1	develop the analysis, Litzenberger, et al. utilized both adjusted and raw beta. In
2	both cases, the CAPM understated the return for utilities with betas less than 1.0.
3	Similarly, Dr. Roger Morin in his 2021 text Modern Regulatory Finance
4	noted the following regarding the use of adjusted betas in the ECAPM:
5	Because of this adjustment, some critics of the ECAPM argue that
6	the use of Value Line adjusted betas in the traditional CAPM
7	amounts to using an ECAPM. This is incorrect. The use of adjusted
8	betas in a CAPM analysis is not equivalent to the ECAPM. Betas
9	are adjusted because of the regression tendency of betas to converge
10	towards 1.0 over time. We have seen that numerous empirical
11	studies have determined that the SML [Security Market Line]
12	described by the CAPM formula at any given moment in time is not
13	as steeply sloped as the predicted SML. The slope of the SML
14	should not be confused with Beta On the point, Eugene F. Brigham,
15	finance professor and the author of many financial textbooks states:
16	The Slope of the SML (5% in Figure 6-16) reflects the degree of risk
17	aversion in the economy. The greater the average investor's
18	aversion to risk, then (a) the steeper the slope of the line, (b) the
19	greater the risk premium for all stocks, and (c) the higher required
20	rate of return on all stocks. Students sometimes confuse beta with
21	the slope of the SML. This is a mistake.
22	The use of an adjusted beta by Value Line is correcting for a
23	different problem than the ECAPM. The adjusted beta
24	captures the fact that betas regress towards one over time. The
25	ECAPM corrects for the fact that the CAPM under-predicts
26	observed returns when beta is less than one and over-predicts
27	observed returns when beta is greater than one. <sup>96</sup>
28	Therefore, contrary to Mr. Gorman's assertion, the adjustment to beta and
29	the use of the ECAPM are not duplicative but rather account for two different
30	factors in the CAPM.

<sup>&</sup>lt;sup>96</sup> Morin, Dr. Roger A., *Modern Regulatory Finance*, Public Utilities Report, Inc. (2021), at 223-224 (emphasis in original).

#### 1 Q108. IS THE ECAPM APPLICABLE TO REGULATED UTILITIES?

2 A. Yes. Stéphane Chrétien and Frank Coggins published a study in 2011 titled "Cost 3 of Equity for Energy Utilities: Beyond the CAPM," where they studied the CAPM 4 and its ability to estimate the risk premium for the utility industry in particular subgroups of utilities.<sup>97</sup> The article considered the CAPM, the Fama-French three-5 6 factor model and a model similar to the ECAPM used in my Direct Testimony. In 7 the article, the ECAPM relied on adjusted betas, which were adjusted using the same approach applied by Value Line. As Chrétien and Coggins show, the ECAPM 8 9 significantly outperformed the traditional CAPM model at predicting the observed 10 risk premium for the various utility subgroups.<sup>98</sup>

11

Q109. ACCORDING TO MR. GORMAN, REGULATORY COMMISSIONS
GENERALLY DISREGARD THE ECAPM, PARTICULARLY WHEN AN
ADJUSTED BETA IS USED IN THE MODEL. ARE YOU AWARE OF ANY
STATE COMMISSIONS THAT HAVE ACCEPTED THE USE OF THE
ECAPM?

A. Yes. Both the New York Public Service Commission ("NYPSC") and the Montana
Public Service Commission ("Montana PSC") have accepted the ECAPM analysis
with the use of adjusted beta coefficients in establishing the authorized ROE for

<sup>&</sup>lt;sup>97</sup> Chrétien, Stéphane, and Frank Coggins. "Cost Of Equity For Energy Utilities: Beyond The CAPM." *Energy Studies Review*, Vol. 18, No. 2, 2011.

<sup>&</sup>lt;sup>98</sup> Chrétien, Stéphane, and Frank Coggins. "Cost Of Equity For Energy Utilities: Beyond The CAPM." *Energy Studies Review*, Vol. 18, No. 2, 2011.

1		regulated utilities. Specifically, the NYPSC has given equal weight to the CAPM
2		and ECAPM (which it refers to as the "Zero Beta" CAPM) results,99 while the
3		Montana PSC has expressed preference for the ECAPM analysis. <sup>100</sup>
4		
5		G. <u>Business risk</u>
6	Q110.	DO YOU AGREE WITH MR. GORMAN THAT ETI FACES BUSINESS AND
7		FINANCIAL RISKS THAT ARE COMPARABLE TO THE RISKS FACED BY
8		THE PROXY GROUP BECAUSE ITS S&P CREDIT RATING IS THE SAME
9		AS THE AVERAGE CREDIT RATING FOR THE PROXY GROUP?
10	A.	No. Credit ratings are assessments of the likelihood a company could default on its
11		debt, whereas the topic of the current proceeding is to determine the riskiness and
12		cost of the Company's equity. In addition, while credit rating agencies consider
13		the business risks of an individual company, when establishing its debt credit rating,
14		they do not conduct a comparative analysis of business risks relative to the proxy
15		group. The development of the investor-required return is based on a proxy group
16		of risk-comparable companies. In developing the proxy group, it is essential to
17		balance the relative risk of the companies included in the proxy group with the
18		overall size of the group. Therefore, it is always the case that the proxy companies
19		do not have exactly the same risk profile as the subject company. As such, it is
20		reasonable to review the relative risks of the proxy group companies and the subject

<sup>&</sup>lt;sup>99</sup> See, e.g., Corning Natural Gas, Case No. 20-G-0101, Order, May 19, 2021 at 44-46.

<sup>&</sup>lt;sup>100</sup> Montana Public Service Commission, Docket No. D2017.9.80, Order No. 7575c, September 26, 2018, at 46.

1		company to determine how the subject company's risk profile compares with the
2		group to determine the appropriate placement of the ROE within the range of results
3		established using the proxy group companies.
4		
5		H. <u>Overall ROE Recommendation for the Company</u>
6	Q111.	WHAT IS MR. GORMAN'S OVERALL ROE RECOMMENDATION FOR THE
7		COMPANY IN THIS PROCEEDING?
8	A.	Based on the midpoint of the results of his three ROE estimation models,
9		Mr. Gorman recommends an ROE of 9.40 percent.
10		
11	Q112.	IS MR. GORMAN'S OVERALL ROE RECOMMENDATION CONSISTENT
12		WITH THE ANALYSES HE PRESENTED?
13	A.	No. Mr. Gorman's final ROE recommendation does not align with the results of
14		the analyses he conducted. As discussed previously, for the DCF analysis, only
15		one of Mr. Gorman's DCF models produces results within his "fair return" range,
16		and the results of that model do not align with his recommended ROE from the
17		DCF. For the CAPM analysis, Mr. Gorman presents results that range from
18		9.84 percent to 10.84 percent, yet he recommends an overall CAPM result of
19		9.80 percent.

1	Q113. YOU HAVE DISCUSSED VARIOUS ISSUES WITH MR. GORMAN'S
2	ANALYSES AND THE ADJUSTMENTS THAT SHOULD BE REASONABLY
3	MADE TO THOSE ANALYSES. WHAT IS THE MIDPOINT OF
4	MR. GORMAN'S ANALYSES ONCE THESE ADJUSTMENTS ARE MADE
5	TO HIS ROE ANALYSES?

6 A. As shown in Figure 17, the midpoint of the results of Mr. Gorman's ROE analyses 7 when reasonably adjusted would be 10.29 percent. Furthermore, it is important to note that the midpoint of the adjusted analyses does not consider capital market 8 9 conditions and the increased business and financial risk of ETI as compared to the 10 proxy group. For example, the DCF model sets the low end of the range used to 11 calculate Mr. Gorman's recommended ROE. However, as noted above, current DCF results are likely understating the cost of equity during the period that ETI's 12 13 rates will be in effect given the expectation that interest rates will increase. If 14 additional weight is placed on the adjusted CAPM and Risk Premium results shown 15 in Figure 17, which better reflect expected market conditions, the ROE estimated 16 for ETI using Mr. Gorman's adjusted cost of equity models would be greater than 17 my recommended ROE of 10.50 percent, and likely consistent with the Company's 18 requested ROE of 10.80 percent that includes a 30 basis point adjustment for 19 performance.

#### 1

#### Figure 17: Midpoint of Mr. Gorman's Adjusted ROE Results

		Recommendation	Overall
	Range of	by Model	<b>Recommended ROE</b>
Model	Results	(midpoint)	(midpoint of range)
DCF Model			
Constant Growth (consensus gwth rate)	9.24% to 9.66%		
Constant Growth ("sustainable" gwth rate)	n/a	9.45%	
Multi-Stage	n/a		10.29%
Bond Yield Plus Risk Premium	10.89% to 11.38%	11.14%	
CAPM	10.86% to 10.91%	10.88%	

#### 2 VIII. <u>RESPONSE TO CITIES WITNESS O'DONNELL</u>

3 Q114. PLEASE SUMMARIZE MR. O'DONNELL'S ANALYSES AND
4 RECOMMENDATION.

Figure 18 summarizes the results of the cost of equity analyses conducted by 5 A. 6 Mr. O'Donnell. As shown in Figure 18, the results of Mr. O'Donnell's Constant 7 Growth DCF, Comparable Earnings and CAPM analyses range from 7.00 percent 8 to 10.50 percent. Based on the results of his analyses, Mr. O'Donnell develops a 9 recommended ROE range of 8.0 percent to 10.00 percent and an ROE 10 recommendation for ETI of 9.00 percent, which is the midpoint of his recommend 11 range.<sup>101</sup> Furthermore, Mr. O'Donnell supports the Company's proposed capital 12 structure consisting of 51.21 percent common equity, 0.81 percent preferred equity and 47.97 percent long-term debt.<sup>102</sup> 13

<sup>&</sup>lt;sup>101</sup> Direct Testimony of Kevin W. O'Donnell, at 42.

<sup>&</sup>lt;sup>102</sup> *Id.*, at 22.

