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.

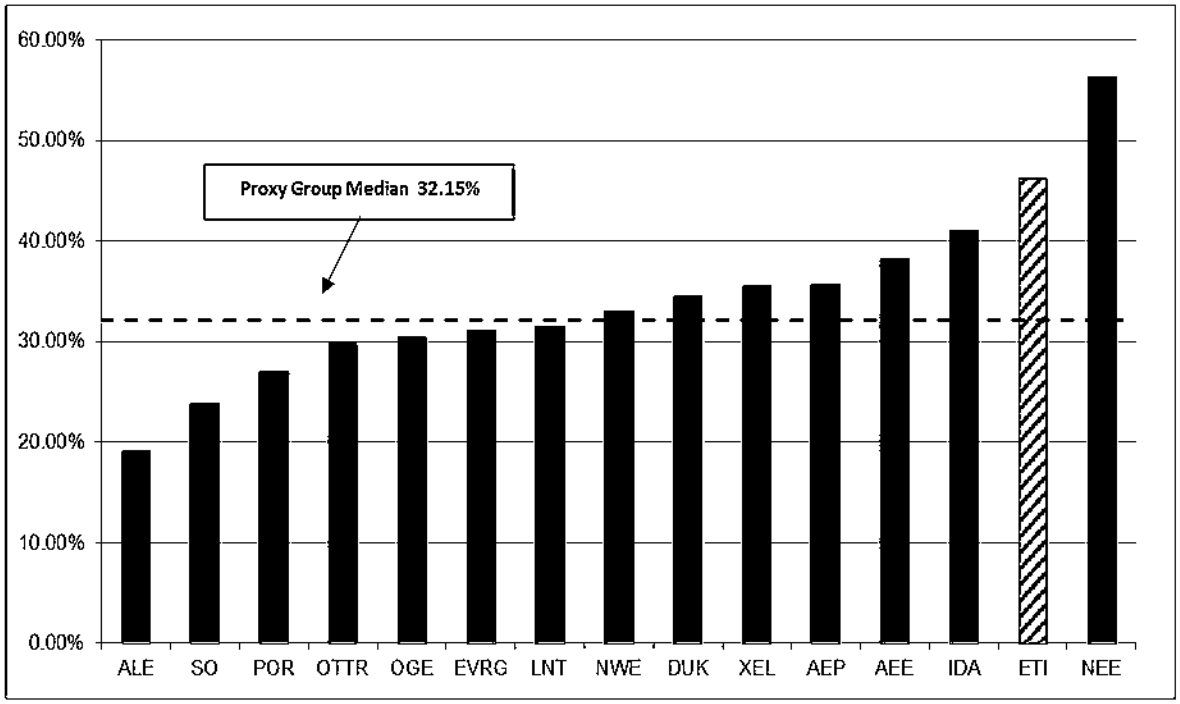
Q75. HOW DO ETI'S CAPITAL EXPENDITURE REQUIREMENTS COMPARE TO THOSE OF THE PROXY GROUP COMPANIES?

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

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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.

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[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.

