- Completed its taper of Treasury bond and mortgage-backed securities purchases, decreasing monthly purchase plans by $60b (from $80b to $20b) since November 2021;[12]

- Increased the target federal funds rate from 0.00 – 0.25 percent to 0.25 – 0.50 percent at the March 16, 2022 meeting[13] and then from 0.25 – 0.50 percent to 0.75 – 1.00 percent at the May 4, 2022 meeting;[14]

- Forecasted a total of seven rate increases in 2022 and four rate increases in 2023 which resulted a median forecast of the federal funds rate of 1.9 percent and 2.8 percent in 2022 and 2023, respectively;[15]

- Will begin reducing its holdings of Treasury and mortgage-backed securities on June 1, 2022.[16] The Federal Reserve will reduce the size of its balance sheet by only reinvesting principal payments on owned securities after the total amount of payments received exceeds a defined cap. For Treasury Securities, the cap will be set at $30 billion per month for the first three months and $60 billion per month after the first three months while for mortgage-backed securities the cap will be set at $17.5 billion per month for the first three months and $35 billion per month after the first three months.[17]

Q24. WHAT IS THE MARKET RESPONSE TO THE RECENT FEDERAL OPEN MARKET COMMITTEE MEETINGS?

A. The market response is an expectation that interest rates will continue to increase in response to Federal Reserve actions to address inflation. The CME Group uses federal funds rate futures contracts to determine investors' views regarding the

[12] Federal Reserve Bank of New York, https://www.newyorkfed.org/markets/domestic-market-operations/monetary-policy-implementation/treasury-securities/treasury-securities-operational-details#monthly-details.

[13] Federal Reserve, Press Release (Mar. 16, 2022).

[14] Federal Reserve, Press Release (May 4, 2022).

[15] Federal Reserve, Summary of Economic Projections, at 2 (Mar 16, 2022).

[16] Federal Reserve, Press Release (May 4, 2022).

[17] Federal Reserve, Plans for Reducing the Size of the Federal Reserve's Balance Sheet, Press Release (May 4, 2022).

probability of the target federal funds rate range at upcoming Federal Reserve meetings.[18] Figure 2 below summarizes investors' expectations regarding the level of the federal funds rate at each of the next eleven meetings as of May 5, 2022, based on The CME Group's methodology. As shown in Figure 2, investors expect the Federal Reserve to increase the federal funds rate at a faster pace than what was indicated in the forecasts released at the Federal Reserve's March 16, 2022 meeting. For example, according to the CME Group, there is a 53.6 percent probability[19] that the target federal funds rate range is 3.00 percent to 3.25 percent as of December 2022 which is greater than the Federal Reserve's median forecast of 1.90 percent. This is consistent with expectations of major financial institutions. In particular:

- Citigroup, Inc. is now projecting 50 basis point increases at the next four Federal Open Market Committee ("FOMC") meetings followed by 25 basis point increases in October and December, reaching 3.50 to 3.75 percent.
- Bank of America Corp. is projecting a 25 basis point increase in May, followed by two 50 basis point increases, and then a 25 basis point increase at each subsequent meeting through May 2023, reaching a range of 3.00 to 3.25 percent.
- Goldman Sachs Group Inc. is projecting 50 basis point increases at the May and June FOMC meetings with a 25 basis point increase at the four remaining meetings in 2022.[20] Moody's recently noted that the financial markets are close to fully pricing in three 50-basis point rate increases this year.[21]

Thus, the consensus of investors is an expectation that the Federal Reserve

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[18] https://www.cmegroup.com/education/demos-and-tutorials/fed-funds-futures-probability-tree-calculator.html.

[19] The probability of a rate hike is calculated by adding the probabilities of all target rate levels above the current target rate.

[20] Lanman, Scott, "Wall Street Lifts Fed Forecasts; Citi See Four Half-Point Hikes," Bloomberg, March 25, 2022.

[21] Moody's Analytics, Weekly Market Outlook, "Fed Girds for Stagflation," April 14, 2022.

will pursue more aggressive monetary policy than indicated at the March 16, 2022, meeting to combat persistent high levels of inflation.

Figure 2: Investor Expectation of Future Federal Funds Rate Increases[22]

	MEETING PROBABILITIES														
MEETING DATE	125-150	150-175	175-200	200-225	225-250	250-275	275-300	300-325	325-350	350-375	375-400	400-425	425-450	450-475	475-500
6/15/2022	12.9%	87.1%	0.0%	0.0%											
7/27/2022	0.0%	0.0%	12.8%	86.9%	0.3%	0.0%	0.0%	0.0%	0.0%						
9/21/2022	0.0%	0.0%	0.0%	6.8%	52.1%	41.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
11/2/2022	0.0%	0.0%	0.0%	0.0%	5.4%	43.0%	43.2%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
12/14/2022	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	41.2%	43.2%	10.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
2/1/2023	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	17.4%	41.9%	31.9%	6.8%	0.3%	0.0%	0.0%	0.0%	0.0%
3/15/2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	8.8%	28.4%	37.4%	20.6%	3.8%	0.2%	0.0%	0.0%
5/3/2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	1.5%	10.5%	29.2%	36.0%	19.2%	3.5%	0.1%	0.0%	0.0%
6/14/2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	6.4%	20.7%	32.9%	26.8%	10.6%	1.7%	0.1%
7/26/2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	5.5%	18.4%	30.9%	27.8%	13.2%	3.1%	0.3%

Q25. HAS THE FEDERAL RESERVE PROVIDED ADDITIONAL SUPPORT FOR INVESTORS' EXPECTATIONS REGARDING THE FEDERAL FUNDS RATE?

A. Yes. Specifically, at the May 4, 2022 meeting, when the Federal Reserve increased the federal funds target rate by 50 basis points from a range of 0.25 – 0.50 percent to a range of 0.75 – 1.00 percent, Federal Reserve Chairman Powell noted at his press conference that additional 50 basis point increases should be considered at the next couple of meetings:

> "[w]e are on a path to move our policy rate expeditiously to more normal levels. Assuming that economic and financial conditions evolve in line with expectations, there is a broad sense on the Committee that additional 50 basis point increases should be on the table at the next couple of meetings. We will make our decisions meeting by meeting, as

[22] CME Group; FedWatch tool as of May 5, 2022.

we learn from incoming data and the evolving outlook for the economy. And we will continue to communicate our thinking as clearly as possible. Our overarching focus is using our tools to bring inflation back down to our 2 percent goal."[23]

B. Inflationary Expectations in Current and Projected Market Conditions

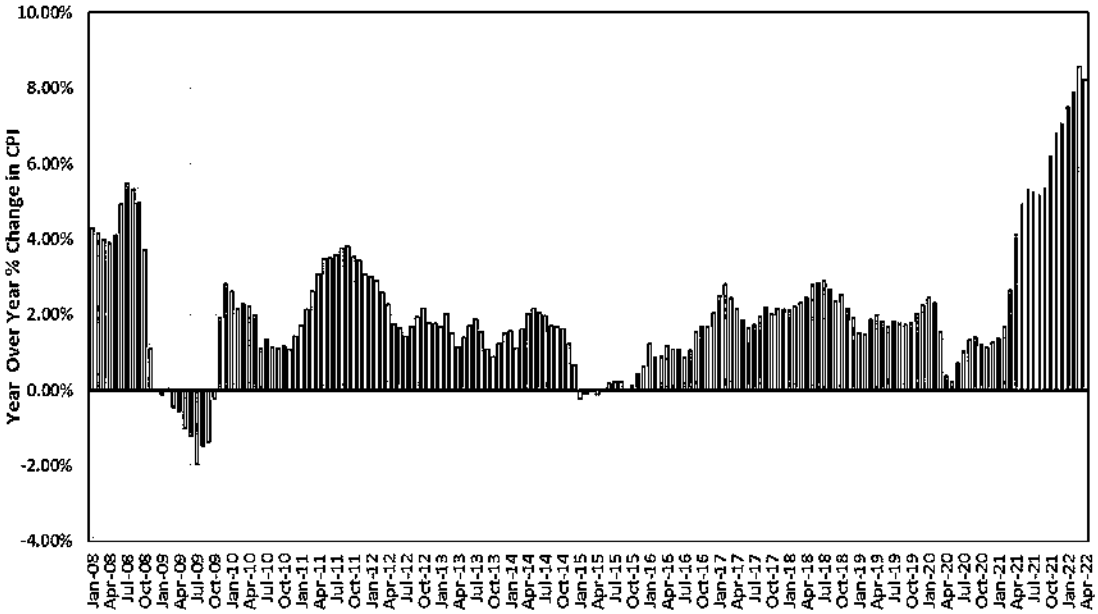
Q26. IS THE INCREASE IN INFLATION SIGNIFICANT?

A. Yes. As shown in Figure 3, the YOY change in the Consumer Price Index ("CPI") published by the Bureau of Labor Statistics has increased steadily over the past year, rising from 1.37 percent in January 2021 to 8.22 percent in April 2022. The 8.22 percent YOY in the CPI in April; 2022 is down slightly from 8.56 percent in March 2022 which was the largest 12-month increase since 1981 and significantly greater than any level seen since January 2008.[24]

[23] Federal Reserve, Transcript of Chair Powell's Press Conference Opening Statement, at 3 (May 4, 2022).

[24] Bureau of Labor Statistics, Consumer Price Index News Release, April 12, 2022, data accessed May 12, 2022.

Figure 3: Consumer Price Index
YOY Percent Change – January 2008 – April 2022[25]



Q27. WHAT ARE THE EXPECTATIONS FOR INFLATION OVER THE NEAR-TERM?

A. In his press conference following the May 4, 2022, meeting, Chairman Powell noted that "[i]nflation is much too high and we understand the hardship it is causing, and we're moving expeditiously to bring it back down."[26] Therefore, investors expect inflation to remain elevated over the near-term. One measure of investors' expectations regarding inflation is the breakeven inflation rate, which is calculated as the difference between the yield on a Treasury bond and the yield on a Treasury Inflation-Protected bond of the same maturity, since the yield on a Treasury Inflation-Protected bond would account for the effect of inflation. The maturity of

[25] Bureau of Labor Statistics, shaded area indicates a recession.

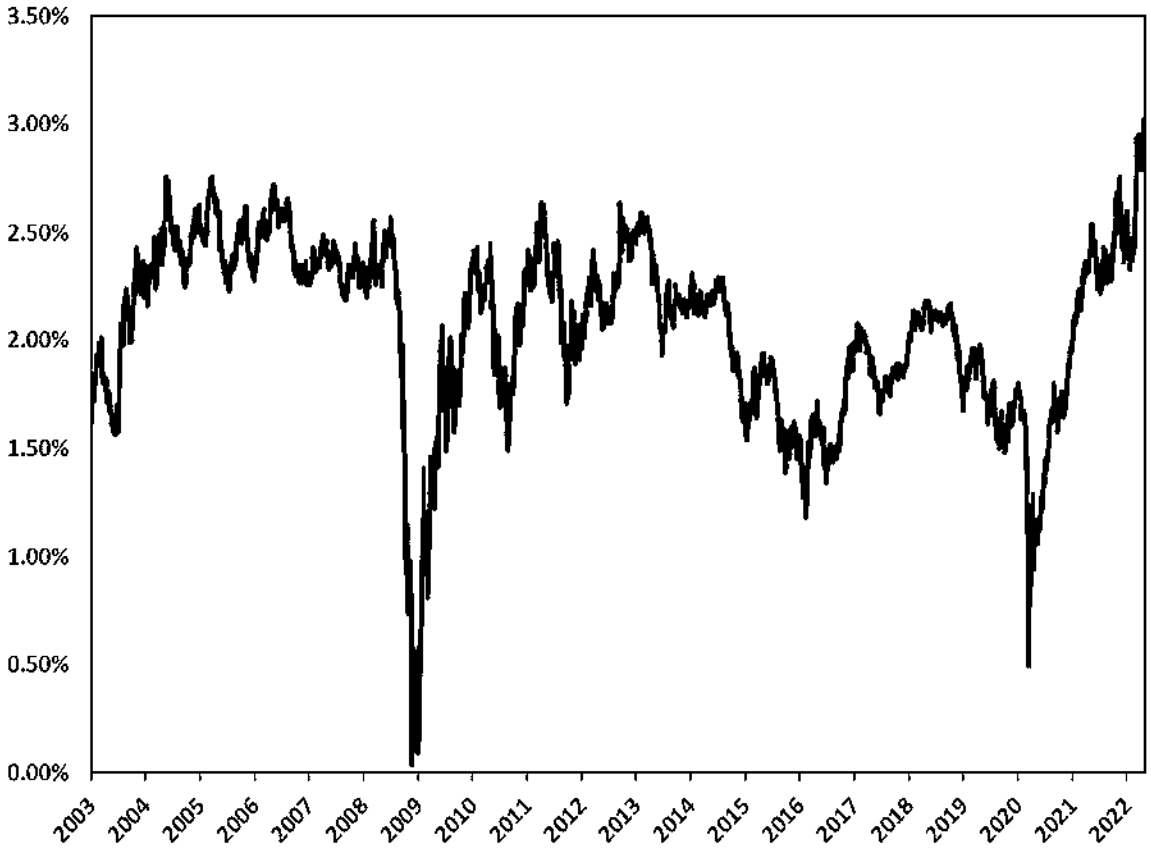
[26] Federal Reserve, Transcript of Chair Powell's Press Conference Opening Statement at 1 (May 4, 2022).

the bond selected would then reflect investors' views of inflation during the holding period of the bond. For example, the 10-year breakeven inflation rate calculated as the spread between the 10-year Treasury bond yield and the 10-year Treasury Inflation-Protected bond yield would reflect investors' expectations of inflation over the next 10 years. As shown in Figure 4 below, the 10-year breakeven inflation rate is currently greater than any level seen since January 2003. Furthermore, the 10-year breakeven inflation rate as of April 29, 2022 was 2.88 percent indicating that investors expect inflation will remain well above the Federal Reserve's 2 percent target over the next 10 years. There are many reasons why inflation is expected to remain elevated. For example, Kiplinger recently noted some key factors, including Russia's war in Ukraine, which led them to forecast an inflation rate of 6.3 percent for 2022:

> The inflation rate is expected to ease further over the rest of this year, but will likely end 2022 at a still-high rate of about 6.3%. In 2023 the rate should fall faster, down to 3.0% by the end of the year. The higher cost of housing will keep inflation rates elevated for some time to come. Gasoline prices and heating costs are likely to stay high for a good while because of the war in Ukraine, but they may plateau instead of climbing more. The price of cars and trucks will also stay at a high level until the semiconductor shortage ends sometime next year. Continued spot shortages of various items will drive their price up, adding to the overall inflation rate. The latest is a shortage of baby formula.[27]

[27] Payne, David, "Inflation Will Ease, But Only Gradually This Year," Kiplinger, May 11, 2022.

Figure 4: 10-year Breakeven Inflation Rate – Janaury 2003 – April 2022[28]



C. The Effect of Inflation on Interest Rates and the Investor-Required Return

Q28. WHAT EFFECT WILL INFLATION HAVE ON LONG-TERM INTEREST RATES?

A. Inflation and the Federal Reserve's normalization of monetary policy will likely result in increases in long-term interest rates. Specifically, inflation reduces the purchasing power of the future interest payments an investor expects to receive over the duration of a bond. This risk increases the longer the duration of the bond. As

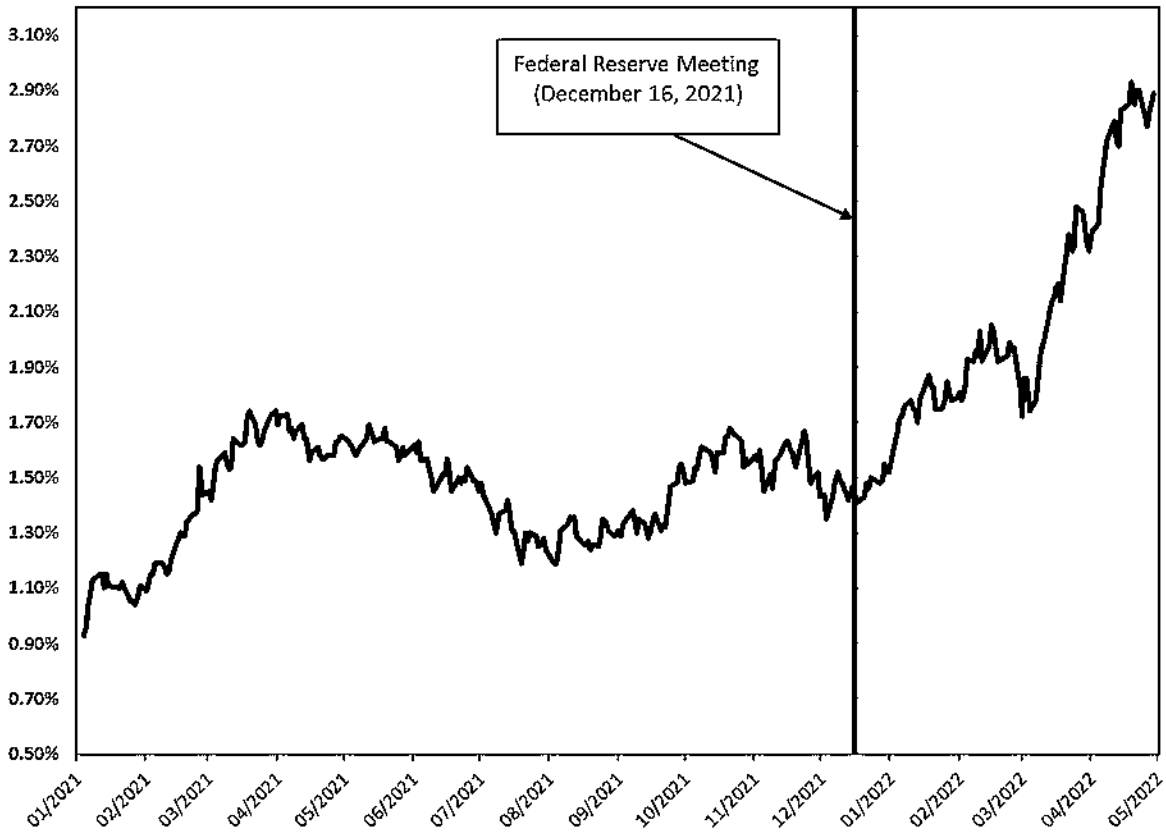
[28] Federal Reserve Bank of St. Louis, 10-Year Breakeven Inflation Rate [T10YIE], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/T10YIE, April 29, 2022.

a result, if investors expect increased levels of inflation, they will require higher yields to compensate for the increased risk of inflation, which means interest rates will increase.

Q29. HAVE THE YIELDS ON LONG-TERM GOVERNMENT BONDS INCREASED IN RESPONSE TO INFLATION AND THE FEDERAL RESERVE'S NORMALIZATION OF MONETARY POLICY?

A. Yes, they have. As noted above, at each of the December 2021, January 2022, March 2022, and May 2022 meetings, the Federal Reserve noted its continued concerns over the sustained increased levels of inflation. In addition, starting at the December 2021 meeting and continuing through the May 2022 meeting, the Federal Reserve accelerated the process of normalizing monetary policy to respond to inflation. As shown in Figure 5, since the Federal Reserve's December 2021 meeting, the yield on 10-year Treasury bond has doubled, increasing from 1.47 percent on December 15, 2021 to 2.89 percent on April 29, 2022. The increase is due to the Federal Reserve's announcements at the December 2021, January 2022, March 2022 and May 2022 meetings, actions the Federal Reserve has taken to normalize monetary policy, and the continued increased levels of inflation that are now expected to persist much longer than the Federal Reserve and investors had originally projected.

Figure 5: 10-Year Treasury Bond Yield – Janaury 2021 – April 2022[29]



Q30. WHAT VIEWS HAVE EQUITY ANALYSTS EXPRESSED ABOUT LONG-TERM GOVERNMENT BOND YIELDS?

A. Leading equity analysts have noted that they expect the yields on long-term government bonds to remain elevated through at least the end of 2022. According to views of equity analysts summarized in Figure 6, the yield on the 10-year Treasury Bond is expected to range from 3.10 percent to 4.00 percent by the end of 2022, which is 101 to 191 basis points greater than the current 30-day average yield on the 10-year Treasury Bond as of March 31, 2022 of 2.09 percent. Furthermore,

[29] S&P Capital IQ Pro.

on March 31, 2022, the yield on the 10-year Treasury was trading at 2.32 percent.

