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## Before the Public Service Commission of the State of Missouri

**Surrebuttal Testimony** 

of

John J. Reed

on behalf of

The Empire District Electric Company

January 2022



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## SURREBUTTAL TESTIMONY OF JOHN J. REED THE EMPIRE DISTRICT ELECTRIC COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION CASE NO. ER-2021-0312

## 1 I. INTRODUCTION AND PURPOSE

### 2 Q. Please state your name and business address.

- A. My name is John J. Reed. I am Chairman and Chief Executive Officer of Concentric
  Energy Advisors, Inc. ("Concentric") and CE Capital Advisors, Inc. My business address
- 5 is 293 Boston Post Road West, Suite 500, Marlborough, Massachusetts 01752.

## 6 Q. On whose behalf are you submitting this Surrebuttal Testimony?

- A. I am submitting this Surrebuttal Testimony on behalf of The Empire District Electric
  Company ("Empire" or "the "Company"), an indirect, wholly-owned subsidiary of
  Algonquin Power & Utilities Corp. ("APUC").
- 10 Q. Did you previously provide testimony in this proceeding?
- A. Yes. In May 2021, I submitted Direct Testimony to the Missouri Public Service
   Commission ("Commission") regarding the appropriate Return on Equity ("ROE") and
   capital structure for Empire in this proceeding, and in December 2021, I submitted Rebuttal
   Testimony.

## 15 Q. What is the purpose of your Surrebuttal Testimony?

16 A. The purpose of my Surrebuttal Testimony is to respond to the Rebuttal Testimony of Mr.

- 17 Peter Chari on behalf of the Missouri Public Service Commission Staff ("Staff") and to the
- 18 Rebuttal Testimony of Mr. David Murray on behalf of the Missouri Office of Public
- 19 Counsel ("OPC") as it relates to the appropriate ROE and capital structure for Empire.

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1	<b>Q</b> .	Are you sponsoring any schedules as part of your Surrebuttal Testimony?

- 2 A. Yes, I am sponsoring <u>Surrebuttal Schedules JJR-1</u> and <u>JJR-2</u>.
- 3 Q. How is your Surrebuttal Testimony organized?

A. My Surrebuttal Testimony is organized by issue rather than by witness. For example, both
Mr. Chari and Mr. Murray question my use of an interest rate forecast, the long-term GDP
growth rate in my multi-stage DCF model, and the forward-looking market risk premium
in my CAPM analysis. I respond to the points made by those witnesses, and explain why
my methodologies produce the most reasonable ROE estimate for Empire in this
proceeding.

## 10 II. <u>PROXY GROUP</u>

# 11 Q. Please summarize Mr. Murray's position regarding the proxy group that you relied 12 on for Empire.

13 Mr. Murray states that I do not recognize or discuss that some of the companies in my A. proxy group have "significant exposure" to unregulated operations.<sup>1</sup> Specifically, Mr. 14 15 Murray expresses concern with the inclusion of Entergy Corporation, Exelon Corporation, Hawaiian Electric, NextEra Energy Inc., OGE Energy Corporation, and Otter Tail 16 17 Corporation in my proxy group. Mr. Murray believes that companies with a higher 18 percentage of unregulated operations have greater risk than Empire, and he suggests that I 19 have not accounted for the higher risk of unregulated operations when comparing the 20 business risk of Empire to the proxy group and that it is not reasonable to conclude that 21 Empire has higher business risk than the proxy group companies.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Rebuttal Testimony of David Murray, at 25.

<sup>&</sup>lt;sup>2</sup> Rebuttal Testimony of David Murray, at 25-26.

# Q. What is your response to Mr. Murray's concern with several of the companies in your proxy group?

3 A. As discussed in my Direct Testimony, I applied a screening criterion that required a 4 company derive at least 60 percent of its operating income from regulated operations.<sup>3</sup> 5 This is a standard proxy group screen. Surrebuttal Schedule JJR-1 shows the percentage of regulated operations for each company in my proxy group. As shown in that Schedule, 6 7 on average the companies in my proxy group derived 92.0 percent of their operating 8 income from regulated operations over the three year period from 2017-2019 (the period 9 used in my proxy group screen in my Direct Testimony) and 93.0 percent over the three 10 year period from 2018-2020 (the most recent data available). As such, I disagree with, and 11 the facts do not support, Mr. Murray's statement that my proxy group contains companies 12 with substantial unregulated operations.