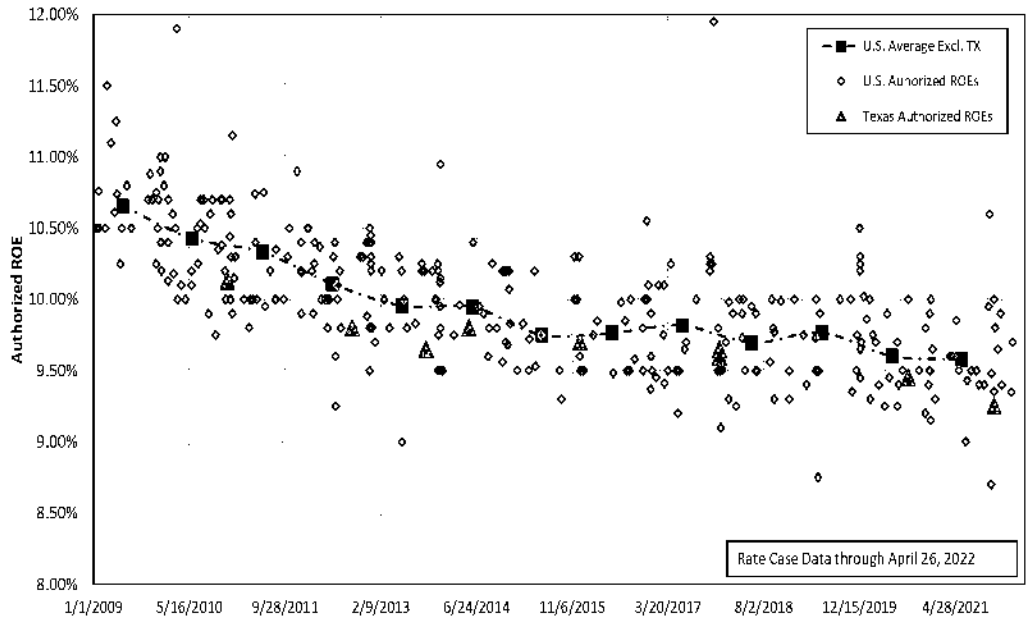
2. Authorized ROEs

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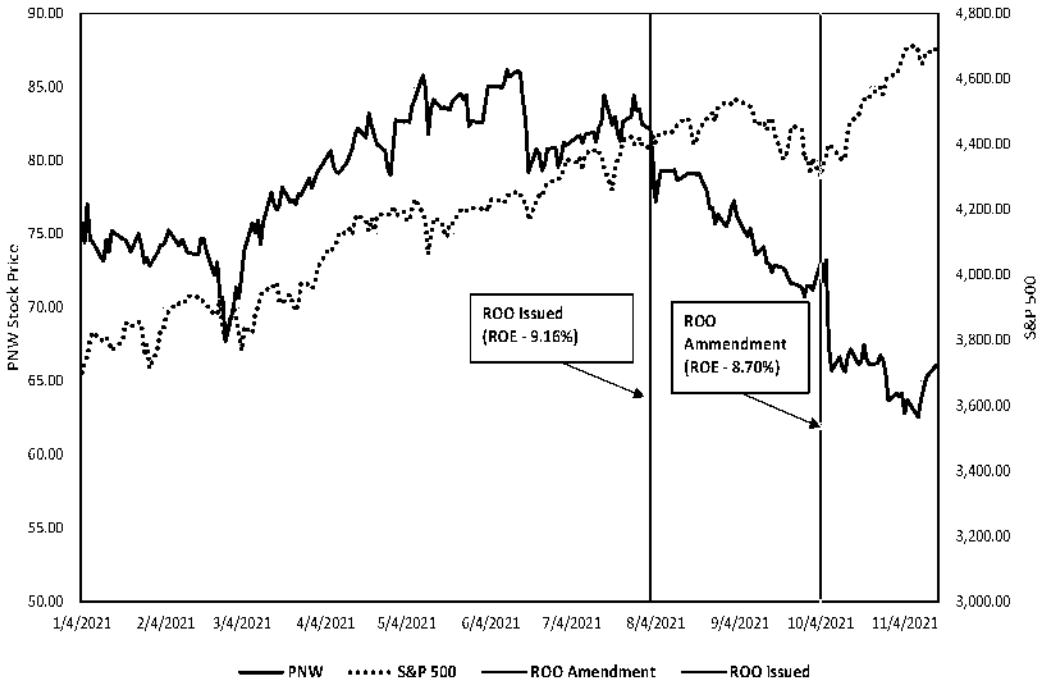
[71] Arizona Corporation Commission Docket No. E-01345A-19-0236, Commissioner Olson Proposed Amendment No. 1 to the Recommended Opinion and Order. (Oct. 4, 2021).

[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.