Figure 6: Equity Analysts Forecast of the 10-year Treasury Yield

Bank	10-year U.S. Treasury Yield	
	30-day Average as of April 29, 2022	2022 Forecast
Advocate Capital Management[30]	2.09%	4.00%
Goldman Sachs[31]	2.09%	3.30%
Blue Chip Financial Forecasts (Consensus Estimate)[32]	2.09%	3.10%
BMO Economics[33]	2.09%	3.15%

Q31. HAVE YOU CONSIDERED ANY ADDITIONAL INDICATORS THAT MAY IMPLY LONG-TERM INTEREST RATES ARE EXPECTED TO INCREASE?

A. Yes, I have. I considered the net position of commercials (i.e., banks) in U.S. Treasury Bond futures contracts as reported in the Commitment of Traders ("COT") Report produced by the Commodity Futures Trading Commission ("CFTC"). A net position is defined as the total number of long positions in a futures contract minus the total number of short positions in a futures contract. A long position means that an investor agrees to purchase an asset in the future at a predetermined price and therefore profits if the price of the underlying asset increases. Conversely, short position is when an investor agrees to sell an asset at a time in the future at a predetermined price and profits if the price of the underlying

[30] MarketWatch, "This bond expert who called the spike in U.S. yields forecasts the 10-year to reach 4%," May 7, 2022. https://www.marketwatch.com/story/this-bond-expert-who-called-the-spike-in-u-s-yields-forecasts-the-10-year-to-reach-4-11651843223.

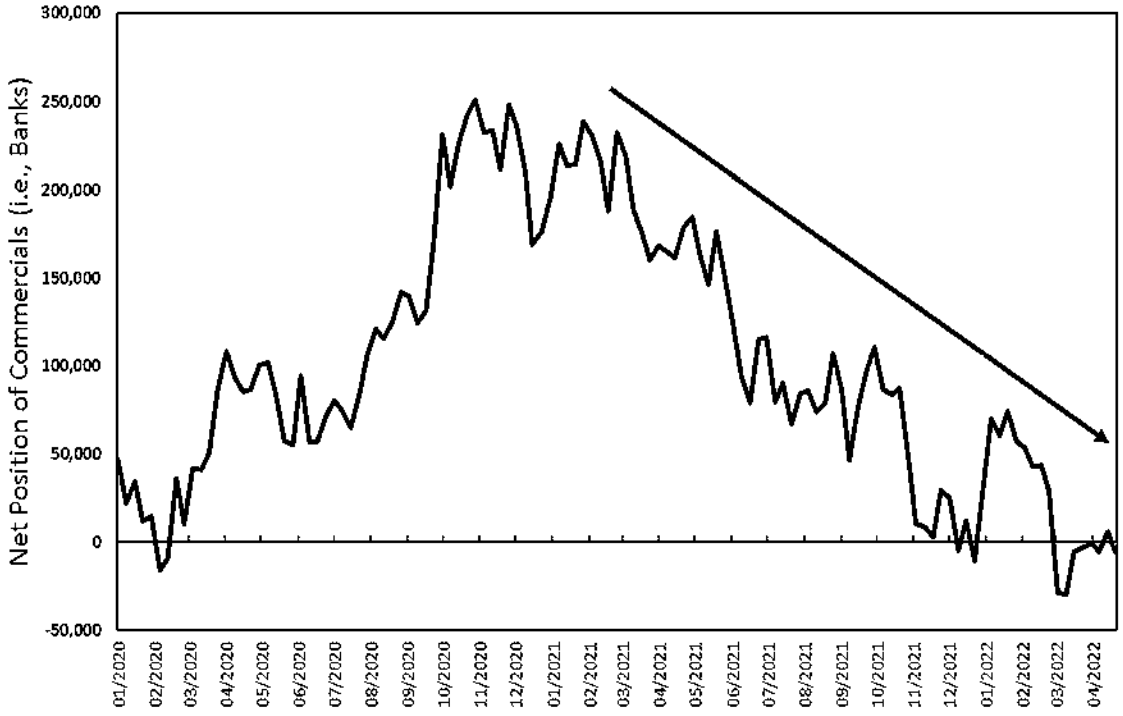
[31] Pollard, Amelia. "Goldman Lifts Yield Forecasts, Sees 10-Year Treasuries at 3.3%." Bloomberg.com, May 12, 2022.

[32] Blue Chip Financial Forecasts, Vol. 41, No. 5, April 29, 2022, at 2.

[33] BMO Economics, "Rates Scenario for May 11, 2022," May 11, 2022.

asset declines. Therefore, if banks are increasing the number of short positions and thus have a declining net position, the banks are assuming that the price of the asset will decline. As shown in Figure 7, the net position of banks in U.S. Treasury Bonds has been decreasing since the end of 2020. Therefore, banks are forecasting a decrease in the price of long-term government bonds and thus the yields (which are inversely related to the price) to increase over the near-term.

Figure 7: Commitment of Traders Report – Net Position of Commercials (i.e., Banks) in U.S. Treasury Bond Futures Contracts[34]



[34] Commitment of Traders Report, as of April 29, 2022
https://www.cftc.gov/MarketReports/CommitmentsofTraders/HistoricalCompressed/index.htm.

D. Expected Performance of Utility Stocks and the Investor-Required ROE on Utility Investments

Q32. ARE UTILITY SHARE PRICES CORRELATED TO CHANGES IN THE YIELDS ON LONG-TERM GOVERNMENT BONDS?

A. Yes, interest rates and utility share prices are inversely correlated which means, for example, that an increase in interest rates will generally result in a decline in the share prices of utilities. For example, Goldman Sachs and Deutsche Bank recently examined the sensitivity of share prices of different industries to changes in interest rates over the past five years. Both Goldman Sachs and Deutsche Bank found that utilities had one of the strongest negative relationships with bond yields (i.e., increases in bond yields resulted in the decline of utility share prices).[35]

Q33. HAVE ELECTRIC UTILITY STOCK PRICES RECENTLY INCREASED?

A. Yes. Utility stock prices had trended down as interest rates moved higher; however, as a result of the political turmoil associated with the war in Ukraine, investors have recently returned to utility stocks as a safe haven seeking to lower risk, resulting in higher electric utility stock prices and thus lower dividend yields.[36]

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[35] Lee, Justina. "Wall Street Is Rethinking the Treasury Threat to Big Tech Stocks." Bloomberg.com, March 11, 2021, www.bloomberg.com/news/articles/2021-03-11/wall-street-is-rethinking-the-treasury-threat-to-big-tech-stocks.

[36] Sonenshine, Jacob. "Utilities Have Been Soaring as Treasuries Get Crushed. That Isn't Supposed to Happen." Barrons.com, April 11, 2022, https://www.barrons.com/articles/utilities-treasury-yields-outlook-51649457572?mod=hp_INTERESTS_bonds&refsec=hp_INTERESTS_bonds.

Q34. HOW DO EQUITY ANALYSTS EXPECT THE UTILITIES SECTOR TO PERFORM IN AN INCREASING INTEREST RATE ENVIRONMENT?

A. Even with the recent increase in electric utility stock prices, equity analysts project that utilities are expected to underperform the broader market as interest rates increase. For example, in its most recent Big Money Poll, which closed in mid-April 2022 and surveyed 112 money managers regarding the outlook for the next twelve months, the professional investors surveyed by Barron's selected the utility sector as the least attractive of all industries for investment.[37] In addition, Fidelity recently recommended underweighting the utility sector and noted that it classified the sector as underweight due to a combination of "poor fundamentals and expensive valuations."[38] Furthermore, regarding the recent increase in utility share prices, Fidelity stated that:

> Energy stocks have garnered a lot of attention, but in February utilities was the only sector with monthly returns in the 90th percentile of its historical range. In the past, powerful utilities rallies have signaled investors getting too defensive. The market typically has gained, and utilities have underperformed, in 12-month periods after top-decile monthly relative returns for the sector.[39]

Q35. HAVE YOU REVIEWED ANY MARKET INDICATORS THAT MAY IMPLY THAT UTILITIES WILL UNDERPERFORM OVER THE NEAR-TERM?

A. Yes, I have. As discussed above, the utility sector is considered a "bond proxy" or a sector that investors view as a "safe haven" alternative to bonds, and changes in

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[37] Jasinski, Nicholas, "Bullish Later: How Investors Are Sizing up Stocks," Barron's, updated April 24, 2022.

[38] Fidelity, "Top sectors to watch in Q2," May 4, 2022.

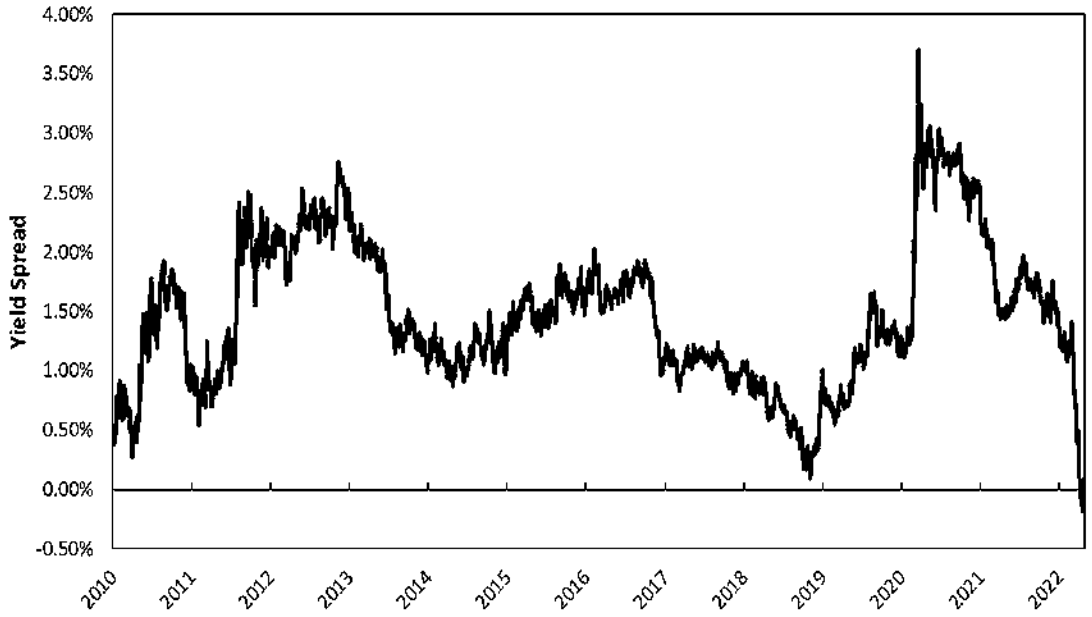
[39] *Id.*

utility stock prices are therefore inversely related to changes in interest rates. For example, the utility sector tends to perform well when interest rates are low since the dividend yields for utilities offer investors the prospect of higher returns when compared to the yields on long-term government bonds. Conversely, the utility sector underperforms as the yields on long-term government bonds increase and the spread between the dividend yields on utility stocks and the yields on long-term government bonds decreases. Therefore, I examined the difference ("yield spread") between the dividend yields of utility stocks and the yields on long-term government bonds from January 2010 through April 2022. I selected the dividend yield on the S&P Utilities Index as the measure of the dividend yields for the utility sector and the yield on the 10-year Treasury Bond as the estimate of the yield on long-term government bonds.

As shown in Figure 8, the yield spread as of April 29, 2022, was 0.05 percent, indicating that the yield on the 10-year Treasury Bond is equivalent to the dividend yield for the S&P Utilities Index. Furthermore, the current yield spread of 0.05 percent is well below the long-term average since January 2010 of 1.47 percent. Given that the yield spread is currently well below the long-term average as well as the expectation that interest rates will continue to increase, it is reasonable to conclude that utility sector will most likely underperform over the near-term. This is because investors that purchased utility stocks as an alternative to the lower yields on long-term government bonds would otherwise be inclined to rotate back into government bonds, particularly as the yields on long-term government bonds continue to increase, thus resulting in a decrease in the share

prices of utilities.

Figure 8: Yield Spread between the Dividend Yield on the S&P Utilities Index and the Yield on the 10-year Treasury Bond – January 2010 – April 2022[40]

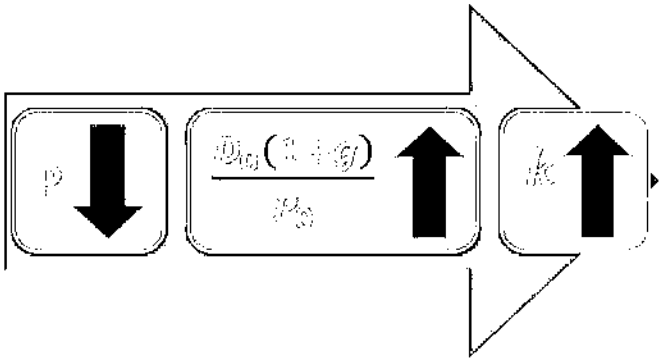


Q36. WHAT IS THE SIGNIFICANCE OF THE INVERSE RELATIONSHIP BETWEEN INTEREST RATES AND UTILITY SHARE PRICES IN THE CURRENT MARKET?

A. As discussed above, the Federal Reserve is currently normalizing monetary policy in response to inflation which is expected to increase long-term government bond yields. If interest rates increase as expected, then the share prices of utilities will decline which results in the DCF model understating the cost of equity. For example, Figure 9 below summarizes the effect of price on the dividend yield in the Constant Growth DCF model.

[40] Bloomberg Professional and S&P Capital IQ Pro.

Figure 9: The Effect of a Decline in Stock Prices on the Constant Growth DCF Model



A decline in stock prices will increase the dividend yields and thus the estimate of the ROE produced by the Constant Growth DCF model. Therefore, this expected change in market conditions supports consideration of the range of ROE results produced by the median to median-high DCF results since the median DCF results would likely understate the cost of equity during the period that the Company's rates will be in effect. Moreover, prospective market conditions warrant consideration of other ROE estimation models such as the CAPM and ECAPM, which may better reflect expected market conditions. For example, two out of three inputs to the CAPM (i.e., the market risk premium and risk-free rate) are forward-looking.

E. Conclusion

Q37. WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECT OF CURRENT MARKET CONDITIONS ON THE COST OF EQUITY FOR THE COMPANY?

A. Over the near-term, investors expect long-term interest rates to increase in response

to continued elevated levels of inflation and the Federal Reserve's normalization of monetary policy. Because the share prices of utilities are inversely correlated to interest rates, an increase in long-term government bond yields will likely result in a decline in utility share prices, which is the reason a number of equity analysts expect the utility sector to underperform over the near-term. The expected underperformance of utilities means that DCF models using recent historical data likely underestimate investors' required return over the period that rates will be in effect. This change in market conditions also supports the use of other ROE estimation models such as the CAPM and the ECAPM, which may better reflect expected market conditions.

VI. PROXY GROUP SELECTION

Q38. WHY HAVE YOU USED GROUPS OF PROXY COMPANIES TO ESTIMATE THE COST OF EQUITY FOR ETI?

A. In this proceeding, I am estimating the cost of equity for ETI, a rate-regulated subsidiary of Entergy. Since the ROE is a market-based concept and given the fact ETI's operations in Texas do not make up the entirety of a publicly-traded entity, it is necessary to establish a group of companies that is both publicly-traded and comparable to ETI in certain fundamental business and financial respects to serve as its "proxy" for purposes of estimating the cost of equity.

Even if ETI's electric utility operations made up the entirety of a publicly-traded entity, it is possible that transitory events could bias its market value over a given time period. A significant benefit of using a proxy group is that it mitigates

the effects of anomalous events that may be associated with any one company. The proxy companies used in my analyses all possess a set of operating and financial risk characteristics that are substantially comparable to ETI, and, therefore, provide a reasonable basis to derive and estimate the appropriate ROE for the Company.

Q39. PLEASE PROVIDE A BRIEF PROFILE OF ETI.

A. ETI is a wholly owned subsidiary that provides electricity to approximately 486,000 customers in 27 counties in Texas.[41] Retail sales in Texas in 2021 were approximately 22,051,000 MWh.[42] ETI currently has an investment grade long-term rating of BBB+ (Outlook: Stable) from Standard & Poor's ("S&P") and Baa2 (Outlook: Stable) from Moody's.[43] ETI's current long-term issuer credit ratings are shown in Figure 10.

Figure 10: ETI Credit Ratings[44]

Credit Rating Agency	Rating	Outlook
Standard & Poor's	BBB+	Stable
Moody's Investors Service	Baa2	Stable

Q40. HOW DID YOU SELECT THE COMPANIES IN YOUR PROXY GROUP?

A. I began with the group of 36 companies that Value Line classifies as Electric Utilities and applied the following screening criteria to select companies that:

[41] Entergy Texas, Inc. https://www.entergy-texas.com/about-us, accessed May 4, 2022.

[42] Entergy Texas, Inc. SEC Form 10-K, December 31, 2020, at 402.

[43] Moody's.com accessed March 28, 2022.

[44] S&P Global Ratings, Ratings Direct, Entergy Texas, Inc., March 7, 2022.

- pay consistent quarterly cash dividends, because companies that do not cannot be analyzed using the Constant Growth DCF model;
- have investment grade long-term issuer ratings from S&P and/or Moody's;
- are covered by at least two utility industry analysts;
- have positive long-term earnings growth forecasts from at least two utility industry equity analysts;
- own regulated generation assets that are included in rate base;
- derive more than 40.00 percent of its megawatt-hour sales from its owned generation facilities;
- derive more than 60.00 percent of their total operating income from regulated operations;
- derive more than 80.00 percent of their total regulated operating income from regulated electric operations; and
- were not parties to a merger or transformative transaction during the analytical periods relied on.

Q41. DID YOU EXCLUDE ANY OTHER COMPANIES FROM THE PROXY GROUP?

A. Yes. I also excluded Pinnacle West Capital Corporation ("PNW") and Hawaiian Electric Industries, Inc. ("HE"). For PNW, the share price decreased approximately 24 percent over a two-month period from October through November 2021 resulting from a negative regulatory decision for its largest operating company, Arizona Public Service Company ("APS"). Therefore, similar to the reason that I exclude transformative transactions; because the stock price can be affected by one-time events, I also excluded PNW from the proxy group.

HE's operations are concentrated on the islands of Hawaii; therefore, the company faces geographic concentration risk. As HE noted in the company's 2021

Form10-K:

> The Company is subject to the risks associated with the geographic concentration of its businesses and current lack of interconnections that could result in service interruptions at the Utilities or higher default rates on loans held by ASB [American Savings Bank].[45]

The increased risk of service interruptions resulting from HE's geographic location which could result in revenue loss and increased costs is a risk unique to HE and would not apply to utilities located on the U.S. mainland. Furthermore, HE's unregulated operations which represent approximately 33 percent of the company's operation income in 2021 are concentrated in the banking sector through the ownership of American Savings Bank ("ASB").[46] ASB also only operates on Hawaii; thus, all of the company's consumer and commercial loans are to customers on Hawaii. If Hawaii were to face an adverse economic or political event, ASB could face severe financial effects given the company's geographic concentration in Hawaii.[47] As a result, I have excluded HE from my proxy group considering HE's unique geographical risks.

Q42. WHAT IS THE COMPOSITION OF YOUR PROXY GROUP?

A. The screening criteria just discussed results in a proxy group consisting of the companies shown in Figure 11 (and also in Exhibit AEB-3).

[45] Hawaii Electric Industries, Inc., 2021 Form 10-K at 23.

[46] *Id.* at 86.

[47] *Id.* at 20.

Figure 11: Proxy Group

Company	Ticker
ALLETE, Inc.	ALE
Alliant Energy Corporation	LNT
Ameren Corporation	AEE
American Electric Power Company, Inc.	AEP
Duke Energy Corporation	DUK
Evergy, Inc.	EVRG
IDACORP, Inc.	IDA
NextEra Energy, Inc.	NEE
NorthWestern Corporation	NWE
OGE Energy Corporation	OGE
Otter Tail Corporation	OTTR
Portland General Electric Company	POR
Southern Company	SO
Xcel Energy Inc.	XEL

VII. COST OF EQUITY ESTIMATION

Q43. PLEASE BRIEFLY DISCUSS THE ROE IN THE CONTEXT OF A REGULATED UTILITY.