13 I also compared the 90-day average Constant Growth DCF results as of March 31, 14 2021 contained in Schedule JJR-4 of my Direct Testimony for the six companies noted 15 by Mr. Murray as having substantial unregulated operations to the remaining companies in 16 my proxy group. As shown in <u>Surrebuttal Schedule JJR-2</u>, the average Constant Growth 17 DCF result excluding those six companies is 9.83 percent, or 33 basis points higher than 18 the average Constant Growth DCF result including those six companies of 9.50 percent. 19 Further, the company with the highest Constant Growth DCF result (Portland General 20 Electric Company at 14.24 percent) has 100 percent regulated electric operations. In

<sup>&</sup>lt;sup>3</sup> Direct Testimony of John J. Reed, at 32.

summary, my analysis demonstrates that my inclusion of the companies challenged by Mr.
 Murray actually serves to reduce the ROE estimate using the Constant Growth DCF model.

Both Mr. Chari and Mr. Murray question the growth rate used in your Constant

3

III. <u>DISCOUNTED CASH FLOW MODEL GROWTH RATES</u>

# 4 5

Q.

## Growth DCF model.<sup>4</sup> What is your response?

6 A. Messrs. Chari and Murray challenge whether it is reasonable to use analysts' forecasts of 7 earnings per share growth in the Constant Growth DCF model. However, the fact remains 8 that neither witness is able to rely on the results of their own DCF analyses (8.30 percent 9 for Mr. Chari and 7.00 to 7.25 percent for Mr. Murray). This is because those results are 10 between 133 and 263 basis points below the average authorized ROE for vertically 11 integrated electric utilities in 2020 and 2021 of 9.63 percent. Rather than questioning the 12 growth rates used in my Constant Growth DCF model, which are consensus estimates from 13 equity analysts that are experts on the companies they cover, and rather than proposing adjustments to those growth rates that reduce the results of my DCF analysis, Mr. Chari 14 15 and Mr. Murray should question their own growth rate inputs to the DCF model that are producing such unreasonably low ROE estimates that they are not able to rely on in making 16 17 their respective ROE recommendations. Put simply, their testimonies on these issues are 18 not supported by the results of their own inputs to the DCF model.

<sup>&</sup>lt;sup>4</sup> Rebuttal Testimony of Peter Chari, at 5-6, and Rebuttal Testimony of David Murray, at 29-31.

1 **Q.** 

2

# Mr. Chari and Mr. Murray also challenge the long-term growth rate in your Multi-Stage DCF analysis.<sup>5</sup> Do you agree with those concerns?

A. No, I do not. Again, Mr. Chari and Mr. Murray argue for a long-term growth rate in the
Multi-Stage DCF model that produces ROE estimates well below their ultimate ROE
recommendations for Empire in this proceeding. In particular, they question my nominal
GDP growth rate of 5.49 percent, which was derived using a combination of historical real
GDP growth from 1929-2020 and projected inflation. As an alternative, Mr. Chari
proposes a projected GDP nominal growth rate of 3.83 percent,<sup>6</sup> and Mr. Murray contends
that GDP nominal growth should be no higher than 4.0 percent.<sup>7</sup>

10 In response to Mr. Chari's and Mr. Murray's concerns with the method I have used 11 to calculate nominal GDP, the use of historical real GDP growth is consistent with the 12 approach relied upon by Morningstar, a leading provider of investment information which 13 previously published data on historical stock and bond returns from Ibbotson and 14 Associates, prior to that publication being acquired by Duff & Phelps. Morningstar states 15 that "[g]rowth in real GDP (with only a few exceptions) has been reasonably stable over 16 time; therefore, its historical performance is a good estimate of expected long-term future performance." According to Morningstar, the correct way to estimate nominal GDP is as 17 18 follows: "By combining the inflation estimate with the real growth rate estimate, a long-19 term estimate of nominal growth is formed..."8

<sup>&</sup>lt;sup>5</sup> Rebuttal Testimony of Peter Chari, at 7-8, and Rebuttal Testimony of David Murray, at 34-36.