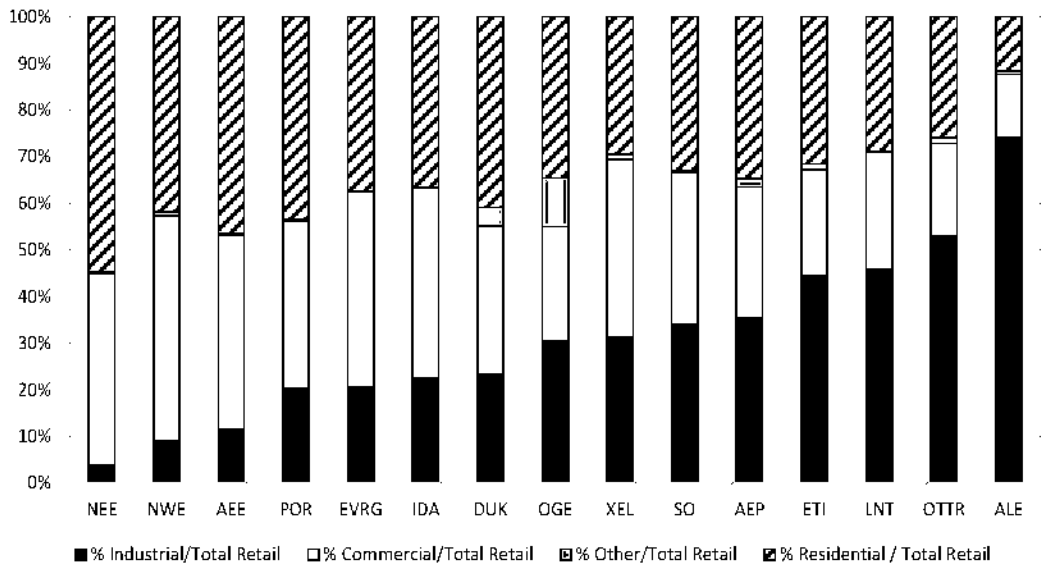
in 2021 were approximately 22,051,000 MWh.[75] The Company's service area is in Southeast Texas, where a number of ETI's industrial customers are engaged in the extraction and transportation of natural gas and crude oil, the manufacturing of equipment and machinery for the extraction and production of 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.
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>
> 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.

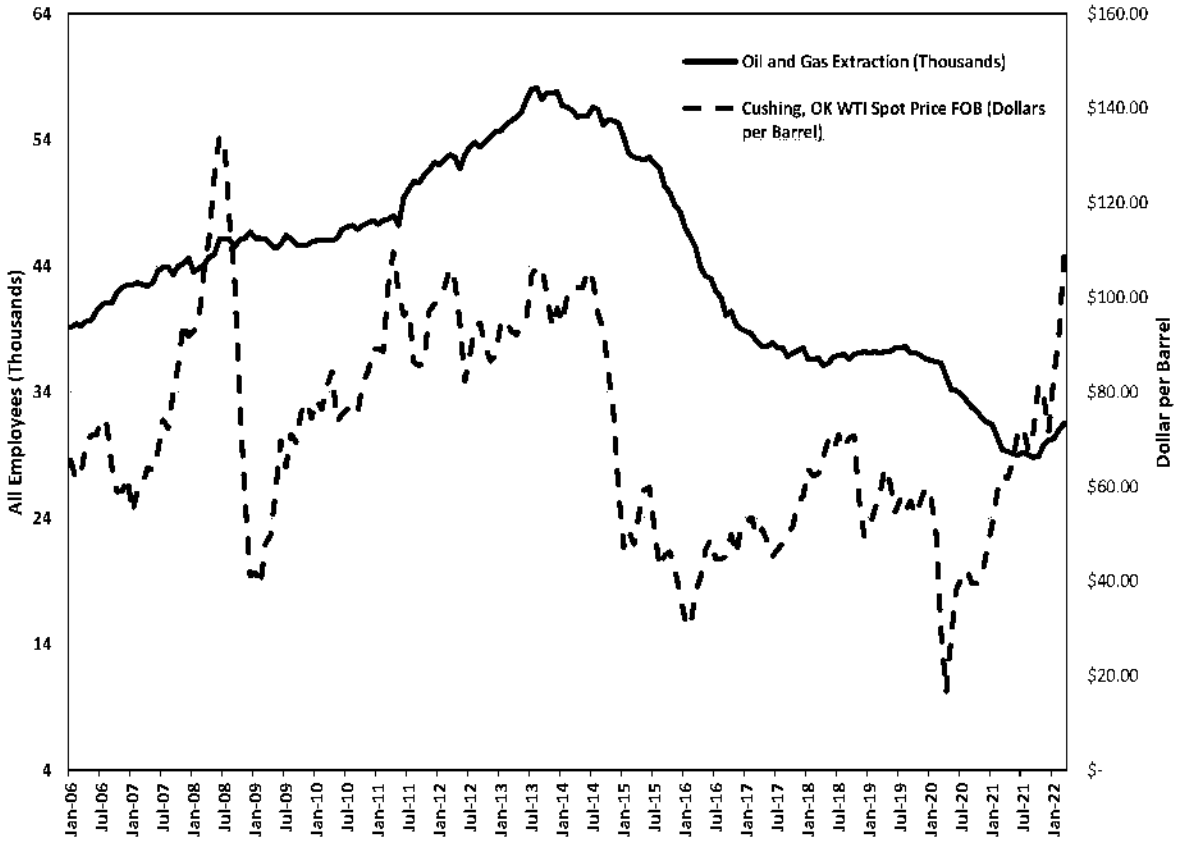
Q97. HOW HAS EMPLOYMENT IN THE OIL AND NATURAL GAS PRODUCTION INDUSTRY FARED IN RECENT ECONOMIC CONDITIONS?

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.

DOCKET NO. 53719

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

DIRECT TESTIMONY

OF

BOBBY R. SPERANDEO

ON BEHALF OF

ENTERGY TEXAS, INC.

JULY 2022

ENTERGY TEXAS, INC.
DIRECT TESTIMONY OF BOBBY R. SPERANDEO
2022 RATE CASE

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EXHIBITS

I. WITNESS INTRODUCTION AND QUALIFICATIONS

A. Qualifications

Q1. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Bobby R. Sperandeo. My business address is 2107 Research Foreset Drive, The Woodlands, Texas 77380. I am employed by Entergy Services, LLC. ("ESL") as the Director, ETI Finance for Entergy Texas, Inc. ("ETI" or "Company"). ESL is the service company affiliate of ETI.

Q2. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I hold a Bachelor degree in Accounting and a Master of Business Administration degree from the University of New Orleans. I am a Certified Public Accountant and a Certified Internal Auditor. Prior to my employment with ESL, I worked for Pan-American Life Insurance Group for seven years with various accounting roles in their Controller's group and Retirement Plan Services division. I began my career with ESL in 2004 as an Accountant II in the Affiliate Accounting group. In 2005, I was promoted to Accountant Lead and transferred to the Fuel Accounting group. After four years in Fuel Accounting, I transferred to the Utility Planning group where I worked on the financial plan for various operating companies for approximately five years. In 2014, I joined the Regulatory Services group where I served as the Regulatory Analyst for ETI for four years. In 2018, I was promoted to my current position as Director, ETI Finance.

Q3. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS DIRECTOR, ETI FINANCE.

A. I am responsible for the development of ETI's financial plan, as well as ensuring that ETI's books and financial disclosures are accurate, complete, and fairly represent the business of ETI. I also provide financial analysis and support for ETI's business plans and strategic initiatives.

Q4. HAVE YOU PREVIOUSLY SPONSORED TESTIMONY?

A. Yes, I sponsored testimony in ETI's Application to Amend its Certificate of Convenience and Necessity to Construct Orange County Advanced Power Station, Docket No. 52487, filed with the Public Utility Commission of Texas ("PUC" or the "Commission").

Q5. DO YOU SPONSOR ANY RATE FILING PACKAGE SCHEDULES OR EXHIBITS?

A. Yes, I sponsor or co-sponsor Rate Filing Package Schedules K-1 through K-9.

B. Purpose of Testimony

Q6. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My testimony serves several purposes. First, I present the Company's capital structure and overall cost of capital. I also support the reasonableness of ETI's non-production Operations & Maintenance ("O&M") expenditures. In doing so, I sponsor a benchmarking study of ETI's non-production O&M expenses, which

shows that ETI manages O&M efficiently and provides additional support for the reasonableness of those expenditures. I also sponsor certain pro forma adjustments to the Company's revenue requirement. Finally, I sponsor two affiliate classes — the Financial Services and Treasury Classes — and explain Entergy Corporation's budgeting process, which serves as a cost-control measure for affiliate costs that are allocated to ETI.

II. CAPITAL STRUCTURE

Q7. PLEASE SUMMARIZE THE COMPANY'S RECOMMENDATIONS CONCERNING CAPITAL STRUCTURE AND COST OF CAPITAL.

A. ETI is proposing that its regulatory capital structure be set at the test year capital structure level. The following table summarizes the Company's proposed capital structure and cost of capital supported by myself and Allison Lofton, along with Ann E. Bulkley's recommended return on equity, to arrive at ETI's overall weighted average cost of capital ("WACC").

ETI	% of Total Capitalization	Cost of Capital Rate	WACC (%)
Long-Term Debt	47.97%	3.47%	1.66%
Preferred Stock	0.81%	5.35%	0.04%
Common Equity	51.21%	10.80%	5.53 %
Total *(Total may not foot due to rounding)*	100.00%		7.24%

Mrs. Bulkley also provides testimony regarding the reasonableness of ETI's proposed capital structure.

Q8. PLEASE DISCUSS THE INCLUSION OF PREFERRED STOCK IN THE CAPITAL STRUCTURE.

A. In September 2019, ETI issued preferred stock, resulting in the disaffiliation and de-consolidation of ETI from the consolidated federal income tax return of Entergy Corporation. The net proceeds received from the issuance and sale of the preferred stock were used for general corporate purposes.

III. NON-PRODUCTION O&M BENCHMARKING STUDY

Q9. PLEASE DESCRIBE THE PURPOSE OF A BENCHMARKING ANALYSIS.

A. The purpose of a benchmarking analysis is to compare a measurable operating characteristic of one company to that experienced by a peer group. The operating characteristic can be a physical unit, such as expressed by the capacity factor of a generating unit; a measure of the efficiency of the inputs to a process to obtain output, such as the number of employees per unit of output; or, as was done here, a measure of cost efficiency of a company, such as the dollars of a particular expense or group of expenses per unit of output, such as megawatt hours ("MWh") sold.

Just because a benchmark calculation can be made does not mean that the results can or should be relied on in isolation. For example, the capacity factor of a generating unit will depend on a number of factors not captured by such an analysis, such as the fuel source of the unit or the alternatives available. Nonetheless, viewed in combination with the other evidence provided by the

Company in this case, my benchmarking analysis clearly supports the reasonableness of ETI's non-production O&M costs.

In this case, I have presented a benchmarking analysis of how ETI compares to the peer group in terms of the cost per MWh sold to customers as well as per customer for non-production O&M costs. These analyses support the testimony of other witnesses in this case to show that, overall, and taking into account other factors such as cost control measures and trends, the Company's costs are reasonable.

Q10. HOW DID YOU SELECT THE COMPANIES YOU USED TO REPRESENT THE ELECTRIC UTILITY INDUSTRY, THE PEER GROUP, FOR THE PURPOSE OF ANALYZING NONPRODUCTION O&M COSTS?

A. I began with all investor-owned electric utilities contained in a database maintained by SNL Financial (now known as S&P Global). SNL Financial collects, standardizes, and disseminates corporate, financial, and market data for the banking, financial, and energy industries. I then removed all companies that had one or more of the following characteristics:

1. Companies that had no sales;
2. Companies with fewer than 20,000 customers; and
3. Companies that had negative or zero administrative and general, distribution or transmission O&M expenses.

After making these eliminations, 123 electric operating companies remained, including ETI, for the year 2018; 120 electric operating companies

remained, including ETI, for the year 2019; 122 electric operating companies remained, including ETI, for the year 2020; and 110 electric operating companies, including ETI, for the year 2021.

Q11. WHAT IS THE SOURCE OF THE DATA CONTAINED IN THE DATABASE?

A. The source of the data contained in the database is each company's annual Federal Energy Regulatory Commission ("FERC") Form No. 1 filing.

Q12. IN YOUR OPINION, IS IT APPROPRIATE TO COMPARE ETI TO ANY PARTICULAR COMPANY IN THE COMPARISON GROUP?

A. No. In my opinion, the proper comparison is to the group or industry average. Individual companies are likely to have abnormalities reflected in certain years. It would be impossible to eliminate such abnormalities and such eliminations would have to be based on judgment. A comparison to industry averages, especially when the size of the group is as large as I have used, will "smooth out" these abnormalities.

Q13. PLEASE DISCUSS THE ANALYSIS OF NONPRODUCTION O&M EXPENSES THAT YOU PERFORMED.

A. I developed the total nonproduction O&M expenses for ