 **analyses?**

6 A. I used a 2.85% perpetual growth rate for the multi-stage DCF analysis shown on Schedules
7 DM-D-6, pages 5-6. I used a 3% perpetual growth rate for the multi-stage DCF analysis
8 shown on Schedule DM-D-6, page 7.

9 **Q. Which multi-stage DCF analysis did you primarily rely on to inform yourself on the**
10 **electric utility industry's COE?**

11 A. The multi-stage DCF analysis that relies on the 2.85% perpetual growth rate.

12 **Q. Why?**

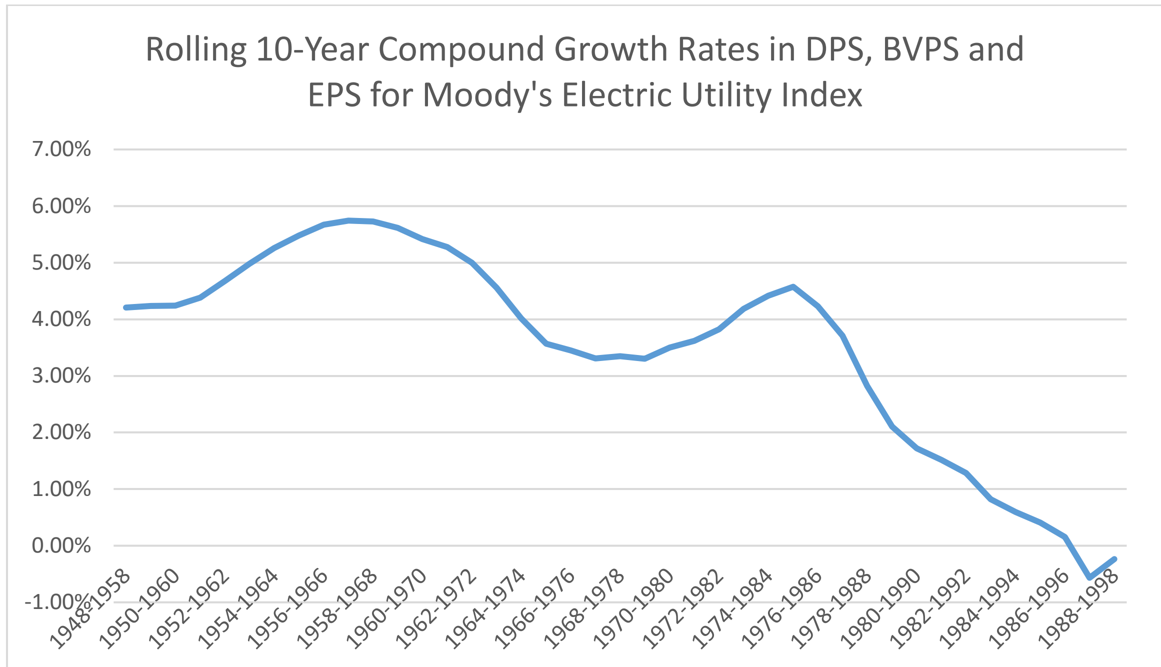
13 A. For a more thorough explanation, please see pages 34-36 of my direct testimony. However,
14 in a nutshell, this version allows for direct consideration of equity analysts' projected
15 dividends, earnings and dividend payout ratios. The key input for the terminal growth rate
16 is the assumed earned ROE and terminal dividend payout ratio. Although some equity
17 analysts assume allowed ROEs will decline to around 9-9.25% by the terminal stage, I used
18 a current average allowed ROE of around 9.5% and multiplied this ROE by an earnings
19 retention ratio of 30%, which is consistent with those I have observed used by equity
20 analysts.

21 **Q. Mr. Hevert indicates that the historical data you analyzed from the Moody's Electric**
22 **Utility Index and the sample proxy of electric utility companies for which data was**
23 **available from Value Line does not support your chosen perpetual growth rates. How**
24 **do you respond?**

1 A. Mr. Hevert is correct that the historical growth rates from my analysis of these two proxy
2 groups and periods indicate growth rates in DPS, EPS and BVPS were higher than 3%
3 (around 3.5%). However, this was not the only information I relied on when deciding a
4 2.85% to 3% growth rate was reasonable for my analysis. Although he is correct that the
5 historical period from these two studies does not include the last 20 years of data, I did not
6 ignore this information in my assessment of what may be appropriate going forward. I did
7 not rely on this more recent data because the restructuring of the electric utility industry at
8 the turn of the century caused major disruptions and noise to the financial data. This
9 explains the major contraction in 2000 Mr. Hevert shows in Chart 6 on page 37 of his
10 rebuttal testimony.