A. The regulatory construct requires that the regulatory agency, acting as a substitute for the competitive market, establish a rate of return for the company that is commensurate with the rate of return expected in the market for investments of similar risk. There can be adjustments to the ROE to reflect specific performance (e.g., positive adjustments recognizing strong management performance, cost savings and other important operational metrics, or negative adjustments reflecting poor performance in similar metrics). Absent any adjustments for these types of

performance measures, the base ROE is intended to reflect the return that investors require in order to invest in utility assets rather than investing in enterprises of comparable risk in the industry or competitive market.

The overall rate of return for a regulated utility includes both the cost of debt and the cost of equity and is based on its weighted average cost of capital, whereby the costs of the individual sources of capital are weighted by their proportion in the capital structure. While the cost of debt and preferred stock can be directly observed, the cost of equity is market-based and, therefore, must be estimated based on observable market data.

Q44. HOW IS THE REQUIRED ROE DETERMINED?

A. The required ROE is estimated by using multiple analytical techniques that rely on market data to quantify investors' return requirements, adjusted for certain incremental costs and risks. Quantitative models produce a range of reasonable results from which the market-required ROE is selected. That selection must be based on a comprehensive review of relevant data and information, but it does not necessarily lend itself to a strict mathematical solution. The key consideration in determining the cost of equity is to ensure that the methodologies employed reasonably reflect investors' views of the financial markets in general and of the subject company (in the context of the proxy group) in particular.

Q45. WHAT METHODS DID YOU USE TO ESTIMATE ETI'S COST OF EQUITY?

A. I considered the results of the Constant Growth DCF model, the CAPM, the

ECAPM and the Bond Yield Plus Risk Premium approach. As discussed in more detail below, a reasonable ROE estimate considers alternative methodologies, and the reasonableness of their individual and collective results.

Q46. WHY IS IT IMPORTANT TO USE MORE THAN ONE ANALYTICAL APPROACH?

A. Because the cost of equity is not directly observable, it must be estimated based on both quantitative and qualitative information. When faced with the task of estimating the cost of equity, analysts and investors are inclined to gather and evaluate as much relevant data as reasonably can be analyzed. Several models have been developed to estimate the cost of equity, and I use multiple approaches to estimate the cost of equity. As a practical matter, however, all of the models available for estimating the cost of equity are subject to limiting assumptions or other methodological constraints. Consequently, many well-regarded finance texts recommend using multiple approaches when estimating the cost of equity. For example, Copeland, Koller, and Murrin[48] suggest using the CAPM and Arbitrage Pricing Theory model, while Brigham and Gapenski[49] recommend the CAPM, DCF, and Bond Yield Plus Risk Premium approaches. Consistent with the *Hope* finding, it is the analytical result, not the methodology employed, which is controlling in arriving at ROE determinations.

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[48] Tom Copeland, Tim Koller and Jack Murrin, *Valuation: Measuring and Managing the Value of Companies*, 3rd Ed. (New York: McKinsey & Company, Inc., 2000) at 214.

[49] Eugene Brigham, Louis Gapenski, *Financial Management: Theory and Practice*, 7th Ed. (Orlando: Dryden Press, 1994) at 341.

Q47. IS IT IMPORTANT GIVEN THE CURRENT MARKET CONDITIONS TO USE MORE THAN ONE ANALYTICAL APPROACH?

A. Yes. The historical average dividend yields for utilities are currently reflecting the effect of the recently low interest rate environment which results in DCF cost of equity estimates that are understating the forward-looking cost of equity. The CAPM and Bond Yield Plus Risk Premium method offer some balance to the sensitivity of the DCF model to low Treasury yields. Low interest rates might also affect the CAPM in two ways: (1) the risk-free rate is lower, and (2) because the market risk premium is a function of interest rates, (i.e., it is the return on the broad stock market less the risk-free interest rate), the risk premium should move higher when interest rates are lower. However, when applied appropriately, the CAPM will take into account the relationship between ROE and interest rates through the market risk premium component. Therefore, it is important to use multiple analytical approaches to moderate the impact that the current low interest rate environment is having on the ROE estimates, especially the DCF analysis, and where possible consider using projected market data in the models to estimate the return for the forward-looking period.

Q48. WHAT ARE YOUR CONCLUSIONS ABOUT THE RESULTS OF THE DCF AND CAPM MODELS?

A. Recent market data that is used as the basis for the assumptions for both models have been affected by market conditions. As a result, relying exclusively on historical assumptions in these models, without considering whether these

assumptions are consistent with investors' future expectations, will underestimate the cost of equity that investors would require over the period that the rates in this case are to be in effect. In this instance, relying on the historically low dividend yields that are not expected to continue over the period that the new rates will be in effect will underestimate the ROE for ETI.

Furthermore, as discussed in Section V above, long-term interest rates have increased since August 2020, and this trend is expected to continue as the Federal Reserve normalizes monetary policy in response to increased inflation. Therefore, the use of current averages of Treasury bond yields as the estimate of the risk-free rate in the CAPM is not appropriate since recent market conditions are not expected to continue over the long-term. Instead, analysts should rely on projected yields of Treasury Bonds in the CAPM. The projected Treasury Bond yields result in CAPM estimates that are more reflective of the market conditions that investors expect during the period that the Company's rates will be in effect.

A. Constant Growth DCF Model

Q49. PLEASE DESCRIBE THE DCF APPROACH.

A. The DCF approach is based on the theory that a stock's current price represents the present value of all expected future cash flows. In its most general form, the DCF model is expressed as follows:

Equation [1]

$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + \ldots + \frac{D_\infty}{(1+k)^\infty}$$

Where P_0 represents the current stock price, $D_1 \ldots D_\infty$ are all expected future dividends, and k is the discount rate, or required ROE. Equation [1] is a standard present value calculation that can be simplified and rearranged into the following form:

Equation [2]

$$k = \frac{D_0(1+g)}{P_0} + g$$

Equation [2] is often referred to as the Constant Growth DCF model in which the first term is the expected dividend yield and the second term is the expected long-term growth rate.

Q50. WHAT ASSUMPTIONS ARE REQUIRED FOR THE CONSTANT GROWTH DCF MODEL?

A. The Constant Growth DCF model requires the following assumptions: (1) a constant growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant price-to-earnings (P/E) ratio; and (4) a discount rate greater than the expected growth rate. To the extent any of these assumptions is violated, considered judgment and/or specific adjustments should be applied to the results.

Q51. WHAT MARKET DATA DID YOU USE TO CALCULATE THE DIVIDEND YIELD IN YOUR CONSTANT GROWTH DCF MODEL?

A. The dividend yield in my Constant Growth DCF model is based on the proxy group companies' current annual dividend and average closing stock prices over the 30-,

90-, and 180-trading days ended March 31, 2022.

Q52. DID YOU MAKE ANY ADJUSTMENTS TO THE DIVIDEND YIELD TO ACCOUNT FOR PERIODIC GROWTH IN DIVIDENDS?

A. Yes. Since utility companies tend to increase their quarterly dividends at different times throughout the year, it is reasonable to assume that dividend increases will be evenly distributed over calendar quarters. Given that assumption, it is reasonable to apply one-half of the expected annual dividend growth rate for purposes of calculating the expected dividend yield component of the DCF model. This adjustment ensures that the expected first year dividend yield is, on average, representative of the coming 12-month period, and does not overstate the aggregated dividends to be paid during that time.

Q53. WHY IS IT IMPORTANT TO SELECT APPROPRIATE MEASURES OF LONG-TERM GROWTH IN APPLYING THE DCF MODEL?

A. In its Constant Growth form, the DCF model (i.e., Equation [2]) assumes a single long-term growth rate in perpetuity. In order to reduce the long-term growth rate to a single measure, one must assume that the dividend payout ratio remains constant and that Earnings Per Share ("EPS"), dividends per share, and book value per share all grow at the same constant rate. Over the long run, however, dividend growth can only be sustained by earnings growth. Therefore, it is important to incorporate a variety of sources of long-term earnings growth rates into the Constant Growth DCF model.

Q54. WHAT SOURCES OF LONG-TERM GROWTH RATES DID YOU RELY ON IN YOUR CONSTANT GROWTH DCF MODEL?

A. As shown in Exhibit AEB-3, my Constant Growth DCF model incorporates three sources of long-term growth rates: (1) consensus long-term earnings growth estimates from Zacks Investment Research; (2) consensus long-term earnings growth estimates from Thomson First Call (provided by Yahoo! Finance); and (3) long-term earnings growth estimates from Value Line Investment Survey (Value Line).

Q55. HOW DID YOU CALCULATE THE RANGE OF RESULTS FOR THE CONSTANT GROWTH DCF MODEL?

A. I calculated the low-end result for the Constant Growth DCF model using the lowest projected earnings growth rate (i.e., the lowest of First Call, Zacks, and Value Line) for each of the proxy group companies. I applied a similar approach to calculate the high-end result for the Constant Growth DCF model by using the highest projected earnings growth rate of the three sources for each proxy group company. The median results of the Constant Growth DCF model were calculated using the mean growth rate of the three sources for each proxy group company. Once the results for each proxy group company were calculated, I then relied on the median of the results as the measure of central tendency for purposes of my analysis, referring to each of the results as the "median low," "median" and "median high" results.

Q56. WHAT ARE THE RESULTS OF YOUR DCF ANALYSES?

A. Figure 12 summarizes the results of my DCF analyses. As shown in Figure 12, the median Constant Growth DCF results range from 9.53 percent to 9.65 percent and the median high results range from 10.20 percent to 10.30 percent.

Figure 12: Discounted Cash Flow Results

	Median Low	Median	Median High
30-Day Average	8.38%	9.53%	10.20%
90-Day Average	8.37%	9.53%	10.24%
180-Day Average	8.43%	9.65%	10.30%

Q57. WHAT ARE YOUR CONCLUSIONS ABOUT THE RESULTS OF THE DCF MODELS?

A. As discussed previously, one primary assumption of the DCF models is a constant P/E ratio. That assumption is heavily influenced by the market price of utility stocks. Since utility stocks are expected to underperform the broader market over the near-term as interest rates increases, it is important to consider the results of the DCF models with caution. This means that the results of the DCF models, which rely on historical stock prices, are below where they would be expected to be going forward during the period in which the rates for the Company will be in effect. Therefore, while I have given weight to the results of the DCF models, my recommendation also gives weight to the results of other ROE estimation models.

B. CAPM Analysis

Q58. PLEASE BRIEFLY DESCRIBE THE CAPITAL ASSET PRICING MODEL.

A. The CAPM is a risk premium approach that estimates the cost of equity for a given

security as a function of a risk-free return plus a risk premium to compensate investors for the non-diversifiable or "systematic" risk of that security.[50] This second component is the product of the market risk premium and the Beta coefficient, which measures the relative riskiness of the security being evaluated.

The CAPM is defined by four components, each of which must theoretically be a forward-looking estimate:

Equation [3]

$$K_e = r_f + \beta(r_m - r_f)$$

Where:

K_e = the required market ROE;

β = Beta coefficient of an individual security;

r_f = the risk-free rate of return; and

r_m = the required return on the market as a whole.

In this specification, the term (r_m – r_f) represents the Market Risk Premium. According to the theory underlying the CAPM, since unsystematic risk can be diversified away, investors should only be concerned with systematic risk. Systematic risk is measured by Beta, which is a measure of the volatility of a security as compared to the overall market. Beta is defined as:

Equation [4]

$$\beta = \frac{Covariance(r_e, r_m)}{Variance(r_m)}$$

The variance of the market return (i.e., Variance (r_m)) is a measure of the

[50] Systematic risk is the risk inherent in the entire market or market segment. This form of risk cannot be diversified away using a portfolio of assets. Non-systematic risk is the risk of a specific company that can be mitigated through portfolio optimization.

uncertainty of the general market. The covariance between the return on a specific security and the general market (i.e., Covariance (r_e, r_m)) reflects the extent to which the return on that security will respond to a given change in the general market return. Thus, Beta represents the risk of the security relative to the general market.

Q59. WHAT RISK-FREE RATE DID YOU USE IN YOUR CAPM ANALYSIS?

A. I relied on three sources for my estimate of the risk-free rate: (1) the current 30-day average yield on 30-year Treasury bonds of 2.37 percent;[51] (2) the projected 30-year Treasury yield for Q3 2022–Q3 2023 of 3.12 percent;[52] and (3) the average projected 30-year Treasury bond yield for the period 2022 through 2026 of 3.40 percent.[53]

Q60. WOULD YOU PLACE MORE WEIGHT ON ONE OF THESE SCENARIOS?

A. Yes. Based on current market conditions, I place more weight on the results of the projected yields on the 30-year Treasury bonds. As discussed previously, the estimation of the cost of equity in this case should be forward-looking because it is the return that investors would receive over the future rate period. Therefore, the inputs and assumptions used in the CAPM analysis should reflect the expectations of the market at that time. While I have included the results of a CAPM analysis that relies on a current 30-day average risk-free rate, this analysis fails to take into

[51] Bloomberg Professional as of March 31, 2022.

[52] Blue Chip Financial Forecasts, Vol. 41, No. 4, April 1, 2022, at 2.

[53] Blue Chip Financial Forecasts, Vol. 40, No. 12, December 1, 2021, at 14.

consideration the effect of the market's expectations for interest rate increases on the cost of equity.

Q61. WHAT BETA COEFFICIENTS DID YOU USE IN YOUR CAPM ANALYSIS?

A. As shown in Exhibit AEB-4, I used the Beta coefficients for the proxy group companies as reported by Bloomberg and Value Line. The Beta coefficients reported by Bloomberg are calculated using 10 years of weekly returns relative to the S&P 500 Index. The Beta coefficients reported by Value Line are calculated based on five years of weekly returns relative to the New York Stock Exchange Composite Index. Additionally, as shown in Exhibit AEB-5, I also considered an additional CAPM analysis that relies on the long-term average Beta coefficient reported by Value Line for the companies in my proxy group from 2013 through 2021.

Q62. HOW DID YOU ESTIMATE THE MARKET RISK PREMIUM IN THE CAPM?

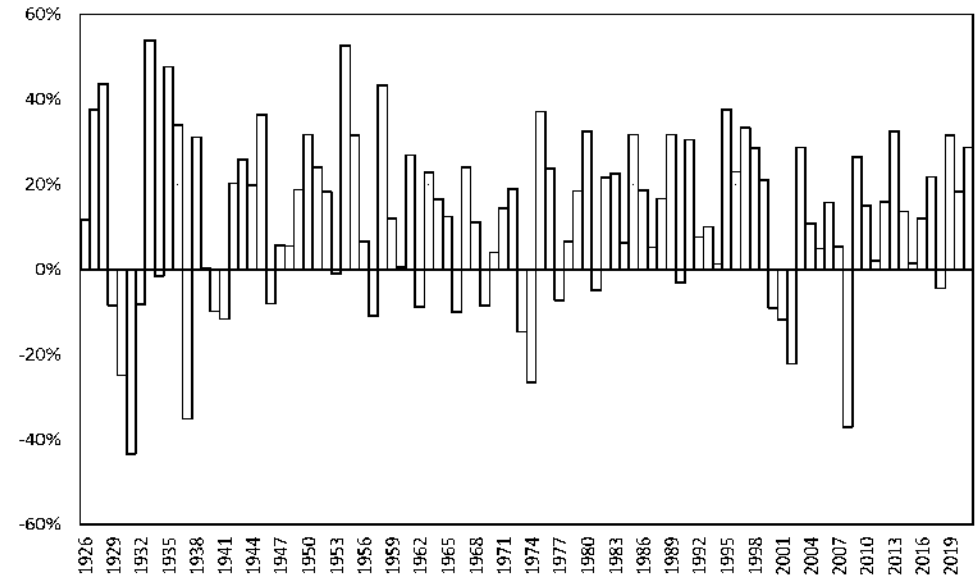
A. I estimated the market risk premium as the difference between the implied expected equity market return and the risk-free rate. The expected return on the S&P 500 Index is calculated using the Constant Growth DCF model discussed earlier in my testimony for the companies in the S&P 500 Index for which dividend yields and Value Line long-term earnings projections are available. As shown in Exhibit AEB-6, based on an estimated market capitalization-weighted dividend yield of 1.61 percent and a weighted long-term growth rate of 10.99 percent, the estimated required market return for the S&P 500 Index is 12.68 percent. The

implied market risk premium over the risk-free rates evaluated (i.e., the current, near-term projected and longer-term projected 30-year U.S. Treasury bond yield) ranges from 9.68 percent to 10.13 percent.

Q63. HOW DOES THE EXPECTED MARKET RETURN YOU HAVE CALCULATED COMPARE TO OBSERVED HISTORICAL MARKET RETURNS?

A. Given the range of annual equity returns that have been observed over the past century as shown in Figure 13, a current expected market return of 12.68 percent is consistent with the historical returns. In fact, in 50 out of the past 96 years (or approximately 52 percent of the observations), the realized equity return was 12.68 percent or greater.

Figure 13: Realized U.S. equity market returns (1926–2021)[54]



[54] Depicts total annual returns on large company stocks, as reported in the 2022 Duff & Phelps SBBI Yearbook.

Q64. DID YOU CONSIDER ANOTHER FORM OF THE CAPM IN YOUR ANALYSIS?

A. Yes. I have also considered the results of an Empirical CAPM ("ECAPM" or alternatively referred to as the Zero-Beta CAPM)[55] in estimating the cost of equity for ETI. The ECAPM calculates the product of the adjusted Beta coefficient and the market risk premium and applies a weight of 75.00 percent to that result. The model then applies a 25.00 percent weight to the market risk premium, without any effect from the Beta coefficient. The results of the two calculations are summed, along with the risk-free rate, to produce the ECAPM result, as noted in Equation [5] below:

Equation [5]

$$k_e = r_f + 0.75\beta(r_m - r_f) + 0.25(r_m - r_f)$$

Where:

k_e = the required market ROE

β = Adjusted Beta coefficient of an individual security

r_f = the risk-free rate of return

r_m = the required return on the market as a whole

In essence, the Empirical form of the CAPM addresses the tendency of the "traditional" CAPM to underestimate the cost of equity for companies with low Beta coefficients such as regulated utilities. In that regard, the ECAPM is not redundant to the use of adjusted Betas; rather, it recognizes the results of academic research indicating that the risk-return relationship is different (in essence, flatter)

[55] *See* e.g., Roger A. Morin, New Regulatory Finance, Public Utilities Reports, Inc., 2006, at 189.

than estimated by the CAPM, and that the CAPM underestimates the "alpha," or the constant return term.[56]

As with the CAPM, my application of the ECAPM uses the forward-looking market risk premium estimates, the three yields on 30-year Treasury securities noted earlier as the risk-free rate, and the Bloomberg, Value Line and long-term average Beta coefficients.

Q65. WHAT ARE THE RESULTS OF YOUR CAPM ANALYSES?

A. As shown in Figure 14, my traditional CAPM analysis produces a range of returns from 10.06 percent to 11.59 percent. The ECAPM analysis results range from 10.72 percent to 11.86 percent.

Figure 14: CAPM Results

	Current Risk-Free Rate (2.37%)	Q3 2022 – Q3 2023 Projected Risk-Free Rate (3.12%)	2023-2027 Projected Risk-Free Rate (3.40%)
CAPM			
Value Line Beta	11.47%	11.55%	11.59%
Bloomberg Beta	10.67%	10.81%	10.87%
Long-term Avg. Beta	10.06%	10.25%	10.32%
ECAPM			
Value Line Beta	11.77%	11.84%	11.86%
Bloomberg Beta	11.17%	11.28%	11.32%
Long-term Avg. Beta	10.72%	10.86%	10.91%

C. Bond Yield Plus Risk Premium Analysis

Q66. PLEASE DESCRIBE THE BOND YIELD PLUS RISK PREMIUM APPROACH.

A. In general terms, this approach is based on the fundamental principle that equity

[56] *Id.* at 191.

investors bear the residual risk associated with equity ownership and therefore require a premium over the return they would have earned as a bondholder. That is, because returns to equity holders have greater risk than returns to bondholders, equity investors must be compensated to bear that risk. Risk premium approaches, therefore, estimate the cost of equity as the sum of the equity risk premium and the yield on a particular class of bonds. In my analysis, I used actual authorized returns for electric utility companies as the historical measure of the cost of equity to determine the risk premium.