<sup>&</sup>lt;sup>6</sup> Rebuttal Testimony of Peter Chari, at 7.

<sup>&</sup>lt;sup>7</sup> Rebuttal Testimony of David Murray, at 36.

<sup>&</sup>lt;sup>8</sup> Ibbotson and Associates, Stocks, Bonds, Bills and Inflation, 1926-2012, 2013 Valuation Yearbook, at 52.

1 In addition, as shown in Figure 9 in my Rebuttal Testimony, the actual historical 2 EPS and DPS growth rates for electric utilities have consistently exceeded the projected 3 nominal GDP growth rate used by Mr. Chari of 3.83 percent, as well as the 3.0 percent 4 perpetual growth rate that Mr. Murray suggests is reasonable. In fact, the actual EPS and 5 DPS growth rates for the 18 electric utility companies in my proxy group from 2010 6 through mid-2021 were 5.42 percent and 4.73 percent, respectively. For that reason, I do 7 not share Messrs. Chari's and Murray's concern that the long-term growth rate in my Multi-8 Stage DCF model is overstated.

9

## IV. <u>USE OF PROJECTED INTEREST RATES</u>

# 10 Q. Mr. Chari criticizes your use of a projected interest rate in the Risk Premium 11 analysis.<sup>9</sup> What is your response?

12 A. Current interest rates are suppressed due to the extraordinary monetary stimulus provided 13 by the Federal Reserve to support the U.S. economy in response to the COVID-19 14 pandemic. In other words, the interest rate environment is being driven primarily by central 15 bank policy, not by the buy and sell decisions of investors in bond markets. As discussed 16 in my Rebuttal Testimony, the Federal Reserve is now withdrawing that extraordinary 17 policy support and has indicated that it plans to raise short-term interest rates in 2022, 2023, 18 and 2024 due to concerns about the elevated level of inflation at both the consumer and 19 producer levels.<sup>10</sup> As short-term interest rates increase, yields on long-term Treasury bonds 20 and corporate bonds are also projected to increase. Therefore, it is not appropriate to use

<sup>&</sup>lt;sup>9</sup> Rebuttal Testimony of Peter Chari, at 11.

<sup>&</sup>lt;sup>10</sup> Rebuttal Testimony of John J. Reed, at 21.

1		only current average bond yields in the Risk Premium analysis (or the CAPM analysis)
2		when those bond yields are not expected to remain at current levels in the future.
3	Q.	Have other utility regulators recognized the importance of using a projected interest
4		rate under such conditions?
5	A.	Yes. For example, in a 2017 decision, the Massachusetts Department of Public Utilities
6		("DPU") recognized that the accommodative monetary policy pursued by the Federal
7		Reserve to stimulate the economy following the recession in 2008-2009 resulted in historic
8		lows on the yields for both short-term and long-term government bonds. As a result, the
9		DPU determined that the CAPM results calculated using current Treasury yields may
10		understate the ROE required by investors. The DPU's Order explained:
11 12		Current federal monetary policy that is intended to stimulate the economy
12 13 14 15 16 17 18 19		has pushed treasury yields to near historic lows. Consequently, the Department has found that a CAPM analysis based on current treasury yields may tend to underestimate the risk-free rate over the long term and, thereby, understate the required ROE. The CAPM is based on investor expectations and, therefore, it is appropriate to use a prospective measure for the risk-free rate component. The Department has found that Blue Chip Financial Forecasts is widely relied on by investors and provides a useful proxy for investor expectations for the risk-free rate. <sup>11</sup>
13 14 15 16 17 18	Q.	Department has found that a CAPM analysis based on current treasury yields may tend to underestimate the risk-free rate over the long term and, thereby, understate the required ROE. The CAPM is based on investor expectations and, therefore, it is appropriate to use a prospective measure for the risk-free rate component. The Department has found that Blue Chip Financial Forecasts is widely relied on by investors and provides a useful
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13 14 15 16 17 18 19 20	<b>Q.</b> A.	Department has found that a CAPM analysis based on current treasury yields may tend to underestimate the risk-free rate over the long term and, thereby, understate the required ROE. The CAPM is based on investor expectations and, therefore, it is appropriate to use a prospective measure for the risk-free rate component. The Department has found that Blue Chip Financial Forecasts is widely relied on by investors and provides a useful proxy for investor expectations for the risk-free rate. <sup>11</sup> Are you aware of other recent decisions that have taken into consideration the
13 14 15 16 17 18 19 20 21		<ul> <li>Department has found that a CAPM analysis based on current treasury yields may tend to underestimate the risk-free rate over the long term and, thereby, understate the required ROE. The CAPM is based on investor expectations and, therefore, it is appropriate to use a prospective measure for the risk-free rate component. The Department has found that Blue Chip Financial Forecasts is widely relied on by investors and provides a useful proxy for investor expectations for the risk-free rate.<sup>11</sup></li> <li>Are you aware of other recent decisions that have taken into consideration the likelihood that interest rates will increase over the next few years.</li> </ul>