11 **Q. When you analyzed the financial data Mr. Hevert shows in Chart 6 on page 37 of his**
12 **rebuttal testimony, did you give much weight to the 2000 financial data to support the**
13 **reasonableness of your estimated perpetual growth rate?**

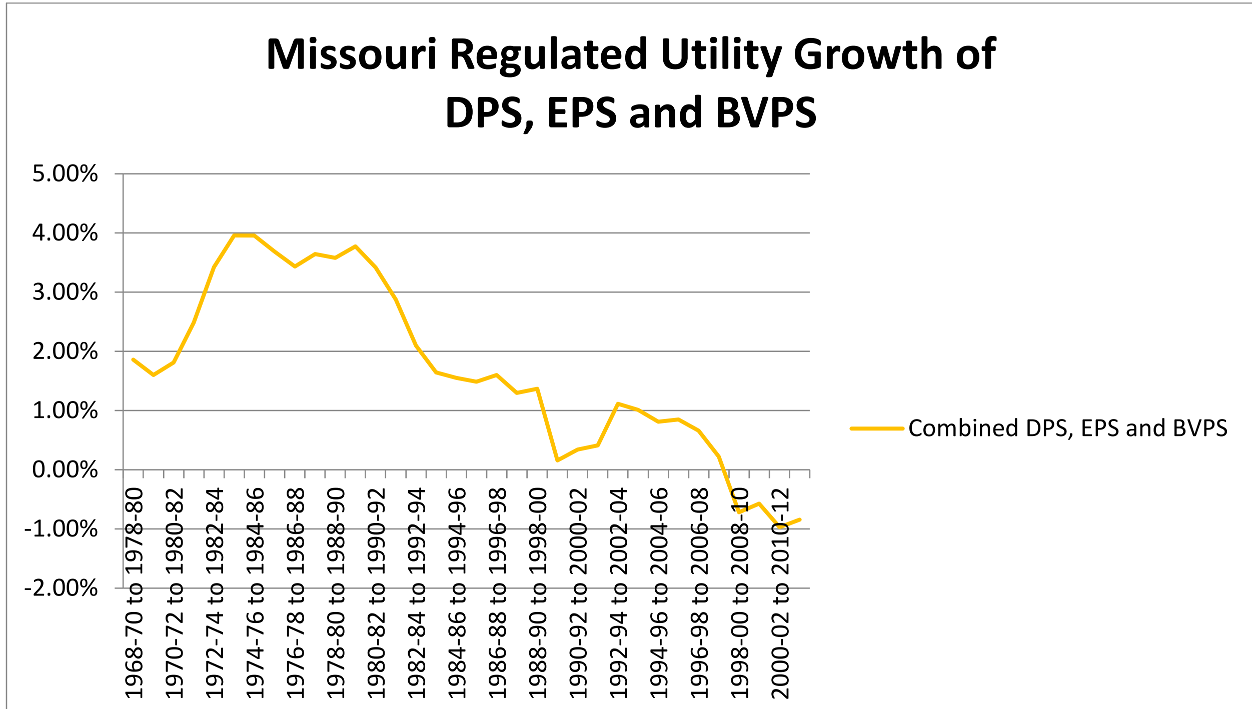
14 A. No. As Mr. Hevert discusses below this graph, I calculated 10-year rolling period averages
15 for the entire period. When I calculated these rolling period averages, I did not include
16 data from 2000. Therefore, these calculations gave no weight to the 2000 data. More
17 importantly, because these calculations were based on rolling 10-year periods from 1947
18 to 1999, the growth rates implied from the averages were higher than 3% due to higher 10-
19 year growth rates during the period through late 1980s, but gradually declined through the
20 90s. As can be seen in the following graph the 10-year compound growth rates decline
21 into negative territory toward the end of the 1990s.