#### 1 Figure 18: Summary of Mr. O'Donnell Cost of Equity Model Results<sup>103</sup>

Method	Low	High
Constant Growth DCF	7.50%	9.50%
Comparable Earnings	9.50%	10.50%
САРМ	7.00%	9.00%

#### 2 Q115. PLEASE IDENTIFY THE AREAS OF MR. O'DONNELL'S ANALYSIS WITH

#### 3 WHICH YOU DISAGREE.

4 A. I disagree with the following in Mr. O'Donnell's analysis:

5 6	•	the use of ETR on a stand-alone basis in the calculation of the Constant Growth DCF, Comparable Earnings and CAPM analyses;
7	٠	the calculation of dividend yields used in the Constant Growth DCF model;
8 9	•	the appropriate growth rates to be considered in the Constant Growth DCF model;
10 11	•	reliance on the results of the Constant Growth DCF model under current market conditions;
12 13	•	the sample of electric authorized ROEs relied on to calculate the Comparable Earnings analysis;
14	٠	the risk-free rate and market risk premium relied on in the CAPM;
15	•	reliance on the Risk Premium Analysis; and
16 17	•	whether the business risks of ETI relative to the proxy group companies support an ROE higher than the median for the proxy group.

1		A. <u>Proxy Group Selection</u>
2	Q116.	DO YOU AGREE WITH MR. O'DONNELL'S USE OF ETR IN HIS ROE
3		ANALYSIS?
4	A.	No, I do not. Mr. O'Donnell uses the same proxy group that I have utilized, but
5		also considers ETR separately. It is not appropriate to include ETR in a proxy
6		group used to determine the authorized ROE for ETI, nor is it appropriate to look
7		at ETR alone as its own proxy group, because of the circular logic that would occur.
8		For example, in the current proceeding, the authorized ROE for ETI is being
9		determined, which in turn contributes to the ROE of its parent company, ETR. If
10		the ROE result for ETR is considered in the analysis to establish ETI's ROE, ETR
11		is being used to determine its own ROE. Therefore, to avoid the circular logic,
12		ETR should be excluded from the proxy group.
13		
14		B. <u>Constant Growth DCF Analysis</u>
15	Q117.	PLEASE SUMMARIZE MR. O'DONNELL'S CONSTANT GROWTH DCF
16		ANALYSIS.
17	A.	Mr. O'Donnell performs a Constant Growth DCF analysis on his proxy group and
18		ETR. While Mr. O'Donnell summarizes many forms of growth rates, he does not
19		specifically rely on any of those growth rates to develop his DCF analysis. Instead
20		of applying any of the company-specific growth rate estimates, Mr. O'Donnell
21		selects his own estimates of 4.5 percent to 6.5 percent for his proxy group and

1		4.0 percent to 6.0 percent for ETR. <sup>104</sup> Mr. O'Donnell applies these growth rate
2		ranges to the current, 4-week, and 13-week average dividend yields for the proxy
3		group, which produces a range of cost of equity estimates of 7.80 percent to
4		9.80 percent for proxy group and 7.10 percent to 9.10 percent for ETR. <sup>105</sup>
5		
6	Q118.	PLEASE COMMENT ON THE RANGE THAT MR. O'DONNELL
7		ESTABLISHES FOR THE DCF RESULTS.
8	A.	Mr. O'Donnell indicates that his DCF analysis supports an ROE range of
9		7.50 percent to 9.50 percent. According to Mr. O'Donnell, this indicated DCF
10		range is the midpoint of his DCF range for his proxy group of 7.80 percent to
11		9.80 percent and ETR of 7.10 percent to 9.10 percent. <sup>106</sup> However, Mr. O'Donnell
12		has incorrectly calculated the DCF results for ETR based on a dividend yield of
13		3.10 percent. As shown in Exhibit KWO-2, the current, 4-week and 13-week
14		average dividend yield for ETR range from 3.4 percent to 3.6 percent. When
15		combined with his selected growth rate range of 4.0 percent to 6.0 percent for ETR,
16		Mr. O'Donnell's DCF results for ETR range from 7.40 percent to 9.60 percent.
17		Thus, absent any other changes, Mr. O'Donnell's overall DCF range should have
18		been higher at 7.60 percent to 9.70 percent.

<sup>106</sup> Id.

<sup>&</sup>lt;sup>104</sup> *Id.*, at 33.

<sup>&</sup>lt;sup>105</sup> Id.

### Q119. HOW DOES MR. O'DONNELL'S RECOMMENDED RANGE COMPARE WITH RECENTLY AUTHORIZED ROES?

3 As noted above, Mr. O'Donnell's corrected Constant Growth DCF results based on Α. 4 his proxy group and ETR range from 7.60 percent to 9.70 percent. As shown in 5 Figure 18, the low-end of this range (7.60 percent) is well below any authorized 6 ROE for a vertically integrated electric utility in the past 3 years. Only the high-7 end of Mr. O'Donnell's DCF range (9.70 percent) falls within the range of recently authorized ROEs for vertically-integrated electric utilities and is reasonably 8 9 consistent with the average over that time period. However, as noted in Section III, 10 authorized ROEs over the past 3 years are likely based on market data that does not 11 consider the current high inflationary environment and recent and expected increases in interest rates, which will increase the cost of equity for utilities over-12 13 the near-term. Therefore, the results of Mr. O'Donnell's Constant Growth DCF 14 analysis understate the cost of equity when compared with the observed authorized 15 equity returns for vertically integrated electric utilities and the corresponding 16 market conditions at the time that the decisions were issued. The Hope and 17 Bluefield decisions, which Mr. O'Donnell acknowledges are standards to be 18 followed in setting a just and reasonable return, require the authorized return to be 19 comparable to other returns available to investors in companies with similar risk. Mr. O'Donnell's Constant Growth DCF results clearly do not meet this standard. 20

Rather than questioning why the DCF model is producing results that are so
far outside the range of comparable returns for other regulated utilities,

Mr. O'Donnell justifies his reliance on the DCF model with the unsubstantiated statement that it is "used much more often than any other method,"<sup>107</sup> and that it is superior to other methods because it captures investor expectations through its reliance on share prices.<sup>108</sup> However, Mr. O'Donnell has not conducted any analysis of cases beyond those where he has offered testimony to substantiate the conclusion that the DCF is used more often than any other methodology.

7 While I agree the DCF model is commonly presented in regulatory proceedings and that there may be much information available in public sources 8 9 about this and other cost of equity estimation models, the frequency with which the 10 model is presented or discussed publicly does not relate to the accuracy of the 11 model in estimating investor expectations. As discussed previously, the Pennsylvania Public Utility Commission, which has historically relied primarily on 12 13 the DCF model, has recently placed additional weight on the results of the CAPM analysis because it concluded that the DCF model was not appropriately capturing 14 15 the effect on the cost of equity of the recent increases in interest rates. Since the 16 ROE that is set in this proceeding is intended to reflect investor expectations, it is 17 important to consider the results of multiple methods. As the Pennsylvania Public 18 Utility Commission has recognized, each ROE estimation model has its strengths and limitations, therefore review of multiple models will produce a more informed 19 result. 20

<sup>&</sup>lt;sup>107</sup> Direct Testimony of Kevin W. O'Donnell at 25.

<sup>&</sup>lt;sup>108</sup> *Id.*, at 24.

# Q120. HAS MR. O'DONNELL ACKNOWLEDGED THAT THE INPUTS OF THE DCF MODEL COULD BE AFFECTED BY CHANGES IN MARKET CONDITIONS?

4 Α. Yes, he does. Mr. O'Donnell suggests that the DCF model can accurately and 5 promptly include all known and relevant information into the model through the reliance on the share price and suggests it may therefore be more accurate than 6 either the Comparable Earnings analysis or the CAPM.<sup>109</sup> 7 However. Mr. O'Donnell recognizes that "irrational behavior" may and has affected share 8 prices.<sup>110</sup> Since share prices affect the dividend yield in the DCF model, the effect 9 10 of irrational behavior on this term in the DCF model may also affect the reliability of the results of the model. 11

12

## 13 Q121. DO YOU AGREE WITH MR. O'DONNELL'S APPLICATION OF THE DCF14 MODEL?

A. No, I do not. Mr. O'Donnell's analysis is not based on the market's view of the
growth of the proxy companies, nor is it based on the specific growth rates for the
companies that are included in his proxy group. Rather, his analysis relies on a
current, 4-week, and 13-week average dividend yield for the proxy companies and
his judgement as to the appropriate average growth for the proxy group.
Mr. O'Donnell's chosen growth rates do not reflect the market view of the expected

<sup>&</sup>lt;sup>109</sup> *Id.*, at 24.

<sup>&</sup>lt;sup>110</sup> *Id.*, at 26.

1

growth for his proxy companies.

2

# 3 Q122. DO YOU HAVE ANY CONCERNS WITH MR. O'DONNELL'S 4 CALCULATION OF THE DIVIDEND YIELD USED IN HIS CONSTANT 5 GROWTH DCF MODEL?

6 A. Yes, I do. Mr. O'Donnell relies on the expected dividend yield as reported weekly 7 by Value Line and then calculates a current, 4-week, and 13-week average as of 8 September 30, 2022. I have two concerns with Mr. O'Donnell's reliance on the 9 expected dividend yield as reported by Value Line. First, the projected dividend 10 yield for the next twelve months for each company reported by Value Line is an 11 estimate developed by only one analyst. Second, the growth in the dividend that is 12 represented by the *Value Line* projection is inconsistent with the mix of historical 13 and forecasted growth rates that Mr. O'Donnell relies on in his Constant Growth 14 DCF analysis. Conversely, I rely on the most recent dividend, annualized and 15 adjusted based on analysts' projected growth rates. Therefore, the approach that I 16 have relied on is more appropriate than Mr. O'Donnell's approach because it both 17 utilizes the expected growth rates of multiple analysts and it maintains consistency 18 between the growth rate that is applied to the dividend yield and the growth rate 19 used in the Constant Growth DCF model.

1	Q123. MR. O'DONNELL RELIES ON HISTORICAL AND PROJECTED GROWTH
2	RATES IN HIS DCF ANALYSIS. <sup>111</sup> DO YOU AGREE THAT HISTORICAL
3	MEASURES OF GROWTH SHOULD BE USED IN THE ROE ESTIMATION
4	MODELS TO ESTIMATE A FORWARD-LOOKING COST OF EQUITY?