<sup>&</sup>lt;sup>11</sup> D.P.U. 17-05 Petition of NSTAR Electric Company and Western Massachusetts Electric Company, each doing business as Eversource Energy, Pursuant to G.L. c. 164, § 94 and 220 CMR 5.00 et seq., for Approval of General Increases in Base Distribution Rates for Electric Service and a Performance Based Ratemaking Mechanism, November 30, 2017, at 693.

increase in the authorized ROE for each utility in the event that the average yield on 30year Treasury bonds over a six month period increases by more than 50 basis points as
compared with the level of interest rates at the time the settlement agreement was approved.
Such a provision recognizes that higher interest rates are likely over the next few years,
and if those higher yields on long-term Treasury bonds materialize as expected, the
settlements provide a mechanism for increasing the utility's authorized ROE without the
need to file another rate case.

Q. Does your ROE recommendation for Empire in this proceeding depend on higher
 interest rates during the period in which rates are in effect, as Mr. Murray asserts?<sup>12</sup>

10 A. No. While it is reasonable to believe that interest rates will increase from current levels, 11 my recommended range of ROE results from 9.50 percent to 10.40 percent is based on the 12 results of my Constant Growth DCF model on the low end and my Expected Earnings 13 analysis on the upper end, with the Multi-Stage DCF and Risk Premium results falling within the range.<sup>13</sup> While I also presented a CAPM analysis, which demonstrates the 14 15 reasonableness of authorizing a higher return than that indicated by the DCF model, my 16 ROE recommendation of 10.00 percent does not depend on the CAPM, which is producing 17 ROE estimates for the proxy group of over 12.30 percent, even using a current average 18 risk-free rate.

<sup>&</sup>lt;sup>12</sup> Rebuttal Testimony of David Murray, at 27.

<sup>&</sup>lt;sup>13</sup> Direct Testimony of John J. Reed, at 68.

## 1

## V. MARKET RISK PREMIUM IN CAPITAL ASSET PRICING MODEL

2 Q. Both Mr. Chari and Mr. Murray question the reasonableness of your forward3 looking market risk premium.<sup>14</sup> What is your response?

4 A. Both witnesses have used a market risk premium in their CAPM analysis that is below the 5 long-term historical average market risk premium of 7.25 percent, as reported by Duff & 6 This is not reasonable because it does not reflect the well-known inverse Phelps. 7 relationship between interest rates and the market risk premium. That is, as interest rates 8 decrease, the market risk premium increases. The average historical Treasury bond yield 9 used to compute the historical market risk premium was 4.91 percent from 1926-2020. 10 which is more than double the current average Treasury bond yield of approximately 2.00 11 percent. This implies that the market risk premium should be higher than the historical average of 7.25 percent, not lower. This is especially reasonable given the frequent bouts 12 13 of volatility that have characterized equity markets in 2020 and 2021, because volatility 14 implies that there is elevated risk, which supports a higher market risk premium.