Because I recognized this was caused by the disruption from restructuring in the electric utility industry and the subsequent Enron bankruptcy, I decided this significant decline in growth was not reflective of what investors would likely expect for the pure-play regulated electric utility industry going forward.

Q. Have you analyzed the changes to Missouri's regulated utility growth rates through more recent periods?

A. Yes. I included this information in past rate cases when I was Staff's ROR witness. Combining growth rate information for Empire, Ameren Corporation and Great Plains Energy showed a continued decline in growth rates through the financial crisis and recession in 2008 to 2009. See below:

1 

2

3 **Q. How did you determine a reasonable terminal growth rate based on current industry**
4 **fundamentals as compared to past industry growth rates?**

5 A. I analyzed equity analysts' research reports to determine what factors they are considering
6 for purposes of determining a rational perpetual growth rate for the electric utility industry.
7 I found that investors typically estimate a perpetual growth rate in the range of 2% to 3%.
8 For example, I discovered that Evercore ISI uses a perpetual growth rate in the range of
9 1.25% to 3% with its base case assuming a 2.5% perpetual growth rate. I discovered that
10 Wells Fargo assumes perpetual growth rates of around 3% with a standard deviation of +/-
11 0.3%, which means 68% of the perpetual growth rates fall within a range of approximately
12 2.7% to 3.3%. At two standard deviations, this indicates that 95% of the perpetual growth
13 rates fall within a range of approximately 2.4% to 3.6%.

1 **Q. What factors did these utility investment analysts take into consideration when**
2 **determining a perpetual growth rate?**

3 A. Historical rate base growth rates, historical payout ratios, current allowed ROEs and
4 expected allowed ROEs. Wells Fargo anticipated allowed ROEs would converge to
5 approximately 9% in their base case scenario, with dividend payout ratios also converging
6 between 65% to 75%. Under the fundamental growth method, the terminal growth rate is
7 simply determined by multiplying the retention rate (1 – dividend payout ratio), which is
8 in between 25% to 35% based on Wells Fargo's assumptions. This results in a perpetual
9 growth rate range of 2.25% to 3.15%. Evercore ISI assumes allowed ROEs eventually
10 converge to 9.25% with dividend payout ratios in the range of 67.5% to 82.6% with a base
11 case scenario of 71.2%. Multiplying the retention ratios by Evercore ISI's projected ROEs
12 results in perpetual growth rates in the range of 1.61% to 2.93% with a base case of 2.67%.

13 **Q. How do these terminal growth rates compare to the estimate you used?**

14 A. Most are actually lower. I assumed a 70% payout ratio and a 9.5% allowed ROE, which
15 results in a terminal growth rate of 2.85%.

16 **Q. Do you know what terminal growth rate APUC assumes in its own valuation**
17 **estimates?**

18 A. Yes. ** ____
19 ____
20 ____
21 ____
22 ____
23 ______________ **

1 **Q. Mr. Hevert also expresses skepticism about the reasonableness your assumed long-**
2 **term dividend growth rate because it is only approximately 1% over the expected rate**
3 **of inflation. Do investors express skepticism of projected utility dividend growth rates**
4 **that are much higher than the expected rate of inflation?**

5 A. Yes. I recently discussed this view in my testimony in the recent Ameren Missouri rate
6 case, Case No. ER-2019-0335. According to a JP Morgan study Ameren relied on for its
7 own dividend strategy formulations, dividend growth above historically achieved 2-3%
8 growth rates is typically discounted by investors.[8]

9 **Q. Has Goldman Sachs used terminal growth rates consistent with the rate of inflation**
10 **when it provided more visibility into the dividend discount model ("DDM") analysis**
11 **it performed on the electric utility industry?**

12 A. Yes. Goldman Sachs used to provide visibility into its multi-stage DDM analysis of utility
13 companies. When they provided this visibility, they showed that they used a terminal
14 growth rate of 2.5% for purposes of estimating the value of utility stocks.