Q67. ARE THERE OTHER CONSIDERATIONS THAT SHOULD BE ADDRESSED IN CONDUCTING THIS ANALYSIS?

A. Yes. It is important to recognize both academic literature and market evidence indicating that the equity risk premium (as used in this approach) is inversely related to the level of interest rates. That is, as interest rates increase (decrease), the equity risk premium decreases (increases). Consequently, it is important to develop an analysis that: (1) reflects the inverse relationship between interest rates and the equity risk premium; and (2) relies on recent and expected market conditions. Such an analysis can be developed based on a regression of the risk premium as a function of U.S. Treasury bond yields. If authorized ROEs for electric utilities serve as the measure of required equity returns and define the yield on the long-term U.S. Treasury bond as the relevant measure of interest rates, the

risk premium simply would be the difference between those two points.[57]

Q68. IS THE BOND YIELD PLUS RISK PREMIUM ANALYSIS RELEVANT TO INVESTORS?

A. Yes. Investors are aware of ROE awards in other jurisdictions, and they consider those awards as a benchmark for a reasonable level of equity returns for utilities of comparable risk operating in other jurisdictions. Because my Bond Yield Plus Risk Premium analysis is based on authorized ROEs for utility companies relative to corresponding Treasury yields, it provides relevant information to assess the return expectations of investors.

Q69. WHAT DID YOUR BOND YIELD PLUS RISK PREMIUM ANALYSIS REVEAL?

A. As shown in Figure 15, from 1992 through March 31, 2022, there was a strong negative relationship between risk premia and interest rates. To estimate that relationship, I conducted a regression analysis using the following equation:

$$RP = a + b(T) \quad [6]$$

Where:

RP = Risk Premium (difference between authorized ROEs and the yield on 30-year U.S. Treasury bonds)

[57] *See* e.g., S. Keith Berry, "Interest Rate Risk and Utility Risk Premia during 1982-93," *Managerial and Decision Economics*, Vol. 19, No. 2 (March 1998), in which the author used a methodology similar to the regression approach described below, including using allowed ROEs as the relevant data source, and came to similar conclusions regarding the inverse relationship between risk premia and interest rates. *See also* Robert S. Harris, "Using Analysts' Growth Forecasts to Estimate Shareholders Required Rates of Return," *Financial Management*, Spring 1986, at 66.

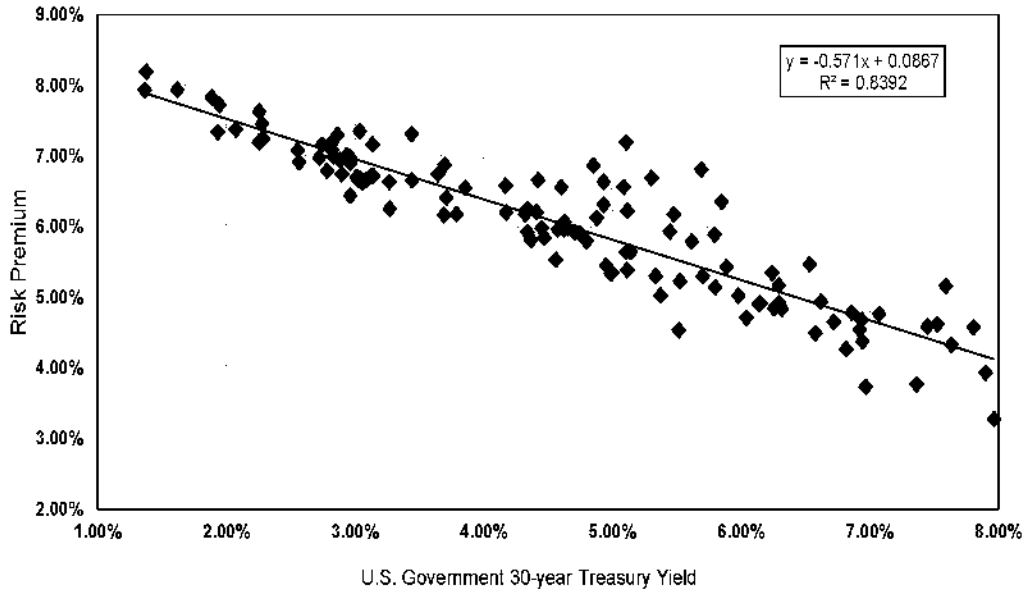
a = intercept term

b = slope term

T = 30-year U.S. Treasury bond yield

Data regarding allowed ROEs were derived from more than 681 vertically integrated electric utility rate cases from 1992 through March 31, 2022 as reported by Regulatory Research Associates ("RRA"). The equation's coefficients were statistically significant.

Figure 15: Risk Premium Results – Electric Utilities



As shown on Exhibit AEB-7, based on the current 30-day average of the 30-year U.S. Treasury bond yield (i.e., 2.37 percent), the risk premium would be 7.31 percent, resulting in an estimated ROE of 9.68 percent. Based on the near-term (Q3 2022 – Q3 2023) projected 30-year U.S. Treasury bond yield (i.e., 3.12 percent), the risk premium would be 6.88 percent, resulting in an estimated ROE of 10.00 percent. Using the long-term projected yield on the 30-year

U.S. Treasury bond (i.e. 3.40 percent), the risk premium would be 6.73 percent and the estimated ROE would be 10.13 percent.

Q70. HOW DO THE RESULTS OF THE BOND YIELD RISK PREMIUM ANALYSIS INFORM YOUR RECOMMENDED ROE FOR ETI?

A. In conjunction with the other ROE models that I have discussed, I have considered the results of the Bond Yield Risk Premium analysis in setting my recommended ROE for ETI. As noted above, investors consider the ROE award of a company when assessing the risk of that company as compared to utilities of comparable risk operating in other jurisdictions. The risk premium analysis accounts for this comparison by estimating the return expectations of investors based on the current and past ROE awards of electric utilities across the US.

VIII. REGULATORY AND BUSINESS RISKS

Q71. DO THE MEDIAN AND MEAN RESULTS OF THE DCF, CAPM, AND RISK PREMIUM ANALYSES FOR THE PROXY GROUP PROVIDE AN APPROPRIATE ESTIMATE OF THE COST OF EQUITY FOR ETI?

A. No. These results provide only a range of the appropriate estimate of ETI's cost of equity. Several additional factors must be considered when determining where the Company's cost of equity falls within the range of analytical results. These risk factors, discussed below, should be considered with respect to their overall effect on ETI's risk profile relative to the proxy group.

A. Capital Expenditures

Q72. PLEASE SUMMARIZE ETI'S CAPITAL EXPENDITURE REQUIREMENTS.

A. ETI's current projections for 2022 through 2024 include approximately $2.37 billion in capital investments for the period.[58] Based on ETI's net utility plant of approximately $5.14 billion as of December 31, 2020, the ratio of projected capital expenditures to net utility plant is approximately 46.24 percent.

Q73. HOW IS ETI'S RISK PROFILE AFFECTED BY ITS CAPITAL EXPENDITURE REQUIREMENTS?

A. As with any utility facing increased capital expenditure requirements, the Company's risk profile may be adversely affected in two significant and related ways: (1) the heightened level of investment increases the risk of under recovery or delayed recovery of the invested capital; and (2) an inadequate return would put downward pressure on key credit metrics.

Q74. DO CREDIT RATING AGENCIES RECOGNIZE THE RISKS ASSOCIATED WITH ELEVATED LEVELS OF CAPITAL EXPENDITURES?

A. Yes. From a credit perspective, the additional pressure on cash flows associated with higher levels of capital expenditures exerts corresponding pressure on credit metrics and, therefore, credit ratings. To that point, S&P explains the importance of regulatory support for large capital projects:

[58] Source: Company provided data.

> When applicable, a jurisdiction's willingness to support large capital projects with cash during construction is an important aspect of our analysis. This is especially true when the project represents a major addition to rate base and entails long lead times and technological risks that make it susceptible to construction delays. Broad support for all capital spending is the most credit- sustaining. Support for only specific types of capital spending, such as specific environmental projects or system integrity plans, is less so, but still favorable for creditors. Allowance of a cash return on construction work-in-progress or similar ratemaking methods historically were extraordinary measures for use in unusual circumstances, but when construction costs are rising, cash flow support could be crucial to maintain credit quality through the spending program. Even more favorable are those jurisdictions that present an opportunity for a higher return on capital projects as an incentive to investors.[59]

Therefore, to the extent that ETI's rates do not permit the opportunity to recover its full cost of doing business, the Company will face increased recovery risk and thus increased pressure on its credit metrics.

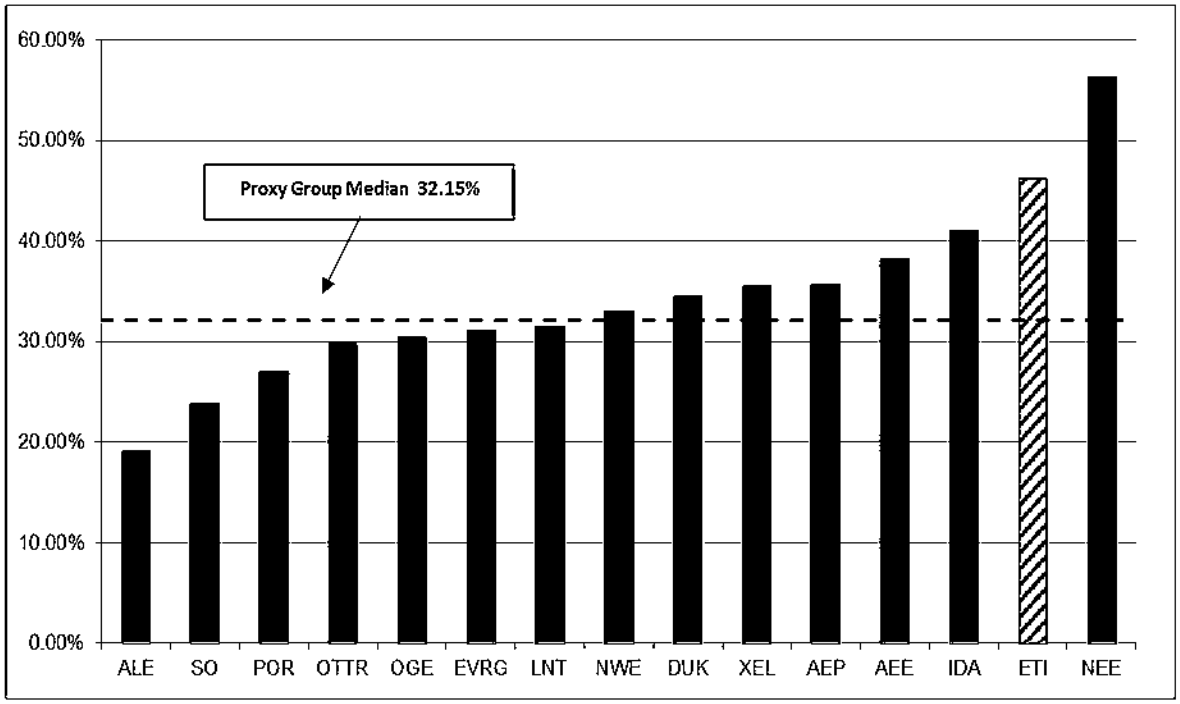
Q75. HOW DO ETI'S CAPITAL EXPENDITURE REQUIREMENTS COMPARE TO THOSE OF THE PROXY GROUP COMPANIES?

A. As shown in Exhibit AEB-8, I calculated the ratio of expected capital expenditures to net utility plant for ETI and each of the companies in the proxy group by dividing each company's projected capital expenditures for the period from 2022-2024 by its total net utility plant as of December 31, 2020. As shown in Exhibit AEB-8 (see also Figure 16 below), ETI's ratio of capital expenditures as a percentage of net utility plant of 46.24 percent is higher than the median of the proxy group companies of 32.15 percent. This result indicates a risk level that is greater than

[59] S&P Global Ratings, "Assessing U.S. Investor-Owned Utility Regulatory Environments," August 10, 2016, at 7.

that of the companies in the proxy group.

Figure 16: Comparison of Capital Expenditures to Proxy Group Companies



Q76. HAVE CREDIT RATING AGENCIES COMMENTED ON THE SIZE OF ETI'S CAPITAL SPENDING PROGRAM?

A. Yes. S&P has noted the sizeable capital spending program at ETI and has indicated that the Company will have negative discretionary cash flow as a result and require external financing. Specifically, S&P writes:

> In addition, we expect robust capital spending along with dividend payments to result in negative discretionary cash flow (DCF). The utility will therefore require external funding that could include debt issuances or capital infusions from the Entergy group.[60]

[60] S&P Global Ratings, Entergy Texas, Inc., October 13, 2021, at 6.

Q77. DOES ETI HAVE A CAPITAL TRACKING MECHANISM TO RECOVER THE COSTS ASSOCIATED WITH CAPITAL EXPENDITURES BETWEEN RATE CASES?

A. Yes. ETI is able to recover qualifying capital costs through the following capital tracking mechanisms:

- Distribution Cost Recovery Factor rider ("DCRF"): The Company is allowed to recover incremental distribution costs that were not included in the Company's last rate proceeding.
- Transmission Cost Recovery Factor Rider ("TCRF"): The Company is allowed to recover incremental transmission costs that were not included in the Company's last rate proceeding.
- Generation Cost Recovery Rider ("GCRR"): The Company is allowed to recover investments in power generation facilities between rate cases.

Through the capital tracking mechanisms, the Company will be able to recover its projected capital expenditures plans for 2022 through 2024, however there is a lag period associated with recovery as each rider is determined on a historical basis and are settled in separate filings between rate cases. The Company will still rely on future rate case filings for a portion of its capital expenditures plan for 2022-2026 and therefore the approved capital tracking mechanisms mitigate but do not eliminate the cost recovery risk associated with elevated capital expenditure plans. Furthermore, as shown in Exhibit AEB-9, approximately 54.93 percent of the proxy group utilities recover costs through capital tracking mechanisms. Therefore, the Company's capital tracking mechanisms result in a risk profile that is generally consistent with that of the proxy group companies.

Q78. WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECT OF THE COMPANY'S CAPITAL SPENDING REQUIREMENTS ON ITS RISK PROFILE AND COST OF CAPITAL?

A. The Company's capital expenditure requirements as a percentage of net utility plant are significant and will continue over the next few years. Additionally, the Company does have the ability to recover its capital expenditures plan through capital tracking mechanisms on a historical basis via separate filings. Similarly, a majority of the operating subsidiaries of the proxy group are able to recover capital expenditures between rate cases through a capital tracking mechanism.

B. Regulatory Risks

Q79. PLEASE EXPLAIN HOW THE REGULATORY ENVIRONMENT AFFECTS INVESTORS' RISK ASSESSMENTS.

A. The ratemaking process is premised on the principle that, for investors and companies to commit the capital needed to provide safe and reliable utility service, the subject utility must have the opportunity to recover the return of, and the market-required return on, invested capital. Regulatory authorities recognize that because utility operations are capital-intensive, regulatory decisions should enable the utility to attract capital at reasonable terms, and that doing so balances the long-term interests of investors and customers. Utilities must finance their operations and thus require the opportunity to earn a reasonable return on their invested capital to maintain their financial profiles. ETI is no exception, and in that respect, the regulatory environment is one of the most important factors considered in both debt

and equity investors' risk assessments.

From the perspective of debt investors, the authorized return should enable the utility to generate the cash flow needed to meet its near-term financial obligations, make the capital investments needed to maintain and expand its systems, and maintain the necessary levels of liquidity to fund unexpected events. This financial liquidity must be derived not only from internally generated funds, but also by efficient access to capital markets. Moreover, because fixed income investors have many investment alternatives, even within a given market sector, a utility's financial profile must be adequate on a relative basis to ensure its ability to attract capital under a variety of economic and financial market conditions.

Equity investors require that the authorized return be adequate to provide a risk-comparable return on the equity portion of the utility's capital investments. Because equity investors are the residual claimants on the utility's cash flows (i.e., the equity return is subordinate to interest payments), they are particularly concerned with the strength of regulatory support and its effect on future cash flows.

Q80. PLEASE EXPLAIN HOW CREDIT RATING AGENCIES CONSIDER REGULATORY RISK IN ESTABLISHING A COMPANY'S CREDIT RATING.

A. Both S&P and Moody's consider the overall regulatory framework in establishing credit ratings. Moody's establishes credit ratings based on four key factors: (1) regulatory framework; (2) the ability to recover costs and earn returns; (3) diversification; and (4) financial strength, liquidity and key financial metrics.

Of these criteria, regulatory framework and the ability to recover costs and earn returns are each given a broad rating factor of 25.00 percent. Therefore, Moody's assigns regulatory risk a 50.00 percent weighting in the overall assessment of business and financial risk for regulated utilities.[61]

S&P also identifies the regulatory framework as an important factor in credit ratings for regulated utilities, stating: "One significant aspect of regulatory risk that influences credit quality is the regulatory environment in the jurisdictions in which a utility operates."[62] S&P identifies four specific factors that it uses to assess the credit implications of the regulatory jurisdictions of investor-owned regulated utilities: (1) regulatory stability; (2) tariff-setting procedures and design; (3) financial stability; and (4) regulatory independence and insulation.[63]

Q81. HOW DOES THE REGULATORY ENVIRONMENT IN WHICH A UTILITY OPERATES AFFECT ITS ACCESS TO AND COST OF CAPITAL?

A. The regulatory environment can significantly affect both the access to and cost of capital in several ways. First, the proportion and cost of debt capital available to utility companies are influenced by the rating agencies' assessment of the regulatory environment. As noted by Moody's, "[f]or rate regulated utilities, which typically operate as a monopoly, the regulatory environment and how the utility

[61] Moody's Investors Service, "Rating Methodology: Regulated Electric and Gas Utilities" at 4 (June 23, 2017).

[62] Standard & Poor's Global Ratings, "Ratings Direct, U.S. and Canadian Regulatory Jurisdictions Support Utilities' Credit Quality—But Some More So Than Others" at 2 (June 25, 2018).

[63] *Id.* at 1.

adapts to that environment are the most important credit considerations."[64] Moody's further highlighted the relevance of a stable and predictable regulatory environment to a utility's credit quality, noting: "[b]roadly speaking, the Regulatory Framework is the foundation for how all the decisions that affect utilities are made (including the setting of rates), as well as the predictability and consistency of decision-making provided by that foundation."[65]

Q82. HAVE YOU CONDUCTED ANY ANALYSIS OF THE REGULATORY FRAMEWORK IN TEXAS RELATIVE TO THE JURISDICTIONS IN WHICH THE COMPANIES IN YOUR PROXY GROUP OPERATE?

A. Yes. I have evaluated the regulatory framework in Texas considering two factors which are important to ensuring ETI maintains access to capital at reasonable terms. As I will discuss in more detail below, the two factors are: 1) cost recovery mechanisms which allow a utility to recover costs in a timely manner between rate cases and provide the utility the opportunity to earn its authorized return; and 2) comparable return standard because an awarded ROE that is significantly below the ROEs awarded to other utilities with comparable risks can affect the ability of a utility to attract capital at reasonable terms.

[64] Moody's Investors Service, Rating Methodology: Regulated Electric and Gas Utilities at 6 (June 23, 2017).

[65] *Id.*

1. Cost Recovery Mechanisms

Q83. HAVE YOU CONDUCTED AN ANALYSIS TO COMPARE THE COST RECOVERY MECHANISMS OF TEXAS TO THE COST RECOVERY MECHANISMS APPROVED IN THE JURISDICTIONS IN WHICH THE COMPANIES IN YOUR PROXY GROUP OPERATE?

A. Yes. I selected four mechanisms that are important to provide a regulated utility an opportunity to earn its authorized ROE. These factors are: (1) fuel cost recovery; (2) the test year convention for ratemaking (i.e., forecast vs. historical test year); (3) use of revenue decoupling or other clauses that mitigate volumetric risk; and (4) prevalence of capital cost recovery between rate cases. The results of this cost recovery assessment are shown in Exhibit AEB-9 and are summarized below.