5 Α. No, I do not. The Constant Growth DCF model is a forward-looking model that 6 evaluates investors' required returns based on future cash flows. As such, the 7 appropriate measure of growth to incorporate for DCF analyses is investors' expectations. Furthermore, historical results can be influenced by past events that 8 9 may not be expected to continue into the future. For example, if a company is 10 expected to adjust its dividend payout ratio, then using historical EPS, BVPS and 11 DPS growth rates may not be appropriate since the historical growth rates would assume that the historical dividend payout ratio continues into the forecast period. 12 13 Therefore, it is more appropriate to use securities analysts' forecasted earnings 14 growth rates, which incorporate historical performance to the extent the analysts 15 believe it is applicable going forward. Moreover, since analysts consider historical 16 conditions in developing projections, relying on both historical growth rates and 17 projected growth rates provides no meaningful incremental information regarding 18 the proxy companies' future growth potential than simply relying on projected 19 growth rates.

<sup>&</sup>lt;sup>111</sup> *Id.*, at 30.

#### 1 Q124. CAN YOU PROVIDE AN EXAMPLE OF HOW HISTORICAL GROWTH MAY

2		NOT BE INDICATIVE OF THE EXPECTED GROWTH OF A COMPANY?
3	A.	Yes. For example, as reported by Value Line, the 10-year historical average payout
4		ratio for Ameren Corporation ("AEE") was 63.4 percent while the five-year
5		historical average payout ratio was 58.2 percent. As a result, it is reasonable to
6		assume that the 10-year and 5-year historical EPS, BVPS and DPS growth rates for
7		AEE will vary between the two periods, as shown in Figure 19, they do.
8		Specifically, the 10-year historical EPS, DPS and BVPS growth rates range from
9		1.0 percent to 3.0 percent while the 5-year historical growth rates range from
10		4.0 percent to 7.5 percent. The large differences indicate that historical growth in
11		EPS, DPS and BVPS is not a reliable indicator of future growth for AEE, as growth
12		in EPS, DPS and BVPS are sensitive to the time period used.

### Figure 19: Ameren Corporation – Value Line Historical and Projected EPS Growth Rate as of September 9, 2022

	10-year Historical	5-year Historical	3-5 year Projected
EPS	3.0%	7.5%	6.5%
DPS	3.0%	4.0%	7.0%
BVPS	1.0%	4.5%	6.5%

#### 15 Q125. HAVE ANY OF THE OTHER ROE WITNESSES CAUTIONED AGAINST THE

16 USE OF HISTORICAL GROWTH RATES IN THE CONSTANT GROWTH17 DCF MODEL?

A. Yes. Mr. Gorman notes that equity analysts' growth projections have been more
 accurate at predicting future returns than historical growth rater estimates.

1		Specifically, Mr. Gorman states:
2 3 4 5 6 7 8		As predictors of future returns, securities analysts' growth estimates have been shown to be more accurate than growth rates derived from historical data. That is, assuming the market generally makes rational investment decisions, analysts' growth projections are more likely to influence investors' decisions, which are captured in observable stock prices, than growth rates derived only from historical data. <sup>112</sup>
9		
10	Q126.	DO YOU AGREE WITH MR. O'DONNELL'S USE OF PROJECTED DPS AND
11		BVPS GROWTH RATES?
12	A.	No, I do not. There are several reasons why reliance on Value Line projections of
13		DPS growth and BVPS growth is not appropriate. First, the use of dividend and
14		book value growth rates ignore the academic research demonstrating that EPS
15		growth rates are most relevant in stock price valuation. <sup>113</sup> Second, as discussed in
16		my Direct Testimony, over the long-term, dividend growth can only be sustained
17		by earnings growth. <sup>114</sup> Management decisions to conserve cash for capital
18		investments, to manage the dividend payout for the purpose of minimizing future
19		dividend reductions, or to signal future earnings prospects can influence dividend
20		growth rates in near-term periods. Similarly, estimates of book value growth are

<sup>&</sup>lt;sup>112</sup> Direct Testimony of Michael P. Gorman, at 29.

<sup>&</sup>lt;sup>113</sup> See Harris, Robert S., Using Analysts' Growth Forecasts to Estimate Shareholder Required Rates of Return, <u>Financial Management</u>, Spring 1986, at 66; Vander Weide, James H. and Carleton, Willard T., Investor growth expectations: Analysts vs. history, <u>The Journal of Portfolio Management</u>, Spring, 1988; Harris, Robert S. and Marston, Felicia C., Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts, <u>Financial Management</u>, Summer, 1992; Advanced Research Center, Investor Growth Expectations, Summer, 2004; The Risk Premium Approach to Measuring a Utility's Cost of Equity, <u>Financial Management</u>, Spring, 1985; Morin, Dr. Roger A., <u>New Regulatory Finance</u>, Public Utilities Reports, Inc. (2006), pp. 299-303.

<sup>&</sup>lt;sup>114</sup> Direct Testimony of Ann E. Bulkley, at 42.

also highly influenced by dividend policy. Investing earnings in assets or paying
 down debt will both increase BVPS (all else equal) but paying dividends will
 decrease BVPS. Therefore, projections of earnings growth provide a more robust
 estimate of total company growth since it is earnings growth that will influence
 both DPS and BVPS growth.

6 Finally, Mr. O'Donnell relies only on Value Line as the source for his DPS 7 and BVPS projections. Earnings growth projections based on consensus estimates such as from Zacks or Yahoo! Finance include the contributions of more than one 8 9 analyst rather than the views of an individual analyst such as at Value Line, and the 10 results are less likely to be biased in one direction or another. Moreover, the fact 11 that projected EPS growth estimates are available on a consensus basis attests to the importance of projected EPS growth rates to investors when developing long-12 13 term growth expectations.

14

### 15 Q127. ARE THERE INSTANCES OF WHICH YOU ARE AWARE THAT A SHORT-

#### 16 RUN MANAGEMENT DECISION HAS AFFECTED DIVIDENDS?

A. Yes. There were a number of companies that suspended dividend payments as a
result of the increased uncertainty due to COVID-19. For example, more than 40
S&P 500 companies temporarily suspended their dividends in 2020 due to COVID19.<sup>115</sup> These dividend suspensions occurred because companies believed earnings
over the short-term would decline and, therefore, elected to conserve cash to offset

<sup>&</sup>lt;sup>115</sup> Langley, Karen, "U.S. Companies Slashed Dividends at Fastest Pace in More Than a Decade," Wall Street Journal, July 8, 2020.

the financial effects of COVID-19. This decision will affect the dividends and the
 payout ratio in the short-term but is not necessarily indicative of a firm's long-term
 earnings growth.

4

5 Q128. DO YOU AGREE WITH MR. O'DONNELL THAT THE SUSTAINABLE 6 ("PLOWBACK") GROWTH RATE SHOULD BE USED IN THE DCF MODEL? 7 Α. No, I do not. First, it is important to note that it does not appear that Mr. O'Donnell 8 relies on his sustainable growth rate for the proxy group to calculate his Constant 9 Growth DCF analysis. As shown in Exhibit KWO-2, the average sustainable 10 growth rate for his proxy group is 4.0 percent while Mr. O'Donnell notes that he 11 relied on a growth rate range of 4.5 percent to 6.5 percent to estimate the Constant 12 Growth DCF model for the proxy group.

13 Second, academic research has shown that there is not a positive correlation 14 between retention growth rates and future earnings growth. In 2006, for example, 15 two articles appeared in Financial Analysts Journal, which addressed the theory that 16 high dividend payouts (i.e., low retention ratios) are associated with low future 17 earnings growth.<sup>116</sup> Both of those articles cite a 2003 study by Arnott and Asness<sup>117</sup> 18 who found that, over the course of 130 years of data, future earnings growth is

<sup>&</sup>lt;sup>116</sup> Zhou, Ping and Ruland, William, Dividend Payout and Future Earnings Growth, <u>Financial Analysts</u> Journal, Vol. 62, No. 3, 2006. See also Owain ap Gwilym, James Seaton, Karina Suddason, Stephen Thomas, International Evidence on the Payout Ratio, Earnings, Dividends and Returns, <u>Financial Analysts Journal</u>, Vol. 62, No. 1, 2006.

<sup>&</sup>lt;sup>117</sup> Arnott, Robert and Asness, Clifford, *Surprise: Higher Dividends = Higher Earnings Growth*, <u>Financial</u> <u>Analysts Journal</u>, Vol. 59, No. 1, January/February 2003.

1 associated with high, rather than low payout ratios.<sup>118</sup>

Finally, I do not agree with how Mr. O'Donnell has calculated his 2 From a theoretical perspective, Mr. O'Donnell's 3 sustainable growth rates. 4 calculation of sustainable growth rates considers only the product of earnings 5 retention rates and earned returns on common equity, or what are commonly known 6 as internally-generated funds. In the sustainable growth formula, this is commonly 7 referred to as the product of "b\*r", where "b" is the retention ratio (i.e., the portion of net income not paid in dividends), and "r" is the expected ROE on the portion of 8 9 net income that is retained within the Company as a means for future growth. 10 Mr. O'Donnell fails to consider that earnings growth also occurs as a result of new 11 equity issuances, or what are commonly known as externally-generated funds. In the sustainable growth formula, this is shown as the product of "s\*v", where "s" 12 13 represents the growth in shares outstanding and "v" is that portion of the market-14 to-book ratio that exceeds unity. This methodology is recognized as a common approach to calculating the sustainable growth rate.<sup>119</sup> 15

16

# 17 Q129. WHAT ARE THE MOST RELEVANT GROWTH RATES TO RELY ON IN18 THE DCF ANALYSIS?

A. Projected, not historical, EPS growth rates are the appropriate growth rates to rely
on in the Constant Growth DCF model. To reduce the long-term growth rate to a

<sup>&</sup>lt;sup>118</sup> Since the payout ratio is the inverse of the retention ratio, the authors found that future earnings growth is negatively related to the retention ratio.

<sup>&</sup>lt;sup>119</sup> See, e.g., Roger Morin, <u>New Regulatory Finance</u>, at 306.