15 The FERC relies exclusively on a forward-looking market risk premium in the 16 CAPM analysis and does not even consider a historical MRP. My approach to calculating 17 the forward-looking MRP is consistent with FERC's methodology of using the Constant 18 Growth DCF model to estimate the total return for the broad market and then subtracting 19 the risk-free rate. In addition, the Minnesota Department of Commerce (which serves as

<sup>&</sup>lt;sup>14</sup> Rebuttal Testimony of Peter Chari, at 8-9, and Rebuttal Testimony of David Murray, at 36-38.

Staff for the Minnesota Public Utilities Commission) also uses a forward-looking MRP in
 its CAPM analysis which is based on the projected EPS growth rate for the S&P 500 Index
 published by State Street less the risk-free rate.<sup>15</sup>

4 I also disagree with Mr. Chari's assertion that companies that do not pay dividends 5 should be excluded from the calculation of the MRP because this would create a mismatch 6 between the calculation of Beta (which includes all companies in the S&P 500) and the 7 calculation of the MRP. Moreover, when investors consider the total return on the broad 8 market, they do not exclude companies such as Alphabet, Facebook, Netflix and Tesla from 9 that return estimate. In fact, those companies represent a significant portion of the market 10 capitalization of the S&P 500, as well as significant percentage of the total return available 11 to investors and a significant portion of GDP growth. It is simply not reasonable to exclude 12 non-dividend paying companies from the estimation of the total market return.

13 Further, the total market return used in my calculation of the forward-looking market risk premium is reasonable when compared against the historical returns for large 14 15 company stocks in the U.S. from 1926-2020. As shown in Figure 11 of my Direct 16 Testimony, the annual return for the S&P 500 has exceeded 13.71 percent in 50 percent of the years (i.e., 47 out of 94 years) since 1926. Given the amount of monetary and fiscal 17 18 stimulus that has been provided to the U.S. economy in response to COVID-19, it is not 19 unreasonable that analysts' short-term EPS growth rates for the companies in the S&P 500 20 are higher than usual.

<sup>&</sup>lt;sup>15</sup> Minnesota Public Utilities Commission, Docket No. G008/GR-19-524, Direct Testimony and Attachments of Craig M. Addonizio, on behalf of the Minnesota Department of Commerce, In the Matter of the Application of Centerpoint Energy Resources Corp., d/b/a Centerpoint Energy Minnesota Gas, for Authority to Increase Natural Gas Rates in Minnesota, filed July 15, 2020, at 39.

1 The market risk premium that Mr. Chari and Mr. Murray use in their respective 2 CAPM analyses causes that model to produce cost of equity results of 6.70 percent (Mr. Chari) and 6.50 to 7.00 percent (Mr. Murray). These results are 263 to 313 basis points 3 4 lower than the average authorized ROE for vertically integrated electric utilities in 2020 5 and 2021 of 9.63 percent. Again, rather than challenging my forward-looking MRP, Mr. 6 Chari and Mr. Murray should question why their own CAPM inputs are producing such 7 unreasonably low ROE estimates that cause their results to be incapable of being relied 8 upon to set the authorized ROE.

9

VI.

### <u>RISK PREMIUM MODEL</u>

10Q.Mr. Murray does not agree with the use of a risk premium model to estimate the cost11of equity for Empire because he contends that the model "does not allow sufficient12compression of allowed ROEs versus the utility industry's COE" and "only serves to13support current utility stock valuation levels."<sup>16</sup> What is your response?

14 My Risk Premium model is designed to estimate the cost of equity for integrated electric A. 15 utilities based on the relationship between Treasury bond yields and authorized ROE for vertically-integrated electric utilities. The risk premium is based on a regression equation 16 17 that compares authorized ROEs for integrated electric utilities since 1992 to the 18 corresponding Treasury bond yield at the time of the decisions. The regression has an  $R^2$ 19 of 0.83, which indicates that the model can be used to predict the authorized return for an 20 integrated electric utility at varying levels of Treasury bond yields. While Treasury bond 21 yields are projected to increase from current levels, the result of my Risk Premium analysis

<sup>1</sup> 

<sup>&</sup>lt;sup>16</sup> Rebuttal Testimony of David Murray, at 40.

using current average Treasury bond yields is 9.67 percent, as shown in <u>Schedule JJR-7</u>.
Furthermore, Mr. Murray's position rests on his invented distinction between the industry's
cost of equity and the allowed return on equity. This distinction exists neither in the realm
of corporate finance nor in utility regulation. The appropriate allowed return on equity for
a utility is its cost of equity as determined through market-based analyses. A risk premium
analysis is a valid and reliable means of estimating the cost of equity and establishing the
appropriate allowed ROE.