15 **Q. Mr. Hevert argues that your sustainable growth rate should have included an**
16 **additional factor to consider potential growth in equity issuance to fund growth in**
17 **investment.[9] Do you agree?**

18 A. No. The entire purpose of performing a multi-stage DCF analysis is to trend the
19 intermediate higher growth rates, which require additional external financing, to a final
20 sustainable growth rate that doesn't require issuance of external equity. This is the
21 rationale for targeting the final dividend payout ratio at a level that allows the company to
22 fund its investment with internal retained equity. My interpretation of the sustainable
23 growth stage is consistent with that which is discussed in the Chartered Financial Analyst
24 ("CFA") curriculum as well.

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[8] Murray Rebuttal, Case No. ER-2019-0355.
[9] Hevert Rebuttal, p. 40, l. 12 – p. 41, l. 8.

Q. Mr. Hevert also suggests it would be more appropriate to use a long-term economic growth rate for purposes of the perpetual stage of your multi-stage DCF analysis.[10] Do you agree?

A. It depends on the context. I do not agree this is true for the utility industry. Actual experience has proven this to be false in the utility industry.[11] A fundamental characteristic of utility stocks is to typically retain less than half of earnings and reinvest such earnings at an expected ROE that is less than earned ROEs for the market as a whole.

However, I do agree that this constraint applies to general market indices, such as the S&P 500. This certainly makes logical sense in the context of the overall market because GDP is generally considered to be a speed limit on the potential growth in earnings for companies that operate within that economy. Specifically, Level III of the CFA Program curriculum states the following regarding using the DCF to estimating market returns for a broader market, such as the S&P 500:

> Earnings growth rate = GDP growth rate + Excess corporate growth (for the index companies)
>
> where the term *excess corporate growth* may be positive or negative depending on whether the sectoral composition of the index companies is viewed as higher or lower growth than that of the overall economy. If the analyst has chosen a broad-based equity index, the excess corporate growth adjustment, if any, should be small.[12]

Q. Does Mr. Hevert's discussion of the growth limitation on the market apply to the analysis he performed in his Direct Testimony for purposes of estimating equity risk premiums?

A. Yes. As I indicated in my rebuttal testimony[13] the growth rates embedded in Mr. Hevert's expected market returns of 13.85% to 15.07% are 14.78% to 14.95%. These growth rates

[10] Hevert Rebuttal, p. 41, l. 9 – p. 42, l. 5.
[11] The historical data I reviewed from the Moody's electric utility index for the period 1947 through 1999 shows that the electric utility industry grew at about 50% of the nominal GDP growth rate. The historical data I reviewed for the proxy group of companies in which I used Value Line as my source, shows that for the period 1968 through 1999 the electric utility industry growth rate was around 44% of the nominal GDP growth rate.
[12] 2010 CFA® Program Curriculum, Level III, Volume 3, p. 34.
[13] Murray Rebuttal, p. 18, ll. 26-27.

1 are approximately three times the long-run GDP growth estimates of approximately 4% for
2 the U.S. economy.

3 **Q. Mr. Hevert testifies to his disagreement with your estimate of the market risk**
4 **premium you used in your CAPM analysis.[14] In your view, is it productive to debate**
5 **equity risk premiums given the dramatic change in the broader capital markets since**
6 **the parties filed rebuttal testimony in this case?**

7 A. No. Before recent capital market events, the general consensus based on many of the equity
8 research reports I had reviewed was that the equity risk premium was in the 5.5% to 6.5%
9 range, but being that the broader markets have reacted much more significantly to COVID-
10 19 and energy market issues, trying to estimate market risk premiums to indirectly estimate
11 the utility industry's cost of capital is subject to too much error. Therefore, debating this
12 issue is futile and will only confuse the information that can be gleaned from analyzing
13 utility-specific securities.

14 **Q. Mr. Hevert indicates that the information you provided in your generic constant-**
15 **growth DCF analysis as a test of reasonableness is not meaningful because it is too**
16 **subjective and is not applied to a specific proxy group. He indicates that for these**
17 **reasons, it should be disregarded.[15] How do you respond?**

18 A. First, let me clarify that I did not use this information in formulating my final allowed ROE
19 recommendation. I provided this information as a "sanity" check for purposes of testing
20 the reasonableness of my COE estimates. The basic characteristics of regulated utility
21 stocks have not changed over the years, which is that they are primarily a yield investment
22 with an opportunity for some appreciation in the stock price. Over long periods of time,
23 utility stock investors receive a majority of their returns through dividends. As I cited in
24 my Direct Testimony, for the period 1974 to 2010, 68% of total returns from utility stocks
25 were from dividends as compared to 32% for capital gains. This is actually quite consistent
26 with the fundamental retention growth rate formula, which dictates that if a

[14] Hevert Rebuttal, p. 11, l. 7-11.
[15] Hevert Rebuttal, p. 49, l.1 through p. 50, l. 6.