1 single measure, one must assume that the dividend payout ratio remains constant 2 and that earnings per share, dividends per share, and book value per share all grow at the same constant rate. Over the long run, dividend growth can only be sustained 3 4 by earnings growth. Earnings growth rates tend to be least influenced by capital 5 allocation decisions that companies may make in response to near-term changes in 6 the business environment. Since such decisions may directly affect near-term 7 dividend payout ratios, estimates of earnings growth are more indicative of longterm investor expectations than are dividend or book value growth estimates. 8 9 Furthermore, EPS growth rates are the more prevalent growth rate estimates. As 10 can be seen in Mr. O'Donnell's Exhibits KWO-2 and KWO-3, projected DPS and 11 BVPS growth rates are only provided by *Value Line* and the Plowback Ratio is calculated using Value Line's projections. The only projected growth rates that are 12 13 reported by multiple analysts are EPS growth rates.

14

Q130. HOW DO YOU RESPOND TO MR. O'DONNELL'S ASSERTION THAT
 PROJECTED EPS GROWTH RATES ARE OVERLY OPTIMISTIC?

A. Mr. O'Donnell references an article by Louis K. C. Chan, Jason Karceski, and Josef
 Lakonishok titled "The Level and Persistence of Growth Rates" published in
 November 2003, which Mr. O'Donnell indicates concluded that projected EPS
 growth rates were "overly optimistic".<sup>120</sup> However, the study was conducted using

<sup>&</sup>lt;sup>120</sup> Direct Testimony of Kevin W. O'Donnell, at 47.

1	data for firms on the Compustat and Active Research files for the period of 1951 to
2	1997, <sup>121</sup> which is prior to the 2003 Global Analysts Research Settlement (the
3	"Global Settlement"). The Global Settlement served to significantly reduce, if not
4	eliminate, bias in analysts' EPS growth rate forecasts. The Global Settlement
5	required financial institutions to insulate investment banking from analysis,
6	prohibited analysts from participating in "road shows," and required the settling
7	financial institutions to fund independent third-party research. In addition, analysts
8	covering the common stock of the proxy companies certify that their analyses and
9	recommendations are not related, either directly or indirectly, to their
10	compensation. Since the study referenced by Mr. O'Donnell relies on data prior to
11	the Global Settlement, it is not reasonable to rely on the study to conclude that
12	analysts' projected EPS growth rates are biased. In fact, a 2010 article in Financial
13	Analysts Journal found that analyst forecast bias declined significantly or
14	disappeared entirely since the Global Settlement:
15 16 17	Introduced in 2002, the Global Settlement and related regulations had an even bigger impact than Reg FD on analyst behavior. After the Global Settlement, the mean forecast bias declined significantly

the Global Settlement, the mean forecast bias declined significantly, 17 18 whereas the median forecast bias essentially disappeared. Although 19 disentangling the impact of the Global Settlement from that or 20 related rules and regulations aimed at mitigating analysts' conflicts 21 of interest is impossible, forecast bias clearly declined around the 22 time the Global Settlement was announced. These results suggest that the recent efforts of regulators have helped neutralize analysts' 23 conflicts of interest.<sup>122</sup> 24

<sup>&</sup>lt;sup>121</sup> Chan, K., Karceski, J., and Lakonishok, J., *The Level and Persistence of Growth Rates*, <u>Journal of Finance</u>, April 2003.

<sup>&</sup>lt;sup>122</sup> Hovakimian, Armen and Saenyasiri, Ekkachai, Conflicts of Interest and Analyst Behavior: Evidence from Recent Changes in Regulation, <u>Financial Analysts Journal</u>, Vol. 66, No. 4, July/August 2010, at 195.

### Q131. HAVE YOU ADJUSTED MR. O'DONNELL'S CONSTANT GROWTH DCF ANALYSIS?

- 3 A. Yes, I have. I modified Mr. O'Donnell's Constant Growth DCF analysis in two
- 4 respects: 1) rely only on the DCF results for Mr. O'Donnell's proxy group and not
- 5 the individual DCF results for ETR; and 2) rely only on projected EPS growth rates.
- 6 As shown in Figure 20, by making these reasonable adjustments, the range of
- 7 results for Mr. O'Donnell's Constant Growth DCF analysis increase from
- 8 7.60 percent to 9.70 percent to 9.20 percent to 9.90 percent.

### 9 Figure 20: Summary of Adjustments to Mr. O'Donnell's Constant Growth 10 DCF<sup>123</sup>

	Dividend Yield	Growth Rate Range	ROE Range
As Filed			
Proxy Group	3.3%	4.5% - 6.5%	7.8% - 9.8%
ETR <sup>124</sup>	3.4% - 3.6%	4.0% - 6.0%	7.4% - 9.6%
Indicated DCF Range			7.6% - 9.7%
Revised			
Proxy Group and Projected EPS Growth Rates ( <i>Value Line</i> , CFRA, Schwab)	3.3%	5.9% - 6.6%	9.2% - 9.9%

#### 11 Q132. WHAT DO YOU CONCLUDE ABOUT THE RESULTS OF THE DCF MODEL

#### 12 UNDER CURRENT MARKET CONDITIONS?

- 13 A. As discussed in Section V, interest rates have increased significantly over the past
- 14 several months. In fact, the yield on the 30-year Treasury Bond was 4.22 percent

<sup>&</sup>lt;sup>123</sup> Exhibit KWO-2.

<sup>&</sup>lt;sup>124</sup> The ETR results have been adjusted to reflect the correct dividend yield range of 3.40 percent to 3.60 percent as shown in Exhibit KWO-2.

1 as of October 31, 2022, which is 43 basis points higher than the yield on the 30-2 year Treasury bond as of September 30, 2022 (i.e., the end of the analytical period relied on by Mr. O'Donnell). Moreover, investors expect interest rates to continue 3 to increase over the near-term as the Federal Reserve normalizes monetary policy 4 5 in response to persistently high levels of inflation not seen in approximately 40 6 years. Given that the share prices of utility stocks are inversely correlated to interest 7 rates, investors expect the utility sector to underperform over the near-term. This suggests that the cost of equity for utilities will increase over the near-term and 8 9 thus, current estimates of the DCF model are likely understating the forward-10 looking cost of equity for ETI.

11 For example, given the increase in Treasury bond yields since the end of September, it is likely that Mr. O'Donnell's Constant Growth DCF results are 12 13 already understating the cost of equity for ETI. As shown in Figure 21, the proxy 14 group average estimated dividend yield for the next 12 months as reported by Value 15 *Line* was 3.28 percent as of September 30, 2022; however, the proxy group average 16 was 3.86 percent as of October 28, 2022, a 58 basis point increase. Assuming 17 growth remained constant between the two months, this would imply a significant 18 increase in the DCF results. Therefore, my adjusted range of Mr. O'Donnell's DCF 19 results of 9.20 percent to 9.80 percent which only includes data through 20 September 30, 2022 is most likely understating investors' return requirements over 21 the period that ETI's rates will be in effect. Moreover, current and prospective 22 market conditions support consideration of other ROE estimation models such as

1 the CAPM, ECAPM, and Risk Premium, which may better reflect expected market

#### 3 4

Figure 21: Comparison of *Value Line*'s Estimated Dividend Yield next 12 months – September 30, 2022 and October 28, 2022

	Ticke	September 30,	October 28,	Difference
Company	r	2022	2022	Difference
ALLETE, Inc.	ALE	4.40%	5.10%	
Alliant Energy Corporation	LNT	2.80%	3.50%	
Ameren Corporation	AEE	2.60%	3.10%	
American Electric Power			3.80%	
Company, Inc.	AEP	3.20%		
Duke Energy Corporation	DUK	3.80%	4.50%	
Evergy, Inc.	EVRG	3.50%	4.20%	
IDACORP, Inc.	IDA	3.60%	3.10%	
NextEra Energy, Inc.	NEE	2.70%	2.40%	
NorthWestern Corporation	NWE	2.10%	5.00%	
OGE Energy Corporation	OGE	4.70%	4.80%	
Otter Tail Corporation	OTTR	4.00%	2.60%	
Portland General Electric			4.30%	
Company	POR	3.00%		
Southern Company	SO	2.70%	4.20%	
Xcel Energy Inc.	XEL	2.80%	3.40%	
Average		3.28%	3.86%	0.58%

# 5 Q133. HAVE REGULATORY COMMISSIONS ACKNOWLEDGED THAT THE 6 CURRENT CAPITAL MARKET CONDITIONS HAVE RESULTED IN THE 7 DCF MODEL UNDERSTATING THE UTILITY COST OF EQUITY?

8 A. Yes. As discussed previously, the Pennsylvania Public Utility Commission, in its 9 May 2022 decision for Aqua Pennsylvania, Inc., concluded that current capital 10 market conditions including high inflation and increasing interest rates have 11 resulted in the DCF model understating the utility cost of equity. As a result, the 12 commission concluded that weight should be placed on the results of risk premium

<sup>2</sup> conditions during the period that ETI's rates will be in effect.

- models such as the CAPM, which better reflect increasing interest rates, when
   determining the utility ROE.
- 3

# 4 Q134. WHAT ARE YOUR CONCLUSIONS REGARDING MR. O'DONNELL'S 5 CONSTANT GROWTH DCF ANALYSIS?

6 A. Mr. O'Donnell's Constant Growth DCF analysis produces a range of ROE results 7 for his proxy group that understate the cost of equity for ETI. As discussed, this is a function of two main factors: 1) given recent and expected market conditions 8 9 included increasing interest rates and high inflation, the DCF model which relies 10 on historical average share prices is likely understating the forward-looking cost of 11 equity and 2) the arbitrary selection of a range of growth rates based on a review of projected DPS, EPS, and BVPS growth rates, historical EPS, DPS, and BVPS 12 13 growth rates and retention growth rates. As shown in Figure 20, making appropriate changes to Mr. O'Donnell's Constant Growth DCF analysis increases 14 his range of DCF results to 9.20 percent to 9.90 percent. Nevertheless, and despite 15 16 these changes to his analysis, given the effect that current market conditions have 17 had on the results of the DCF model, it remains important to consider the revised 18 results of Mr. O'Donnell's Constant Growth DCF in conjunction with the results 19 of additional cost of equity estimation models such as the CAPM, ECAPM and 20 Risk Premium in to establish the authorized ROE for the Company in this 21 proceeding.