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## VII. EXPECTED EARNINGS ANALYSIS

9 Q. Mr. Chari challenges the use of an Expected Earnings analysis on the grounds that it
10 is not based on market data, but rather on book value,<sup>17</sup> while Mr. Murray contends
11 that the expected earnings analysis should be rejected because it is circular.<sup>18</sup> What is
12 your response?

A. The *Hope* and *Bluefield* standards establish that a utility should be granted the opportunity to earn a return that is commensurate with the return on other investments of similar risk. Therefore, it is reasonable to consider the returns that investors expect to earn on the common equity of the electric utility companies in the proxy group as a benchmark for a just and reasonable return because that is the expected earned ROE that an investor will consider in determining whether to purchase shares in the company or to seek alternative investments with a better risk/reward profile. As Dr. Morin notes:

20The Comparable Earnings standard has a long and rich history in regulatory21proceedings, and finds its origins in the fair return doctrine enunciated by22the U.S. Supreme Court in the landmark Hope case. The governing principle23for setting a fair return decreed in Hope is that the allowable return on equity

<sup>&</sup>lt;sup>17</sup> Rebuttal Testimony of Peter Chari, at 11.

<sup>&</sup>lt;sup>18</sup> Rebuttal Testimony of David Murray, at 40.

1 should be commensurate with returns on investments in other firms having 2 comparable risks, and that the allowed return should be sufficient to assure 3 confidence in the financial integrity of the firm, in order to maintain 4 creditworthiness and ability to attract capital on reasonable terms. Two 5 distinct standards emerge from this basic premise: a standard of Capital 6 Attraction and a standard of Comparable Earnings. The Capital Attraction 7 standard focuses on investors' return requirements, and is applied through 8 market value methods described in prior chapters, such as DCF, CAPM, or 9 Risk Premium. The Comparable Earnings standard uses the return earned 10 on book equity investment by enterprises of comparable risks as the measure of fair return.<sup>19</sup> 11

12 Mr. Chari fails to note in his critique of the Expected Earnings analysis that the 13 authorized ROE that is established in this case will be applied to the net book value of 14 Empire's rate base (subject to certain regulatory adjustments). In this regard, the Expected Earnings approach provides valuable insight into the opportunity cost of investing in 15 16 Empire's electric utility operations. If investors devote capital to the Company (which 17 would offer a return of only 9.00 percent on book value if Mr. Murray's recommendation were adopted), they forgo the opportunity for that same capital to earn a potentially greater 18 19 return on book value through investment in the proxy companies. As a result, the Expected 20 Earnings approach is informative because it provides a measure of the return on book value 21 that is available to investors through other investments with comparable risk to Empire.

# 22 Q. Has Dr. Morin also commented on the relevance of the Expected Earnings analysis

23 for regulated utilities?

## 24 A. Yes, he has. According to Dr. Morin:

25The Comparable Earnings approach is far more meaningful in the26regulatory arena than in the sphere of competitive firms. Unlike industrial27companies the earnings requirement of utilities is determined by applying a28percentage rate of return to the book value of a utility's investment, and not

<sup>&</sup>lt;sup>19</sup> <u>New Regulatory Finance</u>, Roger A. Morin Ph.D., Public Utility Reports, 2006, at 381.