1 company/industry retains 30% of its earnings (inverse of the dividend payout ratio), the
2 dividend return to the investor will consist of approximately 70% of its returns with the
3 remaining provided by capital gains (stock price growth).

4 Second, I think the fact that this test of reasonableness breaks down the basic fundamentals
5 of utility stocks and the drivers of their returns as compared to providing a voluminous
6 amount of technical data and convoluted theories allows for decision makers to test the
7 credibility of witnesses, such as Mr. Hevert, that claim their convoluted and subjective
8 detailed analysis of data makes their estimates credible. Simple tests of reasonableness
9 such as I provided with this generic constant-growth shows that the drivers of utility stock
10 returns would fundamentally change if Mr. Hevert's COE estimate of over 10% were
11 correct. In this situation, utility stock investors would receive over 70% of their total
12 returns from capital gains and less than 30% from dividends. This defies historical
13 experience, reason, and the fundamentals of utility investments.

14 **Q. Mr. Hevert expresses concern about your focus on the potential impact on Empire's**
15 **FFO/debt ratios if the Commission adopted your recommended capital structure and**
16 **ROE.[16] Why did you focus on the FFO/debt metric?**

17 A. It is the metric that receives the most weight by at least S&P and Moody's. While I agree,
18 it is definitely not the sole focus of rating agencies, I also recognize that this metric is a
19 primary focus for APUC, LUCo, and Liberty Power when they interact with equity and
20 debt investors. I have already provided statements from APUC's CEO, Ian Robertson,
21 which indicate APUC considers FFO/debt thresholds of around 15% to be appropriate for
22 both APUC's and LUCo's business risks. The companies target this FFO/debt threshold
23 in order to maintain a 'BBB' credit rating. This is critically important and very relevant to
24 determining the reasonableness of the capital structure recommendations in this case.
25 Especially due to the fact that LUCo is charging Empire debt costs based on the debt it
26 issues from its more leveraged capital structure. There simply is no benefit to Empire's
27 ratepayers from paying for a higher-cost, equity-rich capital structure because they do not

[16] Hevert Rebuttal, p. 50, l. 7 – p.56, l. 5.

1 receive the benefit of 'A'-rated debt costs and the financial flexibility such a higher-cost
2 capital structure would ensure if Empire were still a stand-alone entity.

3 The pro forma analysis I show indicates that even with the adoption of my more leveraged
4 capital structure recommendation and my original 9.25% allowed ROE, Empire would still
5 generate an FFO/debt metric that is stronger (more creditworthy) than the entity on which
6 it now relies for financing, LUCo through LUF.

7 **TRUE-UP**

8 **Q. Did you request financial information that would have allowed you to consider**
9 **APUC, LUCo and Empire's capital structure and embedded costs of capital through**
10 **the true-up date, or at least through December 31, 2019?**

11 A. Yes. I requested updated embedded cost of debt information and financial statement
12 information in DR Nos. 3004 and 3009, respectively, but never received any information
13 more recent than September 30, 2019. However, considering I am recommending a capital
14 structure that reconciles to the financial risk impacting Empire's cost of capital rather than
15 a capital structure that reconciles to Empire's rate base, I am comfortable that my capital
16 structure and embedded cost of debt recommendation produce a fair and reasonable ROR
17 for Empire.

18 **Q. Are you aware of any major financing activities that occurred at LUCo during the**
19 **fourth quarter of 2019?**

20 A. No. I am not aware of any major financing activities that occurred at this level. However,
21 I did notice in APUC's quarterly report for the 4th Quarter of 2019 that LUCo may have
22 reduced some of its off-balance-sheet debt. If Empire wants me to consider whether this
23 improves LUCo's capital structure, I will do so, but they will need to provide me the
24 updated financial information.