1		C. <u>Comparable Earnings</u>
2	Q135.	PLEASE SUMMARIZE MR. O'DONNELL'S COMPARABLE EARNINGS
3		ANALYSES.
4	A.	Mr. O'Donnell presents two Comparable Earnings analyses. <sup>125</sup> The first is based
5		on the earned returns on common equity for the companies in his proxy group, as
6		well as ETR, over the period of 2020-2027. This analysis, which is shown in
7		Exhibit KWO-5, produces a range of results from 9.9 percent to 10.9 percent for
8		the proxy group and 11.0 percent to 12.7 percent for ETR. For his second
9		Comparable Earnings analysis, Mr. O'Donnell considers authorized ROEs for
10		electric utilities across the U.S. from 2007-2021. <sup>126</sup> Chart 5 in Mr. O'Donnell's
11		Direct Testimony shows the general decline in authorized returns since 2007.
12		Mr. O'Donnell notes that the average authorized ROE for electric utilities in 2021
13		was 9.38 percent. Mr. O'Donnell concludes that his Comparable Earnings analyses
14		produce a range of returns from 9.5 percent to 10.5 percent. <sup>127</sup>
15		
16	Q136.	DO YOU HAVE ANY COMMENTS ON THESE ANALYSES?
17	A.	Yes. While I will address each of the analyses that Mr. O'Donnell has prepared,
18		the conclusions he reaches from his Comparable Earnings analyses are 50 to 150
19		basis points above his final unadjusted ROE recommendation.
20		Mr. O'Donnell's first Comparable Earnings analysis demonstrates that the

<sup>&</sup>lt;sup>125</sup> Direct Testimony of Kevin W. O'Donnell, at 33-36.

<sup>127</sup> *Id.*, at 35-36.

<sup>&</sup>lt;sup>126</sup> *Id.*, at 35.

earned return on common equity for the proxy group which both Mr. O'Donnell
and I believe is comparable to ETI averaged 9.9 percent in 2020 and 10.7 percent
in 2021 and that the expected return for this group is between 10.80 percent and
10.90 percent. These expectations are 90-190 basis points above his unadjusted
ROE recommendation for the Company in this proceeding of 9.00 percent.

6 Regarding Mr. O'Donnell's second Comparable Earnings analysis, the 7 universe of authorized ROEs that he relies on in his analysis would not be considered generally comparable in risk to ETI. As discussed previously in Section 8 9 III, in order to develop a data set of authorized ROEs that is generally comparable 10 to ETI, Mr. O'Donnell should have excluded: 1) transmission and distribution-only 11 utilities since ETI owns significant regulated generation; 2) limited issue rider cases; 3) jurisdictions subject to an ROE that is established using a formula; 12 13 4) returns in Arizona because it is a state that relies on fair value rate base; and 14 5) authorized returns that reflect a utility-specific penalty because an authorized 15 ROE that includes a penalty is not indicative of a market-derived cost of equity. 16 Had Mr. O'Donnell relied on the aforementioned screening criteria to develop a 17 comparable set of authorized returns for electric utilities from 2007 through 2021, 18 his average authorized return for 2021 would have increased from 9.38 percent to 19 9.60 percent and his average return for the period of 2007 through 2021 would have increased from 9.96 percent to 10.07 percent.<sup>128</sup> Similar to his first Comparable 20 21 Earnings analysis, the adjusted results of his second Comparable Earnings analysis

<sup>&</sup>lt;sup>128</sup> S&P Capital IQ Pro.

are well above his ROE recommendation of 9.00 percent. 1 2 3 O137. HAVE YOU RECALCULATED THE RANGE OF ROE RESULTS 4 **SUPPORTED** BY MR. O'DONNELL'S COMPARABLE EARNINGS 5 ANALYSIS? 6 Yes, I have. I adjusted Mr. O'Donnell's first Comparable Earnings analysis, which Α. 7 relied on the expected return on book equity, to rely on the average result of his proxy group and not the results for ETR. Mr. O'Donnell relied on the first 8 9 Comparable Earnings analysis to set the high-end of the range of results from this 10 approach. To estimate the high-end, Mr. O'Donnell relied on the midpoint of the high-end of his range for the proxy group and ETR.<sup>129</sup> Considering only the results 11 12 of his Comparable Earnings analysis for the proxy group results in a high-end ROE estimate of 10.90 percent.<sup>130</sup> 13 I have also adjusted Mr. O'Donnell's second Comparable Earnings 14 15 analysis, which relies on average annual authorized returns for electric utilities from 16 2007-2021, to consider only the authorized returns for electric utilities that would

be considered generally comparable to ETI (i.e., vertically integrated electric
utilities that operate in states that determine the authorized ROE using approaches
that are generally comparable to those relied on by the Commission).
Mr. O'Donnell relied on the second Comparable Earnings analysis to set the low-

<sup>&</sup>lt;sup>129</sup> Mr. O'Donnell erroneously references 10.50 percent as the high-end of the range for ETR; however, the high-end of the range is 12.70 percent for ETR as shown in Exhibit KWO-5.

<sup>&</sup>lt;sup>130</sup> Exhibit KWO-5.

1		end of his range of results from this model. Mr. O'Donnell placed the low-end of
2		his range between the average return for electric utilities in 2021 and the average
3		return for electric utilities over the period of 2007 through 2021. As noted above,
4		I calculated an adjusted average return for electric utilities in 2021 of 9.60 percent
5		and an adjusted average return for 2007-2021 of 10.06 percent. Taking the
6		midpoint results in an updated low-end ROE of 9.84 percent. Thus, by making
7		reasonable adjustment to Mr. O'Donnell's Comparable Earnings analysis, the range
8		of results increases from 9.50 percent to 10.50 percent to 9.84 percent to
9		10.90 percent.
10		
11		D. <u>CAPM Analysis</u>
12	Q138.	PLEASE SUMMARIZE MR. O'DONNELL'S CAPM ANALYSIS.
13	A.	Mr. O'Donnell expresses reservations about the CAPM, especially when it is
14		applied using a forecasted market risk premium or forecasted interest rates.
15		However, he recognizes that some commissions and boards review other models in
16		addition to the DCF. For that reason, Mr. O'Donnell has performed a CAPM
17		analysis to supplement his DCF and Comparable Earnings analyses, but he
18		indicates that he has not given the CAPM analysis much weight in comparison to
19		the DCF. <sup>131</sup>
20		Mr. O'Donnell develops his CAPM analysis using the high, low and
21		average yields on 30-year Treasury bonds over the past year as the risk-free rate,

<sup>&</sup>lt;sup>131</sup> Direct Testimony of Kevin W. O'Donnell, at 37.

1	beta coefficients reported by Value Line, and a market risk premium of 3.75 percent
2	to 5.75 percent. It is important to note that Mr. O'Donnell's market risk premium
3	is based on historical returns as published in the 2021 edition of the Kroll (formerly
4	Duff and Phelps) SBBI Classic yearbook, several market return estimates that were
5	published in January 2022 by Morningstar, and the market return and market risk
6	premium published by Charles Schwab. Based on these inputs and assumptions,
7	Mr. O'Donnell's CAPM analysis produces a cost of equity estimate in the range of
8	5.0 percent to 8.7 percent for the comparison group and 5.3 percent to 9.1 percent
9	for ETR. <sup>132</sup> From these results, Mr. O'Donnell notes that he placed primary weight
10	on the results of his CAPM analysis relying on the high 30-year Treasury Bond
11	yield scenario given that interest rates have increased over the past year, and thus
12	concludes that his CAPM supports an ROE in the range of 7.0 percent to
13	9.0 percent. <sup>133</sup>
14	
15	Q139. PLEASE COMMENT ON THE RESULTS OF MR. O'DONNELL'S CAPM

- 16 ANALYSIS.
- A. Mr. O'Donnell's CAPM range of 7.0 percent to 9.0 percent is entirely inconsistent with the returns required by equity investors for companies with commensurate risk. To place these results in context, they are 63 to 263 basis points below the average authorized return for vertically integrated electric utilities in the past 3

<sup>&</sup>lt;sup>132</sup> Exhibit KWO-6.

<sup>&</sup>lt;sup>133</sup> Direct Testimony of Kevin W. O'Donnell, at 42.

1		years, which is a time period where interest rates and inflation were significantly
2		lower than the current market environment. <sup>134</sup> Based on these changes in market
3		conditions, it is reasonable to expect that the cost of equity in the current market
4		would be higher than this historical period, making Mr. O'Donnell's CAPM range
5		inconsistent with the cost of equity in the current market.
6		
7	Q140.	WHAT ARE YOUR CONCERNS WITH THE INPUTS AND ASSUMPTIONS
8		THAT MR. O'DONNELL HAS USED TO DEVELOP HIS CAPM ESTIMATE?
9	A.	I disagree with two aspects of Mr. O'Donnell's CAPM analysis: 1) the use of only
10		the current Treasury bond yield as the risk-free rate; and 2) the use of an under-
11		stated market risk premium that is, in part, based on historical returns and which
12		does not reflect the inverse relationship between interest rates and the equity risk
13		premium.
14		
15	Q141.	DO YOU AGREE WITH THE RISK-FREE RATE THAT MR. O'DONNELL
16		RELIED ON IN HIS CAPM ANALYSES?
17	А.	No, I do not. Mr. O'Donnell estimates the risk-free rate based on the minimum,
18		mean and maximum yields on the 30-year Treasury bond over the historical period
19		of September 23, 2021 to September 23, 2022. While Mr. O'Donnell ultimately
20		places primary weight on the maximum yield over his historical period, given the
21		recent increases in interest rates not captured by Mr. O'Donnell's historical period,

<sup>&</sup>lt;sup>134</sup> S&P Capital IQ Pro, Rate Case Summary, accessed October 31, 2022.

his selection of the risk-free rate is likely understating the expected risk-free rate
 during the period that ETI's rates will be in effect.