1 on the market value of that investment. Therefore, it stands to reason that a 2 different percentage rate of return than the market cost of capital be applied 3 when the investment base is stated in book value terms rather than market 4 value terms. In a competitive market, investment decisions are taken on the 5 basis of market prices, market values, and market cost of capital. If 6 regulation's role was to duplicate the competitive result perfectly, then 7 the market cost of capital would be applied to the current market value 8 of rate base assets employed by utilities to provide service. But because 9 the investment base for ratemaking purposes is expressed in book value 10 terms, a rate of return on book value, as is the case with Comparable Earnings, is highly meaningful.<sup>20</sup> 11

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## How do you respond to Mr. Chari's assertion that the FERC rejected the Expected

13 Earnings analysis in Opinion No. 569-A.<sup>21</sup>

14 Although the FERC did not include the Expected Earnings analysis in its most recent ROE A. 15 decision (i.e., Opinion No. 569-A) for electric transmission companies, FERC has left the 16 door open for presentation of an Expected Earnings analysis on a case-by-case basis.<sup>22</sup> In my view, the Expected Earnings analysis provides a more stable picture of the returns that 17 investors are expecting for companies in the Electric Utility sector based on Value Line 18 19 data. This stability is due to Value Line's analysis and projections which change when 20 updated, in contrast to the CAPM and DCF results which shift with more volatile market 21 data. Moreover, the use of accounting returns is appropriate because the authorized ROE 22 is being applied to an accounting rate base in order to determine the net income a company 23 is authorized to recover in rates. In addition, the Expected Earnings approach provides an 24 expected return for like-risk companies, which is a core strength of the model and 25 consistent with the basic tenets of *Hope*. For all of these reasons, I continue to support the

<sup>&</sup>lt;sup>20</sup> <u>New Regulatory Finance</u>, Roger A. Morin Ph.D., Public Utility Reports, 2006, at 394-395. (emphasis added)

<sup>&</sup>lt;sup>21</sup> Rebuttal Testimony of Peter Chari, at 12.

Federal Energy Regulatory Commission, Opinion No. 569-A, Order on Rehearing, issued May 21, 2020, at para. 132.

use of an Expected Earnings analysis as one model to estimate the cost of equity for Empire
 in this proceeding.

## 3 VIII. <u>BUSINESS RISK</u>

4 Q. How do you respond to Mr. Chari's and Mr. Murray's assertion that Empire does
5 not have higher than average risk due to the Company's recent adoption of Plant in
6 Service Accounting ("PISA")?<sup>23</sup>

7 As indicated in my Rebuttal Testimony, I agree that Empire has lower absolute risk after A. 8 adopting PISA than it had before. However, as shown in my Direct Testimony, Empire 9 still has higher relative business and regulatory risk than the proxy group companies.<sup>24</sup> 10 Neither Mr. Chari nor Mr. Murray has conducted a risk assessment of Empire as compared 11 with the proxy group companies. Absent such an analysis, it is not possible for them to 12 conclude that Empire has comparable business and regulatory risk as the companies they 13 have used in their respective ROE analyses. Based on my risk assessment, I have 14 concluded that Empire does in fact have higher relative risk than the proxy group 15 companies, which supports an authorized ROE above the average for the proxy group.

Rebuttal Testimony of Peter Chari, at 12-13, and Rebuttal Testimony of David Murray, at 42. On pages 6-8 of her Rebuttal Testimony, Staff witness Kimberly K. Bolin provides a more detailed discussion of the PISA issue, which Mr. Chari relies on for his conclusions regarding the business risk of Empire.

<sup>&</sup>lt;sup>24</sup> Direct Testimony of John J. Reed, at 55-66.

1 **IX.** 

## X. <u>RETURNS IN OTHER JURISDICTIONS</u>

Q. Mr. Chari acknowledges the importance of returns in other jurisdictions as a
benchmark against which investors assess the reasonableness of the authorized ROE
for Empire in this proceeding.<sup>25</sup> You presented data on returns in other jurisdictions
in your Rebuttal Testimony. Have you updated that analysis?

A. Yes, I have. Figure 2 in my Rebuttal Testimony presented the authorized ROEs for
vertically integrated electric utilities from January 2019 through November 17, 2021. I
have updated that chart to include several additional decisions that have been issued in the
intervening weeks. As shown in Figure 1 below, the average authorized return for
vertically integrated electric utilities is 9.63 percent, within a range from 8.70 percent to
10.60 percent.

<sup>&</sup>lt;sup>25</sup> Rebuttal Testimony of Peter Chari, at 13-14.