1. Fuel Cost Recovery: ETI has a Fixed Fuel factor which fully recovers fuel and purchased power costs. The Fixed Fuel factor recovers projected costs for the period when the Fixed Fuel factor will be in effect, subject to a true-up mechanism. This is consistent with the majority of the proxy group companies as approximately 90 percent of the operating companies held by the proxy group are allowed to pass through fuel costs and purchased power costs directly to customers, without deadbands, sharing bands and earnings tests.

2. Test Year Convention: ETI is relying on a historical test year ending December 31, 2021. Conversely, as shown in Exhibit AEB-9, approximately 49 percent of the operating companies held by the proxy group provide service in jurisdictions that use a fully or partially forecast

test year.

3. Volumetric Risk/Decoupling: ETI does not have protection against volumetric risk in Texas either through straight fixed variable rate design, a revenue decoupling mechanism or a formula rate plan. However, approximately 54 percent of the operating companies held by the proxy group have some form of non-volumetric rate design that allow them to break the link between customer usage and revenues.

4. Capital Cost Recovery: As discussed above, ETI does have capital tracking mechanisms which will allow the Company to recover a portion of its capital expenditures plan. Similarly, 54.93 percent of the operating companies held by the proxy group also have some form of capital cost recovery mechanism in place that allows for recovery of capital costs between rate cases.

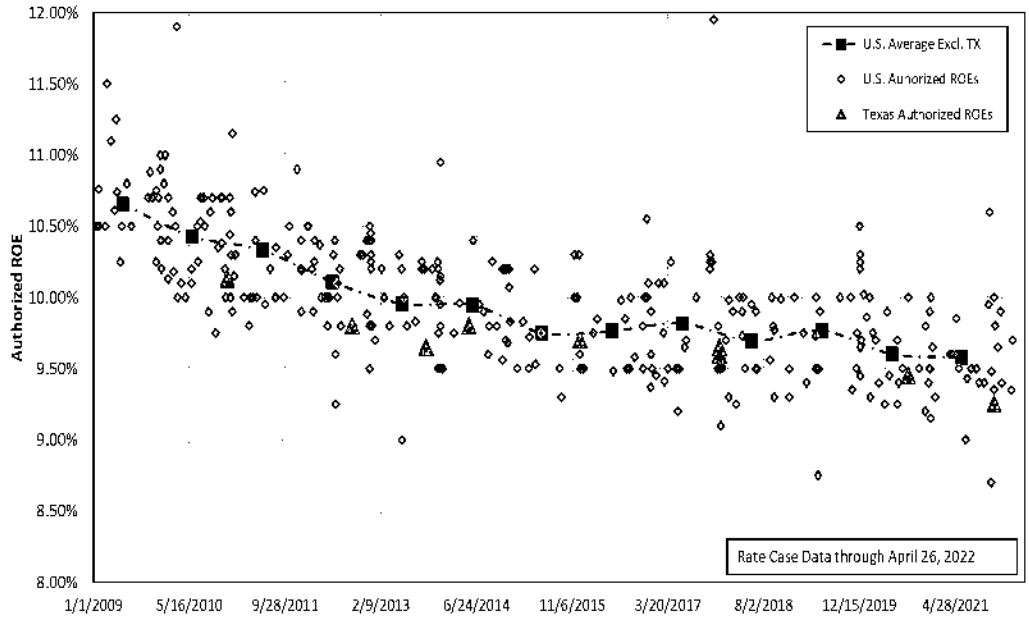
2. Authorized ROEs

Q84. HOW DO RECENT RETURNS IN TEXAS COMPARE TO THE AUTHORIZED RETURNS IN OTHER JURISDICTIONS?

A. Figure 17 below shows the authorized returns for vertically integrated electric utilities in other jurisdictions since January 2009, and the returns authorized in Texas for vertically integrated electric utilities. As shown in Figure 17, the Commission has historically authorized ROEs that were slightly below the average authorized ROEs nationally; however, in the most recent few years, the authorized returns for vertically integrated electric utilities in Texas were even further below

the average authorized ROE for other vertically integrated electric utilities.

Figure 17: Comparison of Texas and U.S. Authorized Vertically Integrated Electric Returns[66]



Q85. SHOULD THE COMMISSION BE CONCERNED ABOUT AUTHORIZING EQUITY RETURNS THAT ARE AT THE LOW END OF THE RANGE ESTABLISHED BY OTHER STATE REGULATORY JURISDICTIONS?

A. Yes. Placing ETI at the low end of authorized ROEs outside Texas over the longer term can negatively affect the Company's access to capital and the overall cost of capital. As I discuss below, the recent negative rate case determination, including a below average authorized ROE, for Arizona Public Service Company ("APS") resulted in a 24 percent decline in the share price for Pinnacle West Capital

[66] S&P Capital IQ Pro. Vertically Integrated Electric rate case decisions from January 1, 2009, through April 26, 2022. The chart does not display the 12.88% ROE that was authorized for Alaska Electric Light and Power on September 2, 2011. The chart also excludes the authorized returns in Vermont since they are established based on a formulaic approach that is directly linked to interest rates and therefore is affected by market conditions and monetary policy.

Corporation ("PNW"), increasing the overall cost of equity for that company.

Second, as noted in Sections V and VII, interest rates are expected to increase as the Federal Reserve normalizes monetary policy, and thus utilities are expected to underperform over the near-term. If utility stocks underperform over the near-term then utility dividend yields will increase resulting in higher estimates of the ROE results produced by the DCF model. Therefore, the results of the DCF model will underestimate investors' expected ROE over the time period in which ETI's rates will be in effect. As a result, it is important that the Commission consider the results of alternative methods such as the forward looking CAPM, ECAPM, and Bond Yield Plus Risk Premium and the returns that have been authorized by other electric utilities across the U.S.

Q86. DO CREDIT RATING AGENCIES CONSIDER THE AUTHORIZED ROE IN THE OVERALL RISK ASSESSMENT OF A UTILITY?

A. Yes, they do. To the extent that the returns in a jurisdiction are lower than the returns that have been authorized more broadly, credit rating agencies will consider this in the overall risk assessment of the regulatory jurisdiction in which the company operates. It is important to consider credit ratings because they affect the overall cost of borrowing, and they act as a signal to equity investors about the risk of investing in the equity of a company. Therefore, lower credit ratings can affect both the cost of debt and equity. Examples of recent credit rating agency responses include ALLETE, Inc., CenterPoint Energy Houston Electric and PNW. Moody's downgraded ALLETE, Inc. from A3 to Baa1 primarily based on the less than

favorable outcome in Minnesota Power's last fully litigated rate case in Minnesota, which included what Moody's noted was a below average authorized ROE of 9.25 percent.[67] In addition, FitchRatings downgraded CenterPoint Energy Houston Electric's ("CEHE") Long-Term Issuer Default rating from A- to BBB+ and revised the rating outlook from Stable to Negative following the approval of an unfavorable outcome by the Commission in a recent rate case.[68] Finally, FitchRatings recently downgraded and maintained a negative outlook for APS and its parent, PNW, following the hearings conducted by the Arizona Corporation Commission ("ACC") in October 2021 regarding APS' current rate case proceeding.[69] While the ACC had not issued a final order in APS' rate case at the time, FitchRatings noted that the developments at the hearing in October indicate a likely credit negative outcome that will negatively affect the financial metrics of both APS and PNW. It is also important to note that both Standard & Poor's and Moody's downgraded PNW's and APS' credit rating and put the companies on credit watch negative following the Commission's November vote that officially authorized the 8.70 percent ROE.[70]

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[67] Moody's Investors Service, Credit Opinion: ALLETE, Inc. Update following downgrade, at 3 (Apr. 3, 2019).

[68] FitchRatings, Fitch Downgrades CenterPoint Energy Houston Electric to BBB+; Affirms CNP; Outlooks Negative, February 19, 2020.

[69] FitchRatings, "Fitch Downgrades Pinnacle West Capital & Arizona Public Service to 'BBB+'; Outlooks Remain Negative," (Oct. 12, 2021).

[70] *See* S&P Capital IQ and Moody's Investors Service, "Rating Actions: Moody's downgrades Pinnacle West to Baa1 and Arizona Public Service to A3; outlook negative," (Nov. 17, 2021).

Q87. ARE YOU AWARE OF ANY UTILITIES WHOSE STOCK PRICE HAS BEEN AFFECTED BY ADVERSE RATE CASE DEVELOPMENTS?

A. Yes, I am. The market has responded negatively to recent returns authorized by the ACC. As noted above, the most recent ROE determination in Arizona was for APS. The Recommended Opinion and Order ("ROO") issued in the APS rate proceeding on August 2, 2021, recommended an ROE of 9.16 percent. In October 2021, that recommendation was amended to reduce the company's ROE to 8.70 percent.[71] The final ROE that was established for APS was 8.70 percent. The market reacted strongly to the proposed order and subsequent amendment and final decision. Guggenheim Securities LLC, an equity analyst that follows Pinnacle West Capital Corporation, the parent company of APS, informed its clients that:

> [T]he "Arizona Corporation Commission is now confirmed to be the single most value destructive regulatory environment in the country as far as investor-owned utilities are concerned."[72]

S&P Global Market Intelligence (Regulatory Research Associates) noted that this decision was "among the lowest ROEs RRA had encountered in its coverage of vertically integrated electric utilities in the past 30 years."[73]

As shown in Figure 18 below, PNW's stock price declined approximately 24 percent from August 2, 2021 to November 4, 2021 following the issuance of the ROO, which recommended an ROE of 9.16 percent, and then the subsequent

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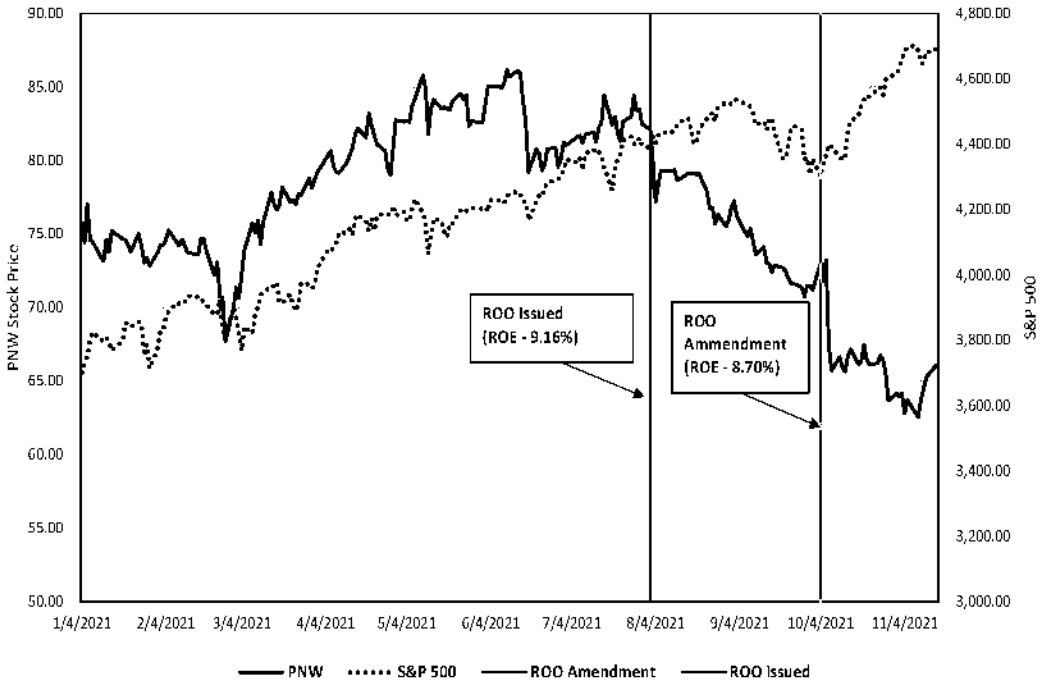
[71] Arizona Corporation Commission Docket No. E-01345A-19-0236, Commissioner Olson Proposed Amendment No. 1 to the Recommended Opinion and Order. (Oct. 4, 2021).

[72] S&P Global Market Intelligence, "Pinnacle West shares tumble after regulators slash returns in rate case," October 7, 2021.

[73] S&P Global Market Intelligence, RRA Regulatory Focus, "Commission accords Arizona Public Service Company a well below average ROE," October 8, 2021.

amendment to that opinion recommending the 8.70 percent ROE ultimately adopted by the ACC.

Figure 18: Pinnacle West Capital Stock Price vs. S&P 500 utilities



Q88. HOW SHOULD THE COMMISSION USE THE INFORMATION REGARDING AUTHORIZED ROES IN OTHER JURISDICTIONS IN DETERMINING THE ROE FOR ETI?

A. As discussed above, the companies in the proxy group operate in multiple jurisdictions across the U.S. Since ETI must compete directly for capital with investments of similar risk, it is appropriate to consider the authorized ROEs in other jurisdictions. The comparison is important because investors are considering the authorized returns across the U.S. and are likely to invest equity in those utilities with the highest returns.

3. State Jurisdictional Regulatory Environment Comparisons

Q89. HAVE YOU DEVELOPED ANY ADDITIONAL ANALYSES TO EVALUATE THE REGULATORY ENVIRONMENT IN TEXAS AS COMPARED TO THE JURISDICTIONS IN WHICH THE COMPANIES IN YOUR PROXY GROUP OPERATE?

A. Yes. I have conducted two additional analyses to compare the regulatory framework of Texas to the jurisdictions in which the companies in the proxy group operate. Specifically, I considered two different rankings: (1) the Regulatory Research Associates ("RRA") ranking of regulatory jurisdictions; and (2) S&P's ranking of the credit supportiveness of regulatory jurisdictions.

Q90. PLEASE EXPLAIN HOW YOU USED THE RRA RATINGS TO COMPARE THE REGULATORY JURISDICTIONS OF THE PROXY COMPANIES WITH THE COMPANY'S REGULATORY JURISDICTION.

A. RRA develops their ranking based on their assessment of how investors perceive the regulatory risk associated with ownership of utility securities in that jurisdiction, specifically reflecting their assessment of the probable level and quality of earnings to be realized by the State's utilities as a result of regulatory, legislative, and court actions. RRA assigns a ranking for each regulatory jurisdiction between "Above Average/1" to "Below Average/3," with nine total rankings between these categories. I applied a numeric ranking system to the RRA rankings with "Above Average/1" assigned the highest ranking ("1") and "Below Average/3" assigned the lowest ranking ("9"). As shown in Exhibit AEB-10 the

Texas jurisdictional ranking ("Average/3" - "6.0") was below the proxy group average ranking ("Average/1 – Average/2" - "4.51") from RRA.

Q91. HOW DID YOU CONDUCT YOUR ANALYSIS OF THE S&P CREDIT SUPPORTIVENESS?

A. For credit supportiveness, S&P classifies each regulatory jurisdiction into five categories that range from "Credit Supportive" to "Most Credit Supportive." My analysis of the credit supportiveness of the regulatory jurisdictions that the proxy companies operate in, as compared with the Company's regulatory jurisdiction, was similar to the analysis of the RRA overall regulatory ranking discussed above. I assigned a numerical ranking to each category, from Most Credit Supportive ("1") to Credit Supportive ("5"). As shown in Exhibit AEB-11, the proxy group average ranking was 2.39, which would be classified between "Highly Credit Supportive" and "Very Credit Supportive." This is slightly higher than the Texas jurisdictional classification of "Very Credit Supportive" ("3").

Q92. WHAT ARE YOUR CONCLUSIONS REGARDING THE PERCEIVED RISKS RELATED TO THE TEXAS REGULATORY ENVIRONMENT?

A. As discussed throughout this section of my testimony, both Moody's and S&P have identified the supportiveness of the regulatory environment as an important consideration in developing their overall credit ratings for regulated utilities. Considering the regulatory adjustment mechanisms, many of the companies in the proxy group have timely cost recovery through fuel cost recovery mechanisms,

forecast test years, capital cost recovery trackers and revenue stabilization mechanisms. While ETI has capital tracking mechanisms, the Company does not have protection against volumetric risk and relies on a historical test year. Additionally, authorized ROEs in Texas have been below the average authorized ROEs for vertically integrated electric utilities across the U.S. Finally, RRA recently downgraded the RRA jurisdictional ranking for Texas in May 2021; thus, a comparison of Texas' RRA jurisdictional ranking to the proxy group indicates greater perceived investor risk than the average for the proxy group. For these reasons, I conclude that ETI has greater than average regulatory risk when compared to the proxy group, indicating that the authorized ROE for ETI should be higher than the proxy group median.

C. Customer Concentration

Q93. HAVE YOU CONSIDERED ANY OTHER BUSINESS RISKS FACED BY ETI?

A. Yes. I have also considered the risks related to ETI's overall customer concentration.

Q94. PLEASE SUMMARIZE ETI'S CUSTOMER CONCENTRATION RISK.

A. As noted above, ETI is a wholly owned subsidiary that provides electricity to approximately 486,000 customers in 27 counties in Texas.[74] Retail sales in Texas

[74] Entergy Texas, Inc. https://www.entergy-texas.com/about-us, accessed May 4, 2022.

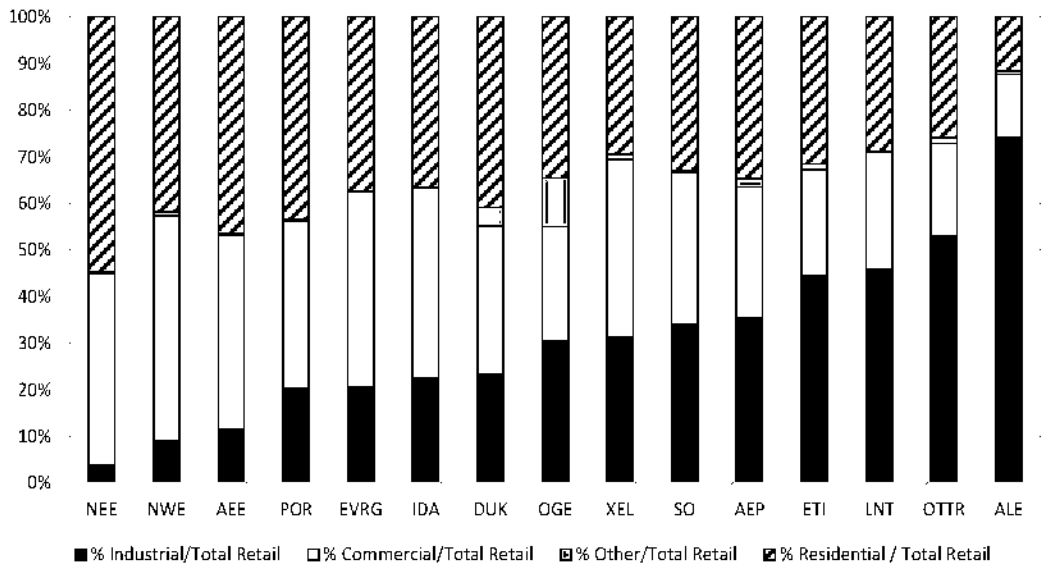
in 2021 were approximately 22,051,000 MWh.[75] The Company's service area is in Southeast Texas, where a number of ETI's industrial customers are engaged in the extraction and transportation of natural gas and crude oil, the manufacturing of equipment and machinery for the extraction and production of crude oil and natural gas and other support for the production of oil and natural gas. As I will discuss in more detail below, the oil and natural gas industry represents a large portion of the economy in Southeast Texas and supports the Company's residential, commercial, and industrial customers.[76] Approximately 44 percent of ETI's 2021 total retail kWh electric sales in Texas were derived from industrial customers. As shown in Figure 19, ETI's industrial sales volume as a percentage of total retail electric sales was higher than all but three of the companies in the proxy group.[77]

[75] Entergy Texas, Inc. SEC Form 10-K, December 31, 2020, at 402.

[76] Entergy Texas, Inc. SEC Form 10-K, December 31, 2021, at 237.

[77] Does not include "other," commercial or residential customers.

Figure 19: Customer Concentration[78]



Q95. HOW DOES CUSTOMER CONCENTRATION AND THE COMPANY'S SERVICE TERRITORY AFFECT BUSINESS RISK?