As discussed in my response to Mr. Filarowicz, since the cost of equity is 3 4 being estimated for the forward-looking period when the Company's rates will be 5 in effect, it is important for the Commission to consider projected risk-free rates. 6 For example, the near-term forecast of the 30-year Treasury bond yield in my 7 updated analysis is 4.00 percent, which is well above the maximum yield on the 30year Treasury bond during this historical period of 3.65 percent on which 8 9 Mr. O'Donnell places primary weight when estimating his CAPM analysis. 10 However, highlighting the fact that Mr. O'Donnell's use of historical data is 11 understating the risk-free rate, the spot yield on the 30-year Treasury bond was 4.22 percent as of October 31, 2022, or an increase of approximately 60 basis in 12 13 slightly over a month. Thus, Mr. O'Donnell's reliance on an historical Treasury 14 bond yield will understate the ROE for ETI.

15

16 Q142. HAVE ANY OF THE OTHER ROE WITNESSES RELIED ON PROJECTED
17 INTEREST RATES AS THE ESTIMATE OF THE RISK-FREE RATE IN THE
18 CAPM?

A. Yes. Mr. Gorman also relies on the near-term projection of the 30-year Treasury
 bond yield in both his CAPM and Risk Premium models.<sup>135</sup>

<sup>&</sup>lt;sup>135</sup> Direct Testimony of Michael P. Gorman, at 46 and 55.

### Q143. DO YOU AGREE WITH MR. O'DONNELL'S CALCULATION OF THE HISTORICAL MARKET RISK PREMIUM?

3 No, I do not. I have four areas of concern with Mr. O'Donnell's use of a historical Α. 4 market risk premium. First, Mr. O'Donnell's calculation of the historical market 5 risk premium is outdated as he relied on the Kroll SBBI Yearbook as of 2021 as 6 opposed to 2022. Second, Mr. O'Donnell's has incorrectly relied on the geometric 7 mean risk premium in addition to the arithmetic mean risk premium. Third, similar to Mr. Filarowicz, Mr. O'Donnell has incorrectly used the total return on long-term 8 9 government bonds to calculate his historical market risk premium instead of the 10 income-only return on long-term government bonds. Finally, also as previously 11 discussed regarding Mr. Filarowicz's CAPM, Mr. O'Donnell's historical market risk premium also fails to consider the inverse relationship between interest rates 12 13 and the market risk premium under current market conditions (i.e., as interest rates 14 decrease, the market risk premium increases).

15

16 Q144. WHY IS IT INAPPROPRIATE TO CONSIDER THE HISTORICAL17 GEOMETRIC MEAN RISK PREMIUM?

A. Geometric and arithmetic means are used for different purposes. The geometric
mean is the compound rate that equates a beginning value to its ending value. It is
used to determine the exact rate of compounded return between a specific starting
and ending point. The arithmetic mean, which is the appropriate calculation to be
used for this purpose, is the simple average of single period rates of return and best

1	approximates the uncertainty associated with returns from year to year. The
2	important distinction between the two methods is that the arithmetic mean assumes
3	that each periodic return is an independent observation and, therefore, incorporates
4	uncertainty into the calculation of the long-term average. In contrast, the geometric
5	mean does not incorporate the same degree of uncertainty because it assumes that
6	returns remain constant from year to year. In his review of literature on the topic,
7	Cooper noted the following rationale for using the arithmetic mean:
8	Note that the arithmetic mean not the geometric mean is the relevant
9	value for this purpose. The quantity desired is the rate of return that
10	investors expect over the next year for the random annual rate of
11	return on the market. The arithmetic mean, or simple average, is the
12	unbiased measure of the expected value of repeated observations of
13	a random variable, not the geometric mean[The] geometric mean
14	underestimates the expected annual rate of return. <sup>136</sup>
15	Furthermore, Pratt and Grabowski note the following in their review of the
16	literature:
17	The choice between which average to use is a matter of
18	disagreement among practitioners. The arithmetic average receives
19	the most support in the literature, though other authors recommend
20	a geometric average. The use of the arithmetic average relies on the
21	assumption that (1) market returns are serially independent (not
22	correlated) and (2) the distribution of market returns is stable (not
23	time-varying). Under these assumptions, an arithmetic average
24	gives an unbiased estimate of expected future returns assuming
25	expected conditions in the future are similar to conditions during the
26	observation period. Moreover, the more observations available, the
27	more accurate will be the estimate. <sup>157</sup>

<sup>&</sup>lt;sup>136</sup> Cooper, Ian, Arithmetic versus geometric mean estimators: Setting discount rates for capital budgeting, European Financial Management 2.2, (1996): 158.

<sup>&</sup>lt;sup>137</sup> Pratt, Shannon P., and Grabowski, Roger J., Cost of Capital: Applications and Examples. Wiley, 2008, at 96.

Q145. IS THERE SUPPORT THAT THE INCOME-ONLY RETURN ON
 GOVERNMENT BONDS SHOULD BE USED TO CALCULATE THE
 HISTORICAL RISK PREMIUM?

A. Yes. As discussed previously regarding Mr. Filarowicz's testimony, Morningstar
states that the historical market risk premium is appropriately calculated by
subtracting the *income-only* portion of the government bond return from the total
return on large company stocks. In addition, as also discussed previously in the
response to Mr. Filarowicz's Direct Testimony and as shown previously in Figure
8, the period during the financial crisis of 2007-2009 highlights the problem with
relying on a historical market risk premium in general for purposes of the CAPM.

11

# 12 Q146. DOES MR. O'DONNELL'S USE OF THE HISTORICAL MARKET RISK 13 PREMIUM ALSO FAIL TO CONSIDER THE INVERSE RELATIONSHIP 14 BETWEEN INTEREST RATES AND THE MARKET RISK PREMIUM?

15 A. Yes. As discussed with regard to Mr. Filarowicz's testimony, the use of the 16 historical market risk premium fails to consider the inverse relationship between interest rates and the market risk premium. Given the current low yields on long-17 18 term Treasury bonds as compared to their long-term historical average (i.e., 19 4.87 percent), and the inverse relationship between interest rates and the market 20 risk premium, it is reasonable to assume that the expected market risk premium 21 therefore would be greater than the long-term historical average market risk 22 premium of 7.46 percent. Consequently, as with Mr. Filarowicz's CAPM,

Mr. O'Donnell's use of a historical market risk premium also understates the
 market risk premium in the current market environment.

3

## 4 Q147. DO YOU HAVE ANY OTHER CONCERNS WITH MR. O'DONNELL'S 5 CALCULATION OF THE HISTORICAL MARKET RISK PREMIUM?

6 A. Yes, I do. Mr. O'Donnell calculates his historical market risk premium using data 7 from 1972 to 2020 as opposed to relying on the entire data set reported by *Kroll*, which includes data back to 1926. Mr. O'Donnell claims that he begins his data set 8 9 in 1972 because "[t]his data is more recent than similar data provided by other 10 sources and analysts over the period from 1926 to 2019 and adds more credence to what a reasonable investor can expect for a return."<sup>138</sup> However, Mr. O'Donnell 11 12 provides no analysis or references to support his claim that using data from 1972 13 through 2020 better reflects investors' expectations regarding the market risk premium. Further, *Kroll* reports the historical risk premium using all of the return 14 15 data since 1926. Therefore, while I disagree that an historical market risk premium 16 is appropriate for the CAPM for the reasons discussed, when calculating a historical 17 risk premium, it would be more appropriate to rely on the entire historical data set 18 reported by Kroll.

<sup>&</sup>lt;sup>138</sup> Direct Testimony of Kevin W. O'Donnell, at 39.

# Q148. HAVE YOU DEVELOPED AN ALTERNATIVE HISTORICAL MARKET RISK PREMIUM TO CORRECT THE ISSUES THAT YOU HAVE IDENTIFIED WITH MR. O'DONNELL'S MARKET RISK PREMIUM?

4 А. Yes, I have. Specifically, I have adjusted Mr. O'Donnell's historical market risk 5 premium calculation to: 1) rely only on the arithmetic mean historical risk 6 premium, 2) rely on historical return data from 1926 through 2021 as opposed to 7 1972 through 2020; 3) rely on the income-only portion of the long-term government 8 bond return; and 4) as discussed in the response to Mr. Filarowicz and shown in 9 Exhibit AEB-R-9, calculate an alternative arithmetic average risk premium of 10 9.64 percent using only the annual risk premia where the income-only return was 11 below the long-term average income-only return on long-term government bonds of 4.87 percent, which better reflects the inverse relationship between interest rates 12 13 and the risk premium. The alternative historical risk premium of 9.64 percent supports my conclusion that Mr. O'Donnell has vastly understated the current 14 15 market risk premium, as his historical market risk premium methodology results in 16 market risk premia of 2.6 percent (geometric average) and 3.5 percent (arithmetic 17 average).

Q149. DOES MR. O'DONNELL STATE THAT HE ALSO CONSIDERS MARKET
 RETURN ESTIMATES FROM OTHER FINANCIAL INSTITUTIONS IN
 DEVELOPING THE MARKET RISK PREMIUM ON WHICH HE RELIES FOR
 HIS CAPM?