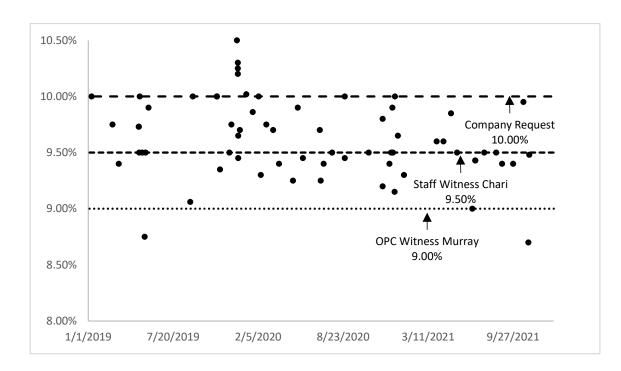


Figure 1: Authorized ROEs – Vertically Integrated Electric Utilities

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In particular, I observe that in December 2021 the Florida PSC approved a settlement agreement for Florida Power & Light ("FPL") that included an authorized ROE of 10.60 percent as part of a four-year rate plan.<sup>26</sup> While the settlement agreement does not specify the authorized capital structure, FPL has maintained an actual equity ratio of between 59 and 60 percent over the past two decades. FPL serves more than 5 million customers, while Empire provides electric utility service to approximately 158,000 customers in Missouri.

<sup>&</sup>lt;sup>26</sup> Florida Public Service Commission, In re: The Petition of Florida Power & Light Company for Base Rate Increase and Rate Unification, Docket No. 20210015-EI, issued December 2, 2021.

## 1 X. <u>CAPITAL STRUCTURE</u>

Q. While Mr. Murray ultimately recommends that short-term debt not be included in
the ratemaking capital structure for Empire,<sup>27</sup> he makes a number of statements in
his Rebuttal Testimony regarding short-term debt on the balance sheets of both
Empire and LUCO.<sup>28</sup> Please explain why short-term debt typically is not included in
the ratemaking capital structure for a regulated utility such as Empire.

- 7 The capital structure that should be used for ratemaking purposes should reflect the A. 8 permanent, long-term financing of the regulated utility. Empire's property, plant and 9 equipment are long-lived assets that are financed with long-term debt and common equity. 10 Short-term debt is generally used to fund items such as seasonal working capital 11 requirements and construction work in progress. My understanding is that Empire also 12 used short-term debt to fund Winter Storm Uri costs (which were one-time, non-recurring 13 extraordinary costs). It is not appropriate to include short-term debt in the ratemaking 14 capital structure of Empire when the permanent, long-term assets in the Company's rate 15 base are not being financed with this source of funds.
- 16

## XI. <u>CONCLUSIONS AND RECOMMENDATIONS</u>

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

A. I continue to support the results of the ROE analysis presented in my Direct Testimony,
 which resulted in a reasonable range of ROE for Empire of 9.50 percent to 10.40 percent.

21 Considering the financial and business risk factors facing Empire, and the expectation that

<sup>&</sup>lt;sup>27</sup> Rebuttal Testimony of David Murray, at 10.

<sup>&</sup>lt;sup>28</sup> See, for example, Rebuttal Testimony of David Murray, at 5, 7-9, and 13-14.

interest rates will continue to increase over the near term as the economy recovers from
 COVID-19 and the Federal Reserve normalizes monetary policy, my recommended ROE
 of 10.0 percent is reasonable and appropriate.

## 4 Q. What is your recommendation regarding a reasonable capital structure for Empire?

- 5 A. I support Empire's proposed actual pro forma capital structure (as updated to reflect June
- 30, 2021 amounts) of 52.79 percent common equity and 47.21 percent long-term debt. As
  shown in my Direct and Rebuttal Testimony, the proposed equity ratio of 52.79 percent is
  reasonable when compared to the actual equity ratios of the operating companies held by
  proxy group, as well as the authorized equity ratios of those companies.
- 10 Q. Does this conclude your Surrebuttal Testimony?
- 11 A. Yes, it does.

## **VERIFICATION**

I, John J. Reed, under penalty of perjury, on this 20th day of January, 2022, declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ John J. Reed