A. An extremely high concentration of industrial customers results in higher business risk. Since the customers are large, they can represent a significant portion of a company's sales which could be lost if a customer goes out of business. Moreover, the loss of large industrial customers would have an effect on the local economy which would ultimately also affect the sales to residential and commercial customers. As noted by Dhaliwal, Judd, Serfling and Shaikh in their article, *Customer Concentration Risk and the Cost of Equity Capital*:

> Depending on a major customer for a large portion of sales can be risky for a supplier for two primary reasons. First, a supplier faces the risk of losing substantial future sales if a major customer becomes financially distressed or declares bankruptcy, switches to a

[78] S&P Capital IQ Pro - Other sales includes: Total Public Street and Highway Lighting, Other Sales to Public Authorities, Sales to Railroad and Railways, and Interdepartmental Sales.

> different supplier, or decides to develop products internally. Consistent with this notion, Hertzel et al. (2008) and Kolay et al. (2015) document negative supplier abnormal stock returns to the announcement that a major customer declares bankruptcy. Further, a customer's weak financial condition or actions could signal inherent problems about the supplier's viability to its remaining customers and lead to compounding losses in sales. Second, a supplier faces the risk of losing anticipated cash flows from being unable to collect outstanding receivables if the customer goes bankrupt. This assertion is consistent with the finding that suppliers offering customers more trade credit experience larger negative abnormal stock returns around the announcement of a customer filing for Chapter 11 bankruptcy (Jorion and Zhang, 2009; Kolay et al., 2015).[79]

Therefore, a company that has a high degree of customer concentration will be inherently riskier than a company that derived income from a larger customer base. Furthermore, as Dhaliwal, Judd, Serfling and Shaik detail in the article, the increased risk associated with a more concentrated customer base will have the effect of increasing a company's cost of equity.[80] In addition, larger industrial customers have the option to self-generate or relocate operations to take advantage of lower-cost regions with respect to labor and operating costs. Furthermore, industrial customer load is very dependent on economic conditions, resulting in large decreases in demand if operations are closed in weak economic periods. Therefore, ETI's customer composition with a large percentage of industrial load results in increased risk of volatility with respect to sales, earnings, and cash flow.

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[79] Dhaliwal, Dan S., J. Scott Judd, Matthew A. Serfling, and Sarah Shaikh. "Customer Concentration Risk and the Cost of Equity Capital." *SSRN Electronic Journal* (2016): 1-2. Web.

[80] *Id.* at 4.

Q96. PLEASE DESCRIBE HOW CHANGES IN ECONOMIC CONDITIONS AND THE INTERDEPENDENT NATURE OF ETI'S SERVICE TERRITORY CAN AFFECT ITS BUSINESS RISK.

A. While ETI does not depend on any one major customer, the Company has a high concentration of industrial customers. ETI's major industrial customers are engaged in industries such as production of crude oil and natural gas and chemical industries.[81] Additionally, Texas' state economy and specifically ETI's service territory in southeastern Texas depends on the oil and natural gas production industry; thus, the industry also supports the Company's commercial and residential customers. It is well-documented that the oil and natural gas production industry are very cyclical. Additionally, like other industries, the oil and natural gas production industries are also dependent on the general business cycle. As a result, the production of the customers could change based on general or industry specific economic conditions thereby impacting the customers' energy consumption.

Furthermore, the oil and natural gas production industries could also be facing a downward trend in overall demand over the long-term given state, national and global initiatives to significantly reduce carbon emissions by 2050. In addition, achieving long-term carbon emissions goals requires the steady reduction in emissions over time which means investment is needed in the near-term to begin to reduce the carbon emissions associated with natural gas and oil production.

[81] Entergy Texas, Inc. SEC Form 10-K, December 31, 2021, at 237.

Companies are currently weighing the cost/benefit of making additional investments over the near-term to increase oil and natural gas production in industries that could face significant declines in demand over time to meet long-term carbon emissions standards. Furthermore, the oil and gas industry much like most industries across the U.S. are also experiencing labor shortages and supply chain issues which are making it difficult to increase production even though the price of oil has increased recently. As noted in a recent article in *The Texas Tribune*, it is going to be difficult to increase oil production in Texas due to supply chain issues, labor shortages, investor pressures associated with both climate change as well as the requirement for oil producers to provide better returns on investment:

> Cranking up production requires more workers, materials and money, and people in the industry say they're facing the same labor shortages and supply chain issues that have plagued countless businesses throughout the COVID-19 pandemic. On top of that, they say Wall Street investors have become more hesitant about pouring money into fossil fuels, and the Biden administration's policies are hampering the oil and gas industry.
>
> ***
>
> Prior to the pandemic, Wall Street was already starting to see oil and gas as a riskier investment because of environmental concerns, said Steven Beach, dean of the business school at the University of Texas Permian Basin.
>
> For example, the Rockefeller family — which became wealthy and famous in the late 1800s from founding the Standard Oil empire, whose successors include Chevron and ExxonMobil — sold off all its fossil fuel investments in 2015 because of concerns about climate change.
>
> Other investors have cooled on the energy sector for purely bottom-line reasons. More than half of 132 oil and gas executives surveyed by the Dallas Fed said this week that pressure by investors to provide a better return on investments is the main reason energy companies

are "restraining growth despite high oil prices."[82]

This means the oil and natural gas industry in South East Texas is unlikely to experience significant growth even if commodity prices continue to increase in the near-term. The lack of growth in the near-term and the expected decline in demand for oil and natural gas over the long-term, increases uncertainty and the risk for ETI because as I will discuss in more detail below, the economy of the Company's service territory is heavily dependent on the oil and natural gas industry.

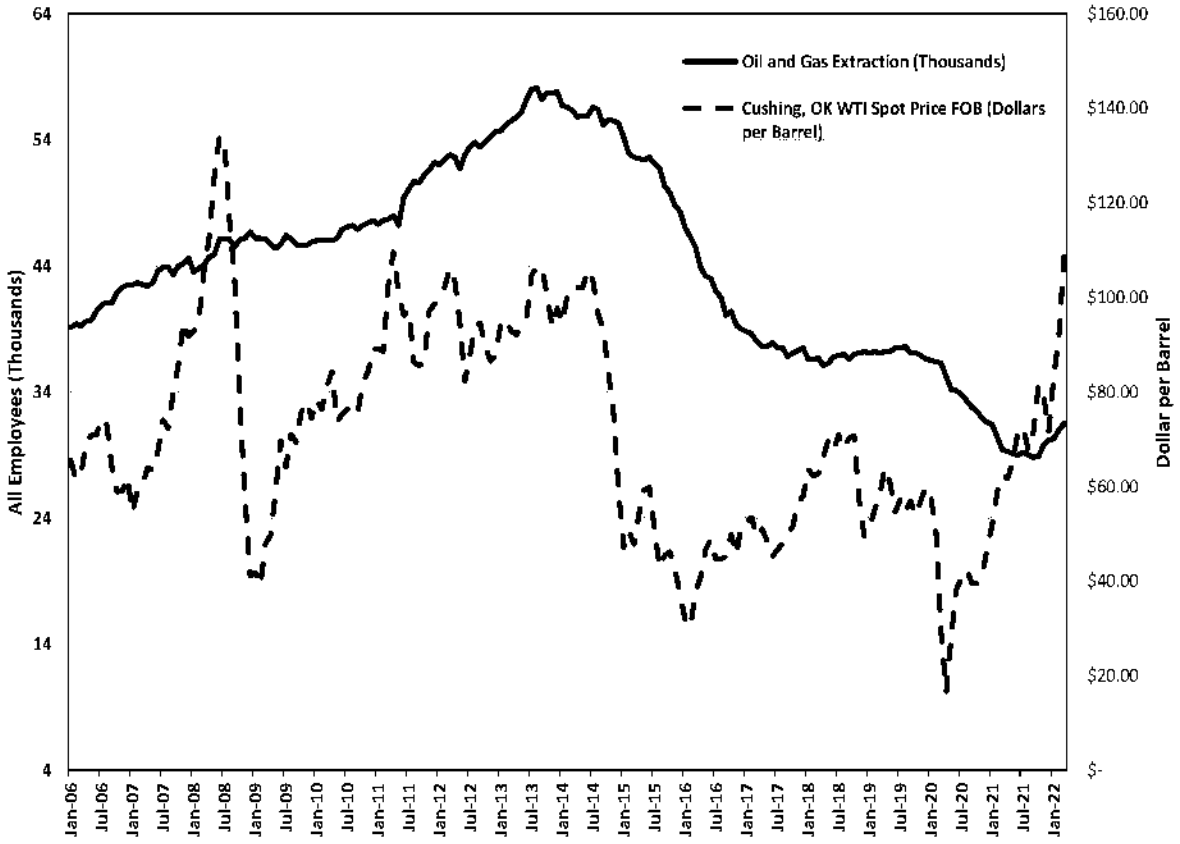
Q97. HOW HAS EMPLOYMENT IN THE OIL AND NATURAL GAS PRODUCTION INDUSTRY FARED IN RECENT ECONOMIC CONDITIONS?

A. Figure 20 below contains data on oil and gas extraction employment for the Houston-The Woodlands-Sugar Land, TX Metropolitan Statistical Area ("MSA") which includes part of ETI's service territory from January 2006 through March 2022. As shown in Figure 20, oil and gas extraction employment has been highly dependent on the price of oil which has been very volatile since 2006. In fact, the decline in the price of oil that began in 2014 and ended in 2016 resulted in a decrease in oil and gas extraction employment in the Houston-The Woodlands-Sugar Land, TX MSA from 56,600 in July 2014 to 39,000 by December 2016 (i.e., a decline of approximately 31 percent). Furthermore, while oil prices have increased significantly over the past year from the lows in 2020 that occurred as a

[82] Ferman, Mitchell. "In Texas, Calls to Boost U.S. Oil Production after Russian Invasion Run into Hard Realities." *The Texas Tribune*, March 25, 2022, https://www.texastribune.org/2022/03/25/texas-permian-basin-oil-russia-invasion/.

result of the COVID-19 pandemic, oil and gas extraction employment has not yet similarly recovered due in part to carbon emissions standards, labor shortages, supply chain issues and investors, discussed above.

Figure 20: Houston-The Woodlands-Sugar Land, TX MSA Oil and Gas Extraction Employment (Thous.) & West Texas Intermediate Spot Price for a Barrel of Oil[83]



Q98. ARE ETI'S ELECTRIC SALES DEPENDENT ON THE NATURAL GAS AND OIL PRODUCTION INDUSTRY?

A. Yes. As discussed above, a large portion of the Company's electric sales were to industrial customers a number of which operate in the refining industries.[84]

[83] Source: Bureau of Labor Statistics and the EIA.

[84] Entergy Texas, Inc. SEC Form 10-K, December 31, 2021, at 237.

Moreover, since the economy in southeastern Texas is heavily reliant on the oil and natural gas production industry, ETI's commercial and residential customers also rely on the industry for sales and employment. For example, according to the Southeast Texas Economic Development Foundation, Southeast Texas:

1. Is the location of North America's largest Oil Refinery.
2. Stores 55 percent of the nation's strategic oil reserves.
3. Has the 3rd largest refining capacity in the United States.
4. Refines a minimum of 13 percent of the U.S.'s daily fuel consumption.[85]

In addition, there are nine refineries located in ETI's service territory that process 2.3 million barrels of crude oil per day.[86] Therefore, fluctuations in the price of oil as a result of the overall business cycle or external events that occur in the industry as well as the expected overall decline in the demand for oil over the long-term due to carbon emission standards and goals could have a significant effect on the economic conditions in ETI's service territory in the near- and long-term. This could result in a reduction in sales to industrial customers. Additionally, if industrial customers reduce output, the effect would be compounded by a decline in local employment which would also reduce the electric sales for ETI's residential and commercial customers.

[85] Southeast Texas Economic Development Foundation, It's On Southeast Texas infographic, https://www.setedf.org/itson/setedf-infographic-its-on.jpg.

[86] Company website: https://goentergy.com/key-industries/energy-services-manufacturing/.

Q99. WHAT IS YOUR CONCLUSION REGARDING THE COMPANY'S CUSTOMER CONCENTRATION AND ITS EFFECT ON THE COST OF EQUITY FOR ETI?

A. ETI is heavily reliant on sales to industrial customers. As noted above, approximately 44 percent of ETI's 2021 total electric sales in Texas were to industrial customers. This concentration is higher than all but three of the proxy group companies. A high degree of customer concentration increases ETI's risk related to customer migration and changes in economic conditions. This risk is greater in ETI's service territory because the residential and commercial customers rely on the success of the oil and natural gas production industry for sales and employment. Increased customer and economic diversity decreases the effect that any one customer or industry can have on a company's sales. Thus, ETI's service territory, where industrial customers represent a large portion of electric sales and commercial and residential customers rely economically on the success of the one industry segment, implies that ETI has an above average risk profile when compared to the companies in the proxy group.

D. Storm Risk

Q100. PLEASE SUMMARIZE THE RISK TO ETI FOR STORM DAMAGE.

A. The ETI service territory is in the Gulf Coast region, making the territory susceptible to extreme weather conditions, including significant storms throughout hurricane season and extreme winter storms that can result in extensive damage to the generation, transmission and distribution operations of the Company. This

extreme weather and the costs of restoration create significant financial risk for ETI.

Q101. PLEASE SUMMARIZE THE RECENT STORM RELATED DAMAGE TO THE ETI SYSTEM.

A. In August and October 2020, Hurricane Laura and Hurricane Delta caused extensive damage to the ETI system. In addition, in February 2021, Winter Storm Uri caused damage to the ETI system. The total cost of these events was over $250 million in restoration costs.

Q102. HOW DOES STORM RISK AFFECT ETI?

A. Due to the location of the system and the severe seasonal weather, storm-related restoration is a significant financial risk factor for ETI. The magnitude of the recovery expenses related to winter storms and hurricanes require access to capital without notice, making it imperative that the Company maintain access to capital on reasonable terms at all times. The costs related to these three particular storms have been addressed through a regulatory proceeding, and a settlement was reached regarding the recovery of these restoration costs. It is necessary, however that there be continued strong regulatory support for ETI, both in the determination of recovery of the costs of specific storms and by ensuring that the overall cost of capital is sufficient to attract capital on reasonable terms at all times.

E. Management Performance and Recognition

Q103. PLEASE SUMMARIZE THE PUBLIC UTILITY REGULATORY ACT AS IT PERTAINS TO CONSIDERATION OF PERFORMANCE FACTORS IN THE UTILITY'S REVENUE REQUIREMENT.

A. PURA § 36.052 states that "in establishing a reasonable return on invested capital, the regulatory authority shall consider applicable factors, including: (1) the efforts and achievements of the utility in conserving resources; (2) the quality of the utility's services; (3) the efficiency of the utility's operations; and (4) the quality of the utility's management."

Q104. HAS THE COMMISSION CONSIDERED PERFORMANCE-BASED ADJUSTMENTS TO THE ROE?

A. Yes. As discussed in the testimony of Mr. Jess Totten, the Commission has considered negative adjustments to the ROE to reflect poor service quality within the service territory of a utility. In particular, Mr. Totten discussed the recent Southwest Electric Power Company case where Commission Staff, the Administrative Law Judges ("ALJs") and individual commissioners recommended a reduction to the ROE for poor performance, specifically because of a transmission line outage and poor SAIDI and SAIFI scores.[87]

[87] *Application of Southwestern Electric Power Company for Authority to Change Rates,* Docket No. 51415, Proposal for Decision at 139-140.

Q105. PLEASE EXPLAIN WHY THE COMPANY'S PERFORMANCE SHOULD BE CONSIDERED IN ESTABLISHING ETI'S ROE.

A. It is reasonable and appropriate that the Commission consider performance symmetrically. Therefore, to the extent that there is a demonstration of performance that exceeds expectations, it would be reasonable to provide an upward adjustment to the ROE. As discussed in the testimony of Mr. Totten, there are four key demonstrations of strong management performance for ETI: low retail rates, low O&M costs, reliability of service, and effective and efficient performance in challenging circumstances.

Q106. PLEASE PROVIDE AN OVERVIEW OF ETI'S PROGRAMS AND INITIATIVES RELATED TO MANAGEMENT PERFORMANCE.

A. As described in the testimony of Jess Totten and further explained in the testimonies of several Company witnesses, these performance achievements relate to recovery from Hurricanes Laura and Delta, the completion of the Montgomery County generating plant, and strong customer service initiatives.

Q107. PLEASE SUMMARIZE THE COMPANY'S STORM PERFORMANCE.

A. As described in the testimony of Jess Totten, in 2020 ETI faced the effects of two hurricanes, Laura and Delta. Hurricane Laura was a Category 4 storm. Both Laura and Delta caused significant damage in the ETI service territory. ETI's storm response was effective; mobilizing 7,000 personnel to complete restoration efforts and restoring service to 83 percent of its customers within seven days after Laura.

Delta required the mobilization of 2,000 personnel, restoring service to 95 percent of its customers by day five.

Q108. HOW DID THE COMPANY DEMONSTRATE SUPERIOR PERFORMANCE IN BRINGING THE MONTGOMERY COUNTY GENERATION ASSET ONLINE?

A. As discussed in Mr. Totten's testimony, ETI brought the Montgomery County generating asset, a 993 MW combined cycle facility, online ahead of schedule and under budget, despite the complications caused by contractor failures, hurricanes, and the effects of COVID-19. ETI established effective oversight procedures and corrective measures to address each set challenges that arose through the duration of the construction cycle resulting in the completion of the project, under budget and six months prior to the planned in-service date.

Q109. PLEASE DESCRIBE THE CUSTOMER SERVICE EFFORTS AT ETI.

A. As discussed in the testimony of Eliecer Viamontes, Entergy Corporation has been recognized for its customer service programs such as the Low Income Home Energy Assistance Program ("LIHEAP"), providing $65.4 million in assistance to low income customers. This program won the "Best Economic Opportunity and Empowerment Program" award from the U.S Chamber of Commerce.[88]

[88] Available at https://www.uschamberfoundation.org/citizens-awards/2021-winners.

Q110. HAVE YOU CONSIDERED THE MANAGEMENT PERFORMANCE OF ETI IN YOUR RECOMMENDATION?

A. As discussed above, a reasonable range of ROE estimates for ETI is from 9.95 percent to 11.10 percent, I recommend an ROE of 10.50 percent for ETI based on my analytical results. In addition, as discussed in Mr. Totten's testimony, the Company is proposing an adjustment of 30 basis points based on the three areas of strong management performance: (1) low retail rates and low O&M costs, (2) storm response, and (3) managing the construction and in-service date of MCPS.

Q111. IS THE COMMISSION PROHIBITED FROM PROVIDING INCREASES IN THE ROE FOR STRONG MANAGEMENT PERFORMANCE?

A. Not at all. In fact, PURA § 36.052 requires the Commission to consider certain factors in setting the return on equity. It would be reasonable to consider these factors symmetrically; as positive adjustments for strong performance and negative adjustments for poor performance.

IX. CAPITAL STRUCTURE

Q112. IS THE CAPITAL STRUCTURE OF THE COMPANY AN IMPORTANT CONSIDERATION IN THE DETERMINATION OF THE APPROPRIATE ROE?

A. Yes. All else equal, a higher debt ratio increases the risk to investors. For debt holders, higher debt ratios result in a greater portion of the available cash flow being

required to meet debt service, thereby increasing the risk associated with the payments on debt. The result of increased risk is a higher interest rate. The incremental risk of a higher debt ratio is more significant for common equity shareholders, who are the residual claimants on the cash flow of the Company. Therefore, the greater the debt service requirement, the less cash flow is available for common equity holders.

Q113. WHAT IS ETI'S PROPOSED CAPITAL STRUCTURE?

A. ETI is proposing a capital structure that is composed of 51.21 percent common equity, 0.81 percent preferred stock and 47.97 percent long-term debt.

Q114. HAVE YOU ANALYZED THE CAPITAL STRUCTURES OF THE PROXY GROUP COMPANIES?

A. Yes. I calculated the mean proportions of common equity, long-term debt and preferred equity for the most recent eight quarters[89] for each of the companies in the proxy group at the operating subsidiary level. Because the cost of equity is established based on the return that is derived from the risk-comparable proxy group, it is reasonable to look to the proxy group average capital structure to benchmark the equity ratio for the Company. As shown in Exhibit AEB-12, the equity ratios for the utility operating subsidiaries of the proxy group range from

[89] The source data for this analysis is the operating company data provided in FERC Form 1 reports. Due to the timing of those filings, my average capital structure analysis uses the quarterly capital structures reported for the proxy group companies for the period from first quarter of 2020 through the fourth quarter of 2021.

47.22 percent to 61.49 percent, with a median of 53.68 percent. ETI's proposed equity ratio of 51.21 percent is below the median and well within the range of equity ratios of the proxy group. Accordingly, I consider the proposed equity ratios to be reasonable.

Q115. WILL THE CAPITAL STRUCTURE AND ROE AUTHORIZED IN THIS PROCEEDING AFFECT THE COMPANY'S ACCESS TO CAPITAL AT REASONABLE RATES?

A. Yes. The level of earnings authorized by the Commission directly affects the Company's ability to fund its operations with internally generated funds. Both bond investors and rating agencies expect a significant portion of ongoing capital investments to be financed with internally generated funds. In addition, it is important to recognize that because a utility's investment horizon is very long, investors require the assurance of a sufficiently high return to satisfy the long-run financing requirements of the assets placed into service. Those assurances, which often are measured by the relationship between internally generated cash flows and debt (or interest expense), depend quite heavily on the capital structure. As a consequence, both the ROE and capital structure are very important to debt and equity investors. Furthermore, considering the capital market conditions discussed in Section V, the authorized ROE and capital structure take on even greater significance.

X. CONCLUSION AND RECOMMENDATION

Q116. WHAT IS YOUR CONCLUSION REGARDING A FAIR ROE FOR ETI?

A. As discussed throughout my testimony, the authorized ROE should be a forward-looking estimate; therefore, the analyses supporting my recommendation rely on forward-looking inputs and assumptions (e.g., projected earnings growth rates in the DCF model, forecasted risk-free rate and market risk premium in the CAPM analyses) and take into consideration capital market conditions, including the expected increasing interest rate environment and the underperformance of utility stocks as the economy emerges from the pandemic. The authorized ROE should also consider the relative regulatory, business, and financial risks of ETI compared to the proxy group.

As discussed previously, the cost of equity ranges from 9.95 percent to 11.10 percent considering the results of all of the models presented in Figure 21. Within this range, taking into consideration current and projected capital market conditions, as well as the specific risk factors discussed for ETI, I conclude that the Company's requested ROE of 10.80 percent which is based on a 10.50 percent rate of return resulting from the analytical model results, and a 30 basis point adder for performance, is reasonable.

Figure 21: Summary of Results

Constant Growth DCF			
	Median Low	Median	Median High
30-Day Average	8.38%	9.53%	10.20%
90-Day Average	8.37%	9.53%	10.24%
180-Day Average	8.43%	9.65%	10.30%
CAPM			
	Current 30-day Average Treasury Bond Yield	Near-Term Blue Chip Forecast Yield	Long-Term Blue Chip Forecast Yield
Value Line Beta	11.47%	11.55%	11.59%
Bloomberg Beta	10.67%	10.81%	10.87%
Long-Term Avg. Beta	10.06%	10.25%	10.32%
ECAPM			
Value Line Beta	11.77%	11.84%	11.86%
Bloomberg Beta	11.17%	11.28%	11.32%
Long-Term Avg. Beta	10.72%	10.86%	10.91%
Risk Premium			
	Current 30-day Average Treasury Bond Yield	Near-Term Blue Chip Forecast Yield	Long-Term Blue Chip Forecast Yield
Risk Premium Results	9.68%	10.00%	10.13%

Q117. WHAT IS YOUR CONCLUSION WITH RESPECT TO ETI'S REQUESTED CAPITAL STRUCTURE?

A. My conclusion is that ETI's requested capital structure consisting of 51.21 percent common equity, 0.81 percent preferred stock and 47.97 percent long-term debt is reasonable.

Q118. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

AFFIDAVIT

COMMONWEALTH OF MASSACHUSETTS)

) ss.

COUNTY OF MIDDLESEX)

Ann E. Bulkley, first being sworn on her oath, states:

I am the witness identified in the preceding testimony. I have read the direct testimony and the accompanying attachments and am familiar with their contents. Based upon my personal knowledge, the facts stated in the testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.

ANN E. BULKLEY

SUBSCRIBED AND SWORN TO before me this ___ day of June, 2022.

Notary Public of the Commonwealth of Massachusetts

My Commission Expires: 11-02-2023

PATRICIA MAHER
Notary Public
Commonwealth of Massachusetts
My Commission Expires
November 2, 2023

Brattle

Ann E. Bulkley

PRINCIPAL

Boston 508.981.0866 Ann.Bulkley@brattle.com

With more than 25 years of experience in the energy industry, Ms. Bulkley specializes in regulatory economics for the electric and natural gas sectors, including rate of return, cost of equity, and capital structure issues.

Ms. Bulkley has extensive state and federal regulatory experience, and she has provided expert testimony on the cost of capital in nearly 100 regulatory proceedings before 32 state regulatory commissions and the Federal Energy Regulatory Commission (FERC).

In addition to her regulatory experience, Ms. Bulkley has provided valuation and appraisal services for a variety of purposes, including the sale or acquisition of utility assets, regulated ratemaking, ad valorem tax disputes, and other litigation purposes. In addition, she has experience in the areas of contract and business unit valuation, strategic alliances, market restructuring, and regulatory and litigation support.

Ms. Bulkley is a Certified General Appraiser licensed in the Commonwealth of Massachusetts and the State of New Hampshire.

Prior to joining Brattle, Ms. Bulkley was a Senior Vice President at an economic consultancy and held senior positions at several other consulting firms.

AREAS OF EXPERTISE

- Regulatory Economics, Finance & Rates
- Regulatory Investigations & Enforcement
- Tax Controversy & Transfer Pricing
- Electricity Litigation & Regulatory Disputes
- M&A Litigation

EDUCATION

- **Boston University**
  MA in Economics
- **Simmons College**
  BA in Economics and Finance

PROFESSIONAL EXPERIENCE

- **The Brattle Group (2022–Present)**
  Principal
- **Concentric Energy Advisors, Inc. (2002–2021)**
  Senior Vice President
  Vice President
  Assistant Vice President
  Project Manager
- **Navigant Consulting, Inc. (1997–2002)**
  Project Manager
- **Reed Consulting Group (1995-1997)**
  Consultant- Project Manager
- **Cahners Publishing Company (1995)**
  Economist

SELECTED CONSULTING EXPERIENCE & EXPERT TESTIMONY

REGULATORY ANALYSIS AND RATEMAKING

Have provided a range of advisory services relating to regulatory policy analysis and many aspects of utility ratemaking, with specific services including:

- Cost of capital and return on equity testimony, cost of service and rate design analysis and testimony, development of ratemaking strategies
- Development of merchant function exit strategies

- Analysis and program development to address residual energy supply and/or provider of last resort obligations
- Stranded costs assessment and recovery
  Performance-based ratemaking analysis and design
- Many aspects of traditional utility ratemaking (e.g., rate design, rate base valuation)

COST OF CAPITAL

Have provided expert testimony on the cost of capital and capital structure in nearly 100 regulatory proceedings before state and federal regulatory commissions in the United States.

RATEMAKING

Have assisted several clients with analysis to support investor-owned and municipal utility clients in the preparation of rate cases. Sample engagements include:

- Assisted several investor-owned and municipal clients on cost allocation and rate design issues including the development of expert testimony supporting recommended rate alternatives.
- Worked with Canadian regulatory staff to establish filing requirements for a rate review of a newly regulated electric utility. Along with analyzing and evaluating rate application, attended hearings and conducted investigation of rate application for regulatory staff. And prepared, supported, and defended recommendations for revenue requirements and rates for the company. Additionally, developed rates for gas utility for transportation program and ancillary services.

VALUATION

Have provided valuation services to utility clients, unregulated generators, and private equity clients for a variety of purposes, including ratemaking, fair value, ad valorem tax, litigation and damages, and acquisition. Appraisal practices are consistent with the national standards established by the Uniform Standards of Professional Appraisal Practice.

Representative projects/clients have included:

- Prepared appraisals of electric utility transmission and distribution assets for ad valorem tax purposes.
- Prepared appraisals of several hydroelectric generating facilities for ad valorem tax purposes.
- Conducted appraisals of fossil fuel generating facilities for ad valorem tax purposes.
- Conducted appraisals of generating assets for the purposes of unwinding sale-leaseback agreements.
- For a confidential utility client, prepared valuation of fossil and nuclear generation assets for financing purposes for regulated utility client.

- Prepared a valuation of a portfolio of generation assets for a large energy utility to be used for strategic planning purposes. Valuation approach included an income approach, a real options analysis, and a risk analysis.
- Assisted clients in the restructuring of NUG contracts through the valuation of the underlying assets. Performed analysis to determine the option value of a plant in a competitively priced electricity market following the settlement of the NUG contract.
- Prepared market valuations of several purchase power contracts for large electric utilities in the sale of purchase power contracts. Assignment included an assessment of the regional power market, analysis of the underlying purchase power contracts, and a traditional discounted cash flow valuation approach, as well as a risk analysis. Analyzed bids from potential acquirers using income and risk analysis approached. Prepared an assessment of the credit issues and value at risk for the selling utility.
- Prepared appraisal of a portfolio of generating facilities for a large electric utility to be used for financing purposes.
- Prepared fair value rate base analyses for Northern Indiana Public Service Company for several electric rate proceedings. Valuation approaches used in this project included income, cost, and comparable sales approaches.
- Prepared an appraisal of a fleet of fossil generating assets for a large electric utility to establish the value of assets transferred from utility property.
- Conducted due diligence on an electric transmission and distribution system as part of a buy-side due diligence team.
- Provided analytical support for and prepared appraisal reports of generation assets to be used in ad valorem tax disputes.
- Provided analytical support and prepared testimony regarding the valuation of electric distribution system assets in five communities in a condemnation proceeding.
- Prepared feasibility reports analyzing the expected net benefits resulting from municipal ownership of investor-owned utility operations.
- Prepared independent analyses of proposal for the proposed government condemnation of the investor-owned utilities in Maine and the formation of a public power district.
- Valued purchase power agreements in the transfer of assets to a deregulated electric market.

STRATEGIC AND FINANCIAL ADVISORY SERVICES

Have assisted several clients across North America with analytically-based strategic planning, due diligence, and financial advisory services.

Representative projects include:

- Preparation of feasibility studies for bond issuances for municipal and district steam clients.
- Assisted in the development of a generation strategy for an electric utility. Analyzed various NERC regions to identify potential market entry points. Evaluated potential competitors and alliance partners. Assisted in the development of gas and electric price forecasts. Developed a framework for the implementation of a risk management program.
- Assisted clients in identifying potential joint venture opportunities and alliance partners. Contacted interviewed and evaluated potential alliance candidates based on company-established criteria for several LDCs and marketing companies. Worked with several LDCs and unregulated marketing companies to establish alliances to enter into the retail energy market. Prepared testimony in support of several merger cases and participated in the regulatory process to obtain approval for these mergers.
- Assisted clients in several buy-side due diligence efforts, providing regulatory insight and developing valuation recommendations for acquisitions of both electric and gas properties.

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
Arizona Corporation Commission				
Southwest Gas Corporation	12/21	Southwest Gas Corporation	Docket No. G-01551A-21-0368	Return on Equity
Arizona Public Service Company	10/19	Arizona Public Service Company	Docket No. E-01345A-19-0236	Return on Equity
Tucson Electric Power Company	04/19	Tucson Electric Power Company	Docket No. E-01933A-19-0028	Return on Equity
Tucson Electric Power Company	11/15	Tucson Electric Power Company	Docket No. E-01933A-15-0322	Return on Equity
UNS Electric	05/15	UNS Electric	Docket No. E-04204A-15-0142	Return on Equity
UNS Electric	12/12	UNS Electric	Docket No. E-04204A-12-0504	Return on Equity
Arkansas Public Service Commission				
Oklahoma Gas and Electric Co	10/21	Oklahoma Gas and Electric Co	Docket No. D-18-046-FR	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
Arkansas Oklahoma Gas Corporation	10/13	Arkansas Oklahoma Gas Corporation	Docket No. 13-078-U	Return on Equity
California Public Utilities Commission				
San Jose Water Company	05/21	San Jose Water Company	A2105004	Return on Equity
Colorado Public Utilities Commission				
Public Service Company of Colorado	07/21	Public Service Company of Colorado	21AL-0317E	Return on Equity
Public Service Company of Colorado	02/20	Public Service Company of Colorado	20AL-0049G	Return on Equity
Public Service Company of Colorado	05/19	Public Service Company of Colorado	19AL-0268E	Return on Equity
Public Service Company of Colorado	01/19	Public Service Company of Colorado	19AL-0063ST	Return on Equity
Atmos Energy Corporation	05/15	Atmos Energy Corporation	Docket No. 15AL-0299G	Return on Equity
Atmos Energy Corporation	04/14	Atmos Energy Corporation	Docket No. 14AL-0300G	Return on Equity
Atmos Energy Corporation	05/13	Atmos Energy Corporation	Docket No. 13AL-0496G	Return on Equity
Connecticut Public Utilities Regulatory Authority				
United Illuminating	05/21	United Illuminating	Docket No. 17-12-03RE11	Return on Equity
Connecticut Water Company	01/21	Connecticut Water Company	Docket No. 20-12-30	Return on Equity
Connecticut Natural Gas Corporation	06/18	Connecticut Natural Gas Corporation	Docket No. 18-05-16	Return on Equity
Yankee Gas Services Co. d/b/a Eversource Energy	06/18	Yankee Gas Services Co. d/b/a Eversource Energy	Docket No. 18-05-10	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
The Southern Connecticut Gas Company	06/17	The Southern Connecticut Gas Company	Docket No. 17-05-42	Return on Equity
The United Illuminating Company	07/16	The United Illuminating Company	Docket No. 16-06-04	Return on Equity
Federal Energy Regulatory Commission				
Florida Gas Transmission	02/21	Florida Gas Transmission	Docket No. RP21-441	Return on Equity
TransCanyon	01/21	TransCanyon	Docket No. ER21-1065	Return on Equity
Duke Energy	12/20	Duke Energy	Docket No. EL21-9-000	Return on Equity
Wisconsin Electric Power Company	08/20	Wisconsin Electric Power Company	Docket No. EL20-57-000	Return on Equity
Panhandle Eastern Pipe Line Company, LP	10/19	Panhandle Eastern Pipe Line Company, LP	Docket Nos. RP19-78-000 RP19-78-001	Return on Equity
Panhandle Eastern Pipe Line Company, LP	08/19	Panhandle Eastern Pipe Line Company, LP	Docket Nos. RP19-1523	Return on Equity
Sea Robin Pipeline Company LLC	11/18	Sea Robin Pipeline Company LLC	Docket# RP19-352-000	Return on Equity
Tallgrass Interstate Gas Transmission	10/15	Tallgrass Interstate Gas Transmission	RP16-137	Return on Equity
Idaho Public Utilities Commission				
PacifiCorp d/b/a Rocky Mountain Power	05/21	PacifiCorp d/b/a Rocky Mountain Power	Case No. PAC-E-21-07	Return on Equity
Illinois Commerce Commission				
North Shore Gas Company	02/21	North Shore Gas Company	No. 20-0810	Return on Equity
Indiana Utility Regulatory Commission				

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
Indiana Michigan Power Co.	07/21	Indiana Michigan Power Co.	IURC Cause No. 45576	Return on Equity
Indiana Gas Company Inc.	12/20	Indiana Gas Company Inc.	IURC Cause No. 45468	Return on Equity
Southern Indiana Gas and Electric Company	10/20	Southern Indiana Gas and Electric Company	IURC Cause No. 45447	Return on Equity
Indiana and Michigan American Water Company	09/18	Indiana and Michigan American Water Company	IURC Cause No. 45142	Return on Equity
Indianapolis Power and Light Company	12/17	Indianapolis Power and Light Company	Cause No. 45029	Fair Value
Northern Indiana Public Service Company	09/17	Northern Indiana Public Service Company	Cause No. 44988	Fair Value
Indianapolis Power and Light Company	12/16	Indianapolis Power and Light Company	Cause No.44893	Fair Value
Northern Indiana Public Service Company	10/15	Northern Indiana Public Service Company	Cause No. 44688	Fair Value
Indianapolis Power and Light Company	09/15	Indianapolis Power and Light Company	Cause No. 44576 Cause No. 44602	Fair Value
Kokomo Gas and Fuel Company	09/10	Kokomo Gas and Fuel Company	Cause No. 43942	Fair Value
Northern Indiana Fuel and Light Company, Inc.	09/10	Northern Indiana Fuel and Light Company, Inc.	Cause No. 43943	Fair Value
Iowa Department of Commerce Utilities Board				
Iowa-American Water Company	08/20	Iowa-American Water Company	Docket No. RPU-2020-0001	Return on Equity
Kansas Corporation Commission				

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
Atmos Energy Corporation	08/15	Atmos Energy Corporation	Docket No. 16-ATMG-079-RTS	Return on Equity
Kentucky Public Service Commission				
Kentucky American Water Company	11/18	Kentucky American Water Company	Docket No. 2018-00358	Return on Equity
Maine Public Utilities Commission				
Central Maine Power	10/18	Central Maine Power	Docket No. 2018-194	Return on Equity
Maryland Public Service Commission				
Maryland American Water Company	06/18	Maryland American Water Company	Case No. 9487	Return on Equity
Massachusetts Appellate Tax Board				
Hopkinton LNG Corporation	03/20	Hopkinton LNG Corporation	Docket No.	Valuation of LNG Facility
FirstLight Hydro Generating Company	06/17	FirstLight Hydro Generating Company	Docket No. F-325471 Docket No. F-325472 Docket No. F-325473 Docket No. F-325474	Valuation of Electric Generation Assets
Massachusetts Department of Public Utilities				
National Grid USA	11/20	Boston Gas Company	DPU 20-120	Return on Equity
Berkshire Gas Company	05/18	Berkshire Gas Company	DPU 18-40	Return on Equity
Unitil Corporation	01/04	Fitchburg Gas and Electric	DTE 03-52	Integrated Resource Plan; Gas Demand Forecast
Michigan Public Service Commission				
Michigan Gas Utilities Corporation	03/21	Michigan Gas Utilities Corporation	Case No. U-20718	Return on Equity
Wisconsin Electric Power Company	12/11	Wisconsin Electric Power Company	Case No. U-16830	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
Michigan Tax Tribunal				
New Covert Generating Co., LLC.	03/18	The Township of New Covert Michigan	MTT Docket No. 000248TT and 16-001888-TT	Valuation of Electric Generation Assets
Covert Township	07/14	New Covert Generating Co., LLC.	Docket No. 399578	Valuation of Electric Generation Assets
Minnesota Public Utilities Commission				
CenterPoint Energy Resources	11/21	CenterPoint Energy Resources	D-G-008/GR-21-435	Return on Equity
Allete, Inc. d/b/a Minnesota Power	11/21	Allete, Inc. d/b/a Minnesota Power	D-E-015/GR-21-630	Return on Equity
Otter Tail Power Company	11/20	Otter Tail Power Company	E017/GR-20-719	Return on Equity
Allete, Inc. d/b/a Minnesota Power	11/19	Allete, Inc. d/b/a Minnesota Power	E015/GR-19-442	Return on Equity
CenterPoint Energy Resources Corporation d/b/a CenterPoint Energy Minnesota Gas	10/19	CenterPoint Energy Resources Corporation d/b/a CenterPoint Energy Minnesota Gas	G-008/GR-19-524	Return on Equity
Great Plains Natural Gas Co.	09/19	Great Plains Natural Gas Co.	Docket No. G004/GR-19-511	Return on Equity
Minnesota Energy Resources Corporation	10/17	Minnesota Energy Resources Corporation	Docket No. G011/GR-17-563	Return on Equity
Missouri Public Service Commission				
Evergy Missouri West	1/22	Evergy Missouri West	File No. ER-2022-0130	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
Evergy Missouri Metro	1/22	Evergy Missouri Metro	File No. ER-2022-0129	Return on Equity
Ameren Missouri	03/21	Ameren Missouri	Docket No. ER-2021-0240 Docket No. GR-2021-0241	Return on Equity
Missouri American Water Company	06/20	Missouri American Water Company	Case No. WR-2020-0344 Case No. SR-2020-0345	Return on Equity
Missouri American Water Company	06/17	Missouri American Water Company	Case No. WR-17-0285 Case No. SR-17-0286	Return on Equity
Montana Public Service Commission				
Montana-Dakota Utilities Co.	06/20	Montana-Dakota Utilities Co.	D2020.06.076	Return on Equity
Montana-Dakota Utilities Co.	09/18	Montana-Dakota Utilities Co.	D2018.9.60	Return on Equity
New Hampshire - Board of Tax and Land Appeals				
Public Service Company of New Hampshire d/b/a Eversource Energy	11/19 12/19	Public Service Company of New Hampshire d/b/a Eversource Energy	Master Docket No. 28873-14-15-16-17PT	Valuation of Utility Property and Generating Assets
New Hampshire Public Utilities Commission				
Public Service Company of New Hampshire	05/19	Public Service Company of New Hampshire	DE-19-057	Return on Equity
New Hampshire-Merrimack County Superior Court				

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
Northern New England Telephone Operations, LLC d/b/a FairPoint Communications, NNE	04/18	Northern New England Telephone Operations, LLC d/b/a FairPoint Communications, NNE	220-2012-CV-1100	Valuation of Utility Property
New Hampshire-Rockingham Superior Court				
Eversource Energy	05/18	Public Service Commission of New Hampshire	218-2016-CV-00899 218-2017-CV-00917	Valuation of Utility Property
New Jersey Board of Public Utilities				
Public Service Electric and Gas Company	10/20	Public Service Electric and Gas Company	EO18101115	Return on Equity
New Jersey American Water Company, Inc.	12/19	New Jersey American Water Company, Inc.	WR19121516	Return on Equity
Public Service Electric and Gas Company	04/19	Public Service Electric and Gas Company	EO18060629 GO18060630	Return on Equity
Public Service Electric and Gas Company	02/18	Public Service Electric and Gas Company	GR17070776	Return on Equity
Public Service Electric and Gas Company	01/18	Public Service Electric and Gas Company	ER18010029 GR18010030	Return on Equity
New Mexico Public Regulation Commission				
Southwestern Public Service Company	07/19	Southwestern Public Service Company	19-00170-UT	Return on Equity
Southwestern Public Service Company	10/17	Southwestern Public Service Company	Case No. 17-00255-UT	Return on Equity
Southwestern Public Service Company	12/16	Southwestern Public Service Company	Case No. 16-00269-UT	Return on Equity
Southwestern Public Service Company	10/15	Southwestern Public Service Company	Case No. 15-00296-UT	Return on Equity
Southwestern Public Service Company	06/15	Southwestern Public Service Company	Case No. 15-00139-UT	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
New York State Department of Public Service				
New York State Electric and Gas Company Rochester Gas and Electric	05/22	New York State Electric and Gas Company Rochester Gas and Electric	22-E-0317 22-G-0318 22-E-0319 22-G-0320	Return on Equity
Corning Natural Gas Corporation	07/21	Corning Natural Gas Corporation	Case No. 21-G-0394	Return on Equity
Central Hudson Gas and Electric Corporation	08/20	Central Hudson Gas and Electric Corporation	Electric 20-E-0428 Gas 20-G-0429	Return on Equity
Niagara Mohawk Power Corporation	07/20	National Grid USA	Case No. 20-E-0380 20-G-0381	Return on Equity
Corning Natural Gas Corporation	02/20	Corning Natural Gas Corporation	Case No. 20-G-0101	Return on Equity
New York State Electric and Gas Company Rochester Gas and Electric	05/19	New York State Electric and Gas Company Rochester Gas and Electric	19-E-0378 19-G-0379 19-E-0380 19-G-0381	Return on Equity
Brooklyn Union Gas Company d/b/a National Grid NY KeySpan Gas East Corporation d/b/a National Grid	04/19	Brooklyn Union Gas Company d/b/a National Grid NY KeySpan Gas East Corporation d/b/a National Grid	19-G-0309 19-G-0310	Return on Equity
Central Hudson Gas and Electric Corporation	07/17	Central Hudson Gas and Electric Corporation	Electric 17-E-0459 Gas 17-G-0460	Return on Equity
Niagara Mohawk Power Corporation	04/17	National Grid USA	Case No. 17-E-0238 17-G-0239	Return on Equity
Corning Natural Gas Corporation	06/16	Corning Natural Gas Corporation	Case No. 16-G-0369	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
National Fuel Gas Company	04/16	National Fuel Gas Company	Case No. 16-G-0257	Return on Equity
KeySpan Energy Delivery	01/16	KeySpan Energy Delivery	Case No. 15-G-0058 Case No. 15-G-0059	Return on Equity
New York State Electric and Gas Company Rochester Gas and Electric	05/15	New York State Electric and Gas Company Rochester Gas and Electric	Case No. 15-E-0283 Case No. 15-G-0284 Case No. 15-E-0285 Case No. 15-G-0286	Return on Equity
North Dakota Public Service Commission				
Montana-Dakota Utilities Co.	05/22	Montana-Dakota Utilities Co.	C-PU-22-	Return on Equity
Montana-Dakota Utilities Co.	08/20	Montana-Dakota Utilities Co.	C-PU-20-379	Return on Equity
Northern States Power Company	12/12	Northern States Power Company	C-PU-12-813	Return on Equity
Northern States Power Company	12/10	Northern States Power Company	C-PU-10-657	Return on Equity
Oklahoma Corporation Commission				
Oklahoma Gas & Electric	12/21	Oklahoma Gas & Electric	Cause No. PUD 202100164	Return on Equity
Arkansas Oklahoma Gas Corporation	01/13	Arkansas Oklahoma Gas Corporation	Cause No. PUD 201200236	Return on Equity
Oregon Public Service Commission				
PacifiCorp d/b/a Pacific Power & Light	02/22	PacifiCorp d/b/a Pacific Power & Light	Docket No. UE-399	Return on Equity
PacifiCorp d/b/a Pacific Power & Light	02/20	PacifiCorp d/b/a Pacific Power & Light	Docket No. UE-374	Return on Equity
Pennsylvania Public Utility Commission				

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
American Water Works Company Inc.	04/22	Pennsylvania-American Water Company	Docket No. R-2020-3031672 (water) Docket No. R-2020-3031673 (wastewater)	Return on Equity
American Water Works Company Inc.	04/20	Pennsylvania-American Water Company	Docket No. R-2020-3019369 (water) Docket No. R-2020-3019371 (wastewater)	Return on Equity
American Water Works Company Inc.	04/17	Pennsylvania-American Water Company	Docket No. R-2017-2595853	Return on Equity
South Dakota Public Utilities Commission				
Northern States Power Company	06/14	Northern States Power Company	Docket No. EL14-058	Return on Equity
Texas Public Utility Commission				
Southwestern Public Service Commission	08/19	Southwestern Public Service Commission	Docket No. D-49831	Return on Equity
Southwestern Public Service Company	01/14	Southwestern Public Service Company	Docket No. 42004	Return on Equity
Utah Public Service Commission				
PacifiCorp d/b/a Rocky Mountain Power	05/20	PacifiCorp d/b/a Rocky Mountain Power	Docket No. 20-035-04	Return on Equity
Virginia State Corporation Commission				
Virginia American Water Company, Inc.	11/21	Virginia American Water Company, Inc.	Docket No. PUR-2021-00255	Return on Equity
Virginia American Water Company, Inc.	11/18	Virginia American Water Company, Inc.	Docket No. PUR-2018-00175	Return on Equity
Washington Utilities Transportation Commission				

SPONSOR	DATE	CASE/APPLICANT	DOCKET /CASE NO.	SUBJECT
Cascade Natural Gas Corporation	06/20	Cascade Natural Gas Corporation	Docket No. UG-200568	Return on Equity
PacifiCorp d/b/a Pacific Power & Light	12/19	PacifiCorp d/b/a Pacific Power & Light	Docket No. UE-191024	Return on Equity
Cascade Natural Gas Corporation	04/19	Cascade Natural Gas Corporation	Docket No. UG-190210	Return on Equity
West Virginia Public Service Commission				
West Virginia American Water Company	04/21	West Virginia American Water Company	Case No. 21-02369-W-42T	Return on Equity
West Virginia American Water Company	04/18	West Virginia American Water Company	Case No. 18-0573-W-42T Case No. 18-0576-S-42T	Return on Equity
Wisconsin Public Service Commission				
Alliant Energy		Alliant Energy		Return on Equity
Wisconsin Electric Power Company and Wisconsin Gas LLC	03/19	Wisconsin Electric Power Company and Wisconsin Gas LLC	Docket No. 05-UR-109	Return on Equity
Wisconsin Public Service Corp.	03/19	Wisconsin Public Service Corp.	6690-UR-126	Return on Equity
Wyoming Public Service Commission				
PacifiCorp d/b/a Rocky Mountain Power	03/20	PacifiCorp d/b/a Rocky Mountain Power	Docket No. 20000-578-ER-20	Return on Equity
Montana-Dakota Utilities Co.	05/19	Montana-Dakota Utilities Co.	30013-351-GR-19	Return on Equity

CERTIFICATIONS/ACCREDITATIONS

Certified General Appraiser, licensed in the Commonwealth of Massachusetts and the State of New Hampshire

See Native Excel file Bulkley Direct_Exhibits AEB-2 through 12.

Control Number: 53719

Item Number: 538

PUC DOCKET NO. 53719
SOAH DOCKET NO. 473-22-04394

RECEIVED
2023 AUG 24 PM 4:10
PUBLIC UTILITY COMMISSION
FILING CLERK

APPLICATION OF ENTERGY TEXAS, INC. FOR AUTHORITY TO CHANGE RATES	§ § §	**PUBLIC UTILITY COMMISSION OF TEXAS**

ORDER

This Order addresses the application of Entergy Texas, Inc. for authority to change rates. On May 10, 2023, the parties filed an unopposed agreement that addresses all issues between themselves in this proceeding except for preliminary-order issues 68 and 69 related to transportation electrification charging infrastructure. The Commission severed preliminary-order issues 68 and 69 into a separate proceeding for further processing by Docket Management, and those issues are not addressed in this Order. On May 10, 2023, Entergy Texas filed an agreed motion for interim rates that are identical to the agreed rates. Attachment A to that motion are the agreed tariffs reflecting the agreed rates. The Commission approves the rates, terms, and conditions of the unopposed agreement to the extent provided in this Order and approves the tariffs attached as attachment A to the agreed motion for interim rates, including the rates in those tariffs, to the extent provided in this Order.

I. Findings of Fact

The Commission makes the following findings of fact.

Applicant

1. Entergy Texas, Inc. is a Texas corporation registered with the Texas secretary of state under filing number 800911623.

2. Entergy Texas owns and operates for compensation in Texas equipment and facilities to generate, transmit, distribute, and sell electricity in Texas.

3. Entergy Texas holds certificate of convenience and necessity number 30076 to provide service to the public.

Application

4. On July 1, 2022, Entergy Texas filed an application requesting authority to change its Texas retail rates based on a historical test year of January 1, 2021 through December 31, 2021, adjusted for known and measurable changes.

5. In the application, Entergy Texas stated its combined base and rider revenues was $1.173 billion, including $197.5 million in revenue from its generation cost recovery rider, distribution cost recovery factor rider, and transmission cost recovery factor rider.

6. Entergy Texas requested an increase of approximately $131.4 million in base and rider rates to collect a total non-fuel retail amount of approximately $1.304 billion.

7. Entergy Texas requested a prudence determination for generation facilities, transmission capital additions, and distribution capital additions closed to plant since January 1, 2018.

8. The application included a request for approval of a new transportation electrification and charging infrastructure rider and a new transportation electrification and charging demand adjustment rider.

9. Entergy Texas filed errata to its application on September 16 and 19, 2022.

10. In an order filed on July 29, 2022, the SOAH ALJs memorialized their finding at the July 22, 2022 prehearing conference that Entergy Texas's application was sufficient.

Effective Date of Proposed Rates

11. Entergy Texas proposed an effective date of August 5, 2022.

12. Entergy Texas requested that, if the new rates were suspended for a period beyond 155 days after Entergy Texas filed its application (i.e., beyond December 3, 2022), the final rates would relate back to, and be made effective for consumption on and after, December 3, 2022.

13. In SOAH Order No. 1 filed on July 11, 2022, the SOAH ALJs suspended the effective date of the proposed rates until January 2, 2023.

14. Entergy Texas agreed to multiple extensions of the effective date, the final extension ending on July 20, 2023.

Notice of the Application

15. On July 1, 2022, Entergy Texas provided notice of the application by email to all municipalities within Entergy Texas's service area.

16. On July 1, 2022, Entergy Texas provided notice of the application by email to the Office of Public Utility Counsel (OPUC).

17. On September 21, 2022, Entergy Texas filed the affidavit of Stuart Barrett, vice president of customer service, attesting to the provision of notice to all municipalities within Entergy Texas's service area and to OPUC.

18. Between July 25, 2022 and August 22, 2022, Entergy Texas provided notice of the application by mail to all affected customers in Entergy Texas's service territory.

19. On September 21, 2022, Entergy Texas filed the affidavit of Kendra James, communications manager, attesting to the provision of notice to affected customers.

20. Entergy Texas published notice of the application for four consecutive weeks in newspapers having general circulation in each county in Entergy Texas's service territory, as follows:

Newspaper	Counties of General Circulation	Publication Dates (2022)
Anahuac Progress	Chambers	July 6, 13, 20, 27
Beaumont Enterprise	Jefferson, Hardin, Tyler, Newton, Orange, Jasper, Liberty, Sabine, Chambers, San Augustine, Angelina, Galveston	July 1, 8, 15, 22
Brenham Banner Press	Washington, Burleson, Waller, Fayette, Grimes, Brazos	July 5, 12, 19, 26
Bryan-College Station Eagle	Brazos, Burleson, Grimes, Leon, Madison, Milam, Robertson	July 1, 8, 15, 22
Burleson County Tribune	Burleson	July 7, 14, 21, 28
Cameron Herald	Milam	July 7, 14, 21, 28
Conroe Courier	Harris, Trinity, Walker, Grimes, Polk, San Jacinto, Washington, Montgomery, Liberty, Austin, Waller, Chambers, Colorado, Brazoria, Fort Bend, Galveston, Wharton, Jackson, Matagorda	July 6, 13, 20, 27

Newspaper	Counties of General Circulation	Publication Dates (2022)
East Montgomery County Observer	Harris, Trinity, Walker, Grimes, Polk, San Jacinto, Washington, Montgomery, Liberty, Austin, Waller, Chambers, Colorado, Brazoria, Fort Bend, Galveston, Wharton, Jackson, Matagorda	July 6, 13, 20, 27
East Texas Banner	Jasper, Newton	July 6, 13, 20, 27
Franklin Advocate	Robertson	July 7, 14, 21, 28
Galveston County Daily News	Galveston	July 1, 8, 15, 22
Grapeland Messenger	Houston, Anderson	July 7, 14, 21, 28
Groesbeck Journal	Limestone	July 7, 14, 21, 28
Hometown Press	Chambers	July 6, 13, 20, 27
Houston Chronicle	Harris, Trinity, Walker, Grimes, Polk, San Jacinto, Washington, Montgomery, Liberty, Austin, Waller, Chambers, Colorado, Brazoria, Fort Bend, Galveston, Wharton, Jackson, Matagorda	July 1, 8, 15, 22
Houston County Courier	Houston	July 7, 14, 21, 28
Humble Observer	Harris, Trinity, Walker, Grimes, Polk, San Jacinto, Washington, Montgomery, Liberty, Austin, Waller, Chambers, Colorado, Brazoria, Fort Bend, Galveston, Wharton, Jackson, Matagorda	July 6, 13, 20, 27
Huntsville Item	Walker	July 7, 14, 21, 28
Jasper Newsboy	Jefferson, Hardin, Tyler, Newton, Orange, Jasper, Liberty, Sabine, Chambers, San Augustine, Angelina, Galveston	July 6, 13, 20, 27
Liberty Vindicator	Jasper	July 7, 14, 21, 28
Madisonville Meteor	Madison, Leon, Grimes, Walker	July 6, 13, 20, 27
Marlin Democrat	Falls	July 6, 13, 20, 27
Montgomery County News	Montgomery	July 6, 13, 20, 27
Navasota Examiner	Grimes	July 6, 13, 20, 27
Newton County News	Newton	July 6, 13, 20, 27
Normangee Star	Leon, Madison	July 6, 13, 20, 27

Newspaper	Counties of General Circulation	Publication Dates (2022)
Orange Leader	Orange	July 6, 13, 20, 27
Penny Record/County Record	Orange, Newton	July 6, 13, 20, 27
Polk County Enterprise	Polk	July 7, 14, 21, 28
Port Arthur News	Jefferson	July 6, 13, 20, 27
Robertson County News	Robertson	July 7, 14, 21, 28
San Jacinto News Times	San Jacinto	July 7, 14, 21, 28
Silsbee Bee	Hardin	July 6, 13, 20, 27
Trinity County News-Standard	Trinity	July 7, 14, 21, 28
Tyler County Booster	Tyler	July 7, 14, 21, 28
Waller Times	Waller, Harris	July 6, 13, 20, 27
Woodlands Villager	Harris, Trinity, Walker, Grimes, Polk, San Jacinto, Washington, Montgomery, Liberty, Austin, Waller, Chambers, Colorado, Brazoria, Fort Bend, Galveston, Wharton, Jackson, Matagorda	July 6, 13, 20, 27

21. On Septemher 21, 2022, Entergy Texas filed publishers' affidavits attesting to the publication of notice.

22. In an order filed on July 29, 2022, the SOAH ALJs memorialized their finding at a prehearing conference held on July 22, 2022, that Entergy Texas's notice of the application was sufficient.

Interventions

23. In an order filed on July 29, 2022, the SOAH ALJs memorialized their decision at the July 22, 2022 prehearing conference to grant motions to intervene filed by the following parties: OPUC, Texas Industrial Energy Consumers (TIEC), and tbe Cities of Anabuac, Beaumont, Bridge City, Cleveland, Dayton, Groves, Houston, Huntsville, Liberty, Montgomery, Navasota, Oak Ridge North, Orange, Pine Forest, Pineburst, Port Arthur,

Port Neches, Roman Forest, Rose City, Shenandoah, Silsbee, Sour Lake, Splendora, Vidor, West Orange, and Willis (collectively, Cities).

24. In SOAH Order No. 3 filed on August 19, 2022, the SOAH ALJs granted the interventions of The Kroger Co.; the United States Department of Energy, on behalf of itself and all other affected Federal Executive Agencies; Walmart Inc.; FlashParking, Inc.; and Sierra Club.

25. In SOAH Order No. 4 filed on September 7, 2022, the SOAH ALJs denied a late motion to intervene filed by Southwestern Public Service Company (SPS).

26. On September 16, 2022, SPS appealed SOAH Order No. 4, and the Commission granted the appeal.

27. In its order on appeal of SOAH Order No. 4 filed on October 20, 2022, the Commission granted the appeal, overturned the SOAH ALJs' denial of SPS's late motion to intervene, and granted SPS's motion.

28. In SOAH Order No. 5 filed on September 19, 2022, the SOAH ALJs granted a late motion to intervene filed by ChargePoint, Inc.

29. In SOAH Order No. 6 filed on October 6, 2022, the SOAH ALJs granted a late motion to intervene filed by Sempra Infrastructure Partners, L.P.

30. In SOAH Order No. 8 filed on October 25, 2022, the SOAH ALJs granted late motions to intervene filed by Americans for Affordable Clean Energy (AACE) and El Paso Electric Company.

Appeals of Municipal Ordinances

31. Entergy Texas timely filed with the Commission petitions for review of rate ordinances of the municipalities exercising original jurisdiction within its service territory.

32. In SOAH Order No. 3 filed on August 19, 2022, the SOAH ALJs consolidated the review of the municipal ordinances adopted by the following municipalities: Hearne, Patton Village, Daisetta, Madisonville, Bedias, Kosse, New Waverly, Somerville, Iola, Anderson, Todd Mission, Trinity, Franklin, Ames, Caldwell, Colmesneil, Bremond, Taylor Landing, Midway, Groveton, Woodbranch Village, Calvert, Woodloch, Nome, Riverside, Woodville, and Lumberton.