5 Yes. Mr. O'Donnell presents market return estimates from several financial Α. 6 institutions that he claims he also considered in developing his market risk premium 7 range of 3.75 percent to 5.75 percent. In particular, Mr. O'Donnell highlights: (i) Blackrock's 6.7 percent 10-year expected nominal return for U.S. equities; 8 9 (ii) Grantham Mayor Van Otterloo's ("GMO") -6.7 percent real return for U.S. 10 equities over the next seven years; (iii) J.P. Morgan Asset Management's 11 4.1 percent nominal return for U.S. stocks for the next 10-15 years; (iv) Morningstar's 1.6 percent nominal return for U.S. stocks over the next 10-12 years; (v) Research Associates' 1.6 percent nominal return for U.S. large cap 13 equities over the next 10-years; (vi) Vanguard's nominal equity return of 14 15 3.3 percent for the next 10-years; and (vii) Charles Schwab's 6.6 percent expected annual return for U.S. large cap stocks for the period of 2021 through 2030.<sup>139</sup> 16

17

# 18 Q150. DO YOU HAVE ANY CONCERNS WITH THE MARKET RETURNS 19 REFERENCED BY MR. O'DONNELL?

A. Yes. While I agree that Mr. O'Donnell has referenced respected sources for
investment information, the implied market risk premia of the market return

<sup>&</sup>lt;sup>139</sup> *Id.*, at 39-40.

estimates referenced by Mr. O'Donnell fail to reflect the inverse relationship 1 between interest rates and the market risk premium. As shown in Figure 22, I 2 calculated the implied market risk premium for each of the market return estimates 3 4 cited by Mr. O'Donnell by subtracting the 30-day average of the 30-year Treasury 5 bond yield as of September 30, 2022 (i.e., the end date of Mr. O'Donnell's 6 analytical period) from each market return estimate. This results in a range of 7 market risk premia from -7.87 percent to 3.23 percent. As noted above, based on historical data from Kroll, the market risk premium from 1926-2021 is 7.46 percent. 8 9 Given that current interest rates are below the historical income-only return on 10 long-term government bonds of 4.87 percent, the inverse relationship between 11 interest rates and the market risk premium indicates that the current market risk premium should be above the historical average market risk premium of 12 13 7.46 percent. However, the market returns referenced by Mr. O'Donnell suggest 14 that the expected market risk premium would be between 423 basis points and 1533 basis points *lower* than the historical average.<sup>140</sup> 15

Furthermore, 4 of the 7 market return estimates referenced by Mr. O'Donnell imply a negative market risk premium indicting the investors' require an equity return below the current return on a risk-free rate investment, which is implausible.

<sup>&</sup>lt;sup>140</sup> The expected market risk premium proposed by O'Donnell is between -7.87% and 3.23%. Considering the historical average of 7.46%, this range is 423 basis points (7.46%-3.23%) to 1533 basis points (7.46%-(7.87%)) below the historical average.

Source	Market Return <sup>141</sup>	Risk-Free Rate <sup>142</sup>	Implied Market Risk Premium
Blackrock (nominal return)	6.7%	3.47%	3.23%
GMO (real return)	-6.7%	1.1 <b>7%</b> <sup>143</sup>	-7.87%
J.P. Morgan (nominal return)	4.1%	3.47%	0.63%
Morningstar (nominal return)	1.6%	3.47%	-1.87&
Research Associates (nominal return)	1.6%	3.47%	-1.87%
Vanguard (nominal return)	3.3%	3.47%	-0.17%
Charles Schwab (nominal return)	6.6%	3.47%	3.13%

#### Figure 22: Implied Market Risk Premia Cited by Mr. O'Donnell

#### 2 Q151. DO YOU HAVE ANY ADDITIONAL CONCERNS WITH THE MARKET

### 3

4

1

## RETURNS THAT MR. O'DONNELL REFERENCES FROM FINANCIAL INSTITUTIONS?

5 A.	Yes. As shown in Figure 22, the market return for the sources cited by
6	Mr. O'Donnell range from -6.70 percent to 6.70 percent. However, these market
7	returns are inconsistent with the results produced by Mr. O'Donnell's DCF
8	analysis. As Mr. O'Donnell notes, the Constant Growth DCF results for his proxy
9	group range from 7.80 percent to 9.80 percent. Since Mr. O'Donnell has
10	acknowledged that the proxy group is less risky than the broader market by relying
11	on beta coefficients of 0.88, it would stand to reason that the market returns that
12	Mr. O'Donnell referenced should be significantly higher than his Constant Growth
13	DCF results for a group of electric utilities. However, the market returns cited by

<sup>&</sup>lt;sup>141</sup> Direct Testimony of Kevin W. O'Donnell, at 39-40.

<sup>&</sup>lt;sup>142</sup> 30-day average of the 30-year Treasury Bond yield as of September 30, 2022.

<sup>&</sup>lt;sup>143</sup> 30-day average of the 30-year TIPS yield as of September 30, 2022. Treasury Inflation Protected Securities were used as the estimate of the risk-free rate since the return estimated by GMO is a real return.

1		Mr. O'Donnell range from approximately 110 basis points to 1650 basis points
2		below his Constant Growth DCF results. Therefore, the market return estimates
3		referenced by Mr. O'Donnell are not reasonable even when compared to the
4		unreasonably low results produced by Mr. O'Donnell's Constant Growth DCF
5		model.
6		
7	Q152.	DO YOU AGREE WITH MR. O'DONNELL THAT YOUR ESTIMATE OF THE
8		MARKET RETURN AND THUS THE MARKET RISK PREMIUM IS
9		UNREASONABLE WHEN COMPARED TO THE MARKET RETURN
10		ESTIMATES OF FINANCIAL INSTITUTIONS?
11	А.	No, for the reasons just discussed, the market returns referenced by Mr. O'Donnell
12		do not indicate that the market return that on which I rely in my CAPM analysis is
13		unreasonable. A more appropriate comparison would be to compare my market
14		return to the historical market return achieved by Large Company Stocks. As noted
15		above, the average market return from 1926-2021 is 12.34 percent as reported by
16		Kroll, which is generally consistent with the market return that I relied on in my
17		Direct Testimony of 12.68 percent. Moreover, as shown in Figure 13 of my direct
18		testimony, reviewing the range of annual equity returns that have been observed
19		over the past century, in 50 out of the past 96 years (or roughly 52 percent of
20		observations), the realized equity return was at least 12.68 percent or greater.
21		Therefore, my estimate of the market return is reasonable considering the historical
22		returns achieved by Large Company Stocks.

1	Q153.	IS MR. O'DONNELL'S SELECTED RANGE OF MARKET RISK PREMIA
2		SUPPORTED BY THE DATA THE HE SAYS THAT HE HAS CONSIDERED?
3	А.	No. He claims to have relied on both the historical market risk premium he
4		calculated using historical return data from Kroll and the return estimates he
5		referenced from financial institutions. However, his historical market risk premium
6		estimates range from 2.6 percent to 3.5 percent and as shown in Figure 22 above,
7		the implied risk premium from the referenced financial institutions range from 7.87
8		percent to 3.23 percent. Both ranges are below his selected range of 3.75 percent
9		to 5.75 percent. Therefore, it appears Mr. O'Donnell has relied solely on his
10		judgement to develop his unreasonably low range of market risk premia.
11		
11 12	Q154.	HAVE YOU ADJUSTED MR. O'DONNELL'S CAPM ANALYSIS TO
11 12 13	Q154.	HAVE YOU ADJUSTED MR. O'DONNELL'S CAPM ANALYSIS TO ADDRESS THE ISSUES THAT YOU HAVE IDENTIFIED WITH HIS
11 12 13 14	Q154.	HAVE YOU ADJUSTED MR. O'DONNELL'S CAPM ANALYSIS TO ADDRESS THE ISSUES THAT YOU HAVE IDENTIFIED WITH HIS ANALYSIS?
<ol> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> </ol>	Q154. A.	HAVE YOU ADJUSTED MR. O'DONNELL'S CAPM ANALYSIS TO ADDRESS THE ISSUES THAT YOU HAVE IDENTIFIED WITH HIS ANALYSIS? Yes, I have updated Mr. O'Donnell's CAPM analysis in the following respect:
<ol> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> </ol>	Q154. A.	HAVE YOU ADJUSTED MR. O'DONNELL'S CAPM ANALYSIS TO ADDRESS THE ISSUES THAT YOU HAVE IDENTIFIED WITH HIS ANALYSIS? Yes, I have updated Mr. O'Donnell's CAPM analysis in the following respect: 1) while continuing to rely on his historical market risk premium, adjust it to
<ol> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> </ol>	Q154. A.	HAVE YOU ADJUSTED MR. O'DONNELL'S CAPM ANALYSIS TO ADDRESS THE ISSUES THAT YOU HAVE IDENTIFIED WITH HIS ANALYSIS? Yes, I have updated Mr. O'Donnell's CAPM analysis in the following respect: 1) while continuing to rely on his historical market risk premium, adjust it to properly reflect current market conditions and the inverse relationship between
<ol> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>	Q154. A.	HAVE YOU ADJUSTED MR. O'DONNELL'S CAPM ANALYSIS TO ADDRESS THE ISSUES THAT YOU HAVE IDENTIFIED WITH HIS ANALYSIS? Yes, I have updated Mr. O'Donnell's CAPM analysis in the following respect: 1) while continuing to rely on his historical market risk premium, adjust it to properly reflect current market conditions and the inverse relationship between interest rates and market risk premia just as I have done with Mr. Filarowicz's
<ol> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>	Q154. A.	HAVE YOU ADJUSTED MR. O'DONNELL'S CAPM ANALYSIS TO ADDRESS THE ISSUES THAT YOU HAVE IDENTIFIED WITH HIS ANALYSIS? Yes, I have updated Mr. O'Donnell's CAPM analysis in the following respect: 1) while continuing to rely on his historical market risk premium, adjust it to properly reflect current market conditions and the inverse relationship between interest rates and market risk premia just as I have done with Mr. Filarowicz's CAPM; <sup>144</sup> 2) rely only on the maximum yield on the 30-year Treasury bond over

<sup>&</sup>lt;sup>144</sup> These adjustments (i) rely on the historical market risk premium as reported by *Kroll* from 1926-2021 of 7.46 percent to set the low-end of the CAPM range and (ii) rely on the average risk premium estimated using only the years between 1926 and 2021 where the income-only return on long-term government bonds was less than the long-term average of 4.87 percent to set the high-end of the CAPM range.

1		Mr. O'Donnell, which is 3.65 percent; and 3) rely only on the proxy group to
2		estimate the CAPM results, not Mr. O'Donnell's ETR-only assessment. As shown
3		in Exhibit AEB-R-14, these adjustments result in an increase in Mr. O'Donnell's
4		CAPM range from 7.00 percent to 9.00 percent to 10.21 percent to 12.13 percent.
5		
6	Q155.	WHAT IS YOUR CONCLUSION REGARDING MR. O'DONNELL'S CAPM
7		ANALYSIS?
8	A.	My conclusion is that Mr. O'Donnell's CAPM analysis is based on flawed
9		assumptions and inputs that are not forward-looking. As such, the results of his
10		CAPM analysis are well below the average authorized return of 9.63 percent for
11		vertically-integrated utilities in the past 3 years and therefore should not be relied
12		upon to estimate the cost of equity for ETI. Furthermore, when reasonable
13		adjustments are applied to Mr. O'Donnell's CAPM, the range of results increases
14		significantly to 10.21 percent to 12.13 percent.
15		
16		E. <u>Mr. O'Donnell's ROE Recommendation</u>
17	Q156.	PLEASE SUMMARIZE HOW MR. O'DONNELL DEVELOPED HIS
18		RECOMMEND ROE OF 9.00 PERCENT FOR ETI.
19	A.	As shown in Figure 23, the results of Mr. O'Donnell's Constant Growth DCF,
20		Comparable Earnings, and CAPM analyses range from 7.00 percent to
21		10.50 percent. Based on the results of his analyses, Mr. O'Donnell develops a
22		recommended ROE range of 8.00 percent to 10.00 percent and an ROE

7

1	recommendation for ETI of 9.00 percent, which is the midpoint of his recommend
2	range. While Mr. O'Donnell does not explicitly state how he developed his
3	recommended range of 8.00 percent to 10.00 percent, as shown in Figure 23, the
4	range appears to be generally consistent with the average of his low-end DCF,
5	Comparable Earnings and CAPM results (8.00 percent) and the average of his high-
6	end DCF, CAPM and Comparable Earnings results (9.67 percent).

Figure 23: Summary of O'Donnell Cost of Equity Results<sup>145</sup>

Method	Low	High
Constant Growth DCF	7.50%	9.50%
СЕ	9.50%	10.50%
САРМ	7.00%	9.00%
Average	8.00%	9.67%

8 Q157. HAVE YOU DEVELOPED AN UPDATED RANGE OF RESULTS BASED ON

9 YOUR RECOMMENDED CHANGES TO MR. O'DONNELL'S CONSTANT

10 GROWTH DCF, CAPM AND COMPARABLE EARNINGS ANALYSES?

11 A. Yes, I have. Figure 24 presents the adjusted results of Mr. O'Donnell's Constant 12 Growth DCF, CAPM and Comparable Earnings analyses that I described 13 previously. The adjustments result in a revised cost of equity range of 9.20 percent 14 to 12.13 percent. Taking the average of the low- and high-end results produces a 15 cost of equity range of 9.75 percent to 10.98 percent, with a midpoint of 16 10.36 percent. These adjusted results are consistent with my recommended cost of 17 equity range of 9.90 percent to 11.00 percent and provide additional support for the

<sup>&</sup>lt;sup>145</sup> Direct Testimony of Kevin W. O'Donnell, at 42.

- 1 Company's requested ROE of 10.80 percent, which is based on a 10.50 percent rate
- 2 of return resulting from the analytical model results, and a 30 basis point adder for
- 3 performance.

4 5 Figure 24: Adjusted Cost of Equity Model Results for Mr. O'Donnell's Proxy Group

Method	Low	High
Constant Growth DCF	9.20%	9.90%
CE	9.84%	10.90%
САРМ	10.21%	12.13%
Average	9.75%	10.98%
Midpoint	10.36%	

6		F. <u>Business Risk</u>
7	Q158.	HOW DO YOU RESPOND TO MR. O'DONNELL'S ASSERTION THAT THE
8		COMPANY'S HIGH DEGREE OF CUSTOMER CONCENTRATION IS A
9		"POSITIVE" FACTOR FOR THE COMPANY?
10	A.	Mr. O'Donnell concludes without any support that because the Company's high
11		degree of customer concentration is due to customers in the oil and gas industry
12		that the risk factor is a positive for the Company because the "oil and natural gas
13		industry is booming right now due to geopolitical factors." <sup>146</sup> This conclusion is
14		incorrect. As I discuss in my Direct Testimony, while the price of oil and natural
15		gas have increased significantly recently, which would imply short-term benefits,
16		oil and gas extraction employment in southeastern Texas has not had a

<sup>146</sup> *Id.*, at 51.

corresponding increase.<sup>147</sup> This is due to supply chain issues, labor shortages, 1 2 investor pressures associated with both climate change as well as the requirement for oil producers to provide better returns on investment. Therefore, while the price 3 4 of oil and natural gas have increased over the short-term, the southeastern Texas 5 economy does not appear to have benefited significantly from the increase in the 6 commodity price, and any such benefits are not expected to continue over the 7 longer-term. It is unreasonable to expect the significant increase in oil prices to be sustained over the long-term, particularly considering the political pressure to 8 9 reduce such prices. Moreover, as I also discuss in my Direct Testimony, the 10 expected decline in demand for oil and natural gas over the long-term increases uncertainty and the risk for ETI.<sup>148</sup> As a result, it is not reasonable to conclude as 11 12 Mr. O'Donnell has that the Company's significant dependence on the oil and 13 natural gas industry does not increase the risk of the Company. 14 15 Q159. HAS MR. O'DONNELL MISCHARACTERIZED YOUR TESTIMONY

16 CONCERNING THE EFFECT OF AN AUTHORIZED ROE ON A 17 COMPANY'S CREDIT RATING AND SHARE PRICE?

18 A. Yes, he has. Mr. O'Donnell implies that I state authorized ROEs should be set to 19 satisfy market participants (i.e., avoid a decline in a company's share price) and 20 maintain a certain credit rating.<sup>149</sup> However, that is not consistent with the

<sup>&</sup>lt;sup>147</sup> Direct Testimony of Ann E. Bulkley, at 78-79.

<sup>&</sup>lt;sup>148</sup> *Id.*, at 78.

<sup>&</sup>lt;sup>149</sup> Direct Testimony of Kevin W. O'Donnell, at 51.

1 conclusions I reached on pages 65 through 69 of my Direct Testimony. As discussed above and in my Direct Testimony, one of the requirements of the Hope 2 and *Bluefield* decisions is that the return authorized must be comparable to the 3 4 returns available on other assets of similar risk, which Mr. O'Donnell has acknowledged in his Direct Testimony.<sup>150</sup> Authorizing an ROE that is well below 5 6 the ROEs available on assets of similar risk can affect a utility's ability to attract 7 capital at reasonable terms. Credit rating downgrades and significant declines in share prices that occur following negative rate case decisions are indicators that 8 9 investors may not view the return authorized as comparable to returns awarded to 10 similar risk assets.

11 For example, as discussed in my Direct Testimony and previously herein regarding Mr. Filarowicz's proxy group, the negative market reactions resulting 12 from the recent rate case decision for Arizona Public Service Company (e.g., 13 substantial decline in share price; credit downgrades; deferred equity issuance) 14 15 highlight the importance of ensuring the return authorized is comparable to similar 16 risk assets in order to ensure the Company access to capital at reasonable terms. I 17 do not suggest that returns be set to maintain credit ratings or satisfy market 18 participants; rather, I simply highlight the importance of the comparable return 19 standard of *Hope* and *Bluefield* in setting the authorized return, a standard which 20 Mr. O'Donnell also references the importance of in his testimony. Furthermore, 21 credit rating downgrades have the potential to decrease the access to capital on

<sup>&</sup>lt;sup>150</sup> *Id.*, at 12-13.

1	reasonable terms and result in higher overall costs for customers.
2	
3	IX. <u>SUMMARY AND CONCLUSIONS</u>
4	Q160. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATION.
5	Nothing in the other witnesses' testimony has caused me to change my
6	recommended range of results or my support of the Company's requested ROE.
7	The results of the cost of equity estimation models that have been developed by the
8	other witnesses in this case have not considered current and prospective market
9	conditions, including the recent increases in interest rates and the expectation that
10	interest rates will increase over the near-term as the Federal Reserve continues to
11	normalize monetary policy. As noted in Section V above, interest rates have
12	increased substantially since the end of September, which was the end of the
13	analytical period relied on by the other witnesses for their cost of equity estimates.
14	Therefore, their respective recommendations are understating the cost of equity
15	during the period that ETI's rates will be in effect. When reasonable changes are
16	made to Mr. Filarowicz's, Mr. Gorman's and Mr. O'Donnell's analyses to reflect
17	current and projected market conditions, their cost of equity model results also
18	support my recommended range of returns of 9.95 percent to 11.10 percent.
19	

### 20 Q161. WHAT FACTORS SUPPORT THE COMPANY'S PROPOSED ROE OF 21 10.80 PERCENT?

A. An authorized ROE of 10.80 percent, which is based on a 10.50 percent rate of

1		return	resulting from the analytical model results, and a 30 basis point adder for
2		perform	nance, is reasonable and appropriate for ETI because it:
3		1.	it will provide ETI with access to capital on reasonable terms, which
4			benefits customers;
5		2.	is supported by the analyses contained in my Direct and Rebuttal
6			Testimonies;
7		3.	is consistent with current and prospective capital market conditions;
8		4.	is consistent with the updated results of the other witnesses' cost of equity
9			estimation models when reasonable changes to the inputs and assumptions
10			are reflected;
11		5.	considers the unique business and operating risks of ETI's electric
12			operations in Texas; and
13		6.	will support ETI's ability to attract capital to finance investments at
14			reasonable rates, which will provide long-term benefits to ratepayers by
15			limiting the long-term cost of capital.
16			
17	Q162.	DOES	THIS CONCLUDE YOUR REBUTTAL TESTIMONY?
18	A.	Yes, it	does.

#### AFFIDAVIT OF ANN E. BULKLEY

### COMMONWEALTH OF MASSACHUSETTS COUNTY OF MIDDLESEX

This day, Ann E. Bulkley the affiant, appeared in person before me, a notary public, who knows the affiant to be the person whose signature appears below. The affiant stated under oath:

My name is Ann E. Bulkley. I am of legal age and a resident of the Commonwealth of Massachusetts. The foregoing testimony and exhibits offered by me are true and correct, and the opinions stated therein are, to the best of my knowledge and belief, accurate, true and correct.

MEBulke \_\_\_\_

) ) )

SUBSCRIBED AND SWORN TO BEFORE ME, notary public, on this the 16th day of November 2022.

oun otary Public, Commonwealth of Massachusetts

My Commission expires:

30



Gerard M. Rooney NOTARY PUBLIC Commonwealth of Massachusetts 1y Commission Expires 6/30/2028 See Native Excel file Bulkley Rebuttal\_Exhibits AEB-R-1 through AEB-R-14.

The following files are not convertible:

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