1 **Q. What is your current ROR recommendation?**

2 A. Using my revised allowed ROE recommendation of 9.5%, my recommended capital
3 structure of 46% common equity and 54% long-term debt, and a 4.65% cost of debt, my
4 recommended allowed ROR is 6.88% (see Schedule DM-S-9).

5 **SUMMARY AND CONCLUSIONS**

6 **Q. What are your primary conclusions about Empire's response in rebuttal to your**
7 **direct testimony on capital structure?**

8 A. Even after I gave Empire the opportunity to provide a response by presenting in my direct
9 testimony a comprehensive and detailed analysis of Empire's capital structure relative to
10 that of LUCo, the entity on which Empire now relies on for tis debt financing, Empire
11 failed to do so. Empire and its affiliates have not taken the conditions the Commission
12 imposed on them in Case No. EM-2016-0213 seriously. The Commission, as well as its
13 Staff and the OPC, relied on these conditions to protect Empire and its customers from
14 detriments that could occur due to its financing needs being consolidated with the rest of
15 APUC's regulated utilities. Empire has not even attempted to justify Empire's less
16 economical capital structure in its direct testimony or its rebuttal testimony. Although it
17 wasn't OPC's burden to disprove the Empire capital structure is not as economic as
18 LUCo's, I have. The fact that APUC created entities for the sole purpose of receiving debt
19 financing from LUF to give the appearance of an equity investment in LUCo causes me
20 great concern about the new ownerships transparency and respect for this Commission's
21 orders and rules. The only evidence on capital structure that is thoroughly supported in
22 this case is my capital structure recommendation.

23 **Q. What are your conclusions as it relates to the appropriate ROE in this case?**

24 A. Although recent financial market activity has been extremely unnerving, it is important to
25 stay focused on the fact that utility investments, both debt and equity, are highly correlated
26 to changes in long-term interest rates. The long-term interest rate environment has been in
27 a secular decline since the financial crisis. During this secular decline, utility P/E ratios

1 have trended to their all-time highs. However, during the last couple of weeks, utility P/E
2 ratios have declined considerably and dividend yields have increased considerably.
3 Therefore, I have increased by allowed ROE recommendation to 9.5% from 9.25%.
4 Considering my original ROE and capital structure recommendation, showed that it would
5 not dilute APUC and LUCo's targeted FFO/debt ratios of approximately 15%, my
6 recommendation is fair and reasonable.

7 **Q. Does this conclude your testimony?**

8 A. Yes.

Case No. ER-2019-0374

Schedule DM-S-1 to David Murray's Surrebuttal Testimony and True-Up Direct Testimony has been deemed "Confidential" in its entirety

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Schedule DM-S-2 to David Murray's Surrebuttal Testimony and True-Up Direct Testimony has been deemed "Confidential" in its entirety

Case No. ER-2019-0374

Schedule DM-S-3 to David Murray’s Surrebuttal Testimony and True-Up Direct Testimony has been deemed “Confidential” in its entirety

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Schedule DM-S-4 to David Murray’s Surrebuttal Testimony and True-Up Direct Testimony has been deemed “Confidential” in its entirety

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Schedule DM-S-5 to David Murray’s Surrebuttal Testimony and True-Up Direct Testimony has been deemed “Confidential” in its entirety

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Schedule DM-S-6 to David Murray's Surrebuttal Testimony and True-Up Direct Testimony has been deemed "Confidential" in its entirety

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Schedule DM-S-7 to David Murray's Surrebuttal Testimony and True-Up Direct Testimony has been deemed "Confidential" in its entirety

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Schedule DM-S-8 to David Murray's Surrebuttal Testimony and True-Up Direct Testimony has been deemed "Confidential" in its entirety

Weighted Rate of Return
for Empire District Electric Company

Capital Component	Percentage of Capital	After-Tax Gross ROR	Pre-Tax Gross ROR	After-Tax Weighted ROR	Pre-Tax Weighted ROR
Common Stock Equity	46.00%	9.50%	12.47%	4.37%	5.74%
Long-Term Debt	54.00%	4.65%	4.65%	2.51%	2.51%
Short-Term Debt	0.00%	0.00%	0.00%	0.00%	0.00%
	100.00%			6.88%	8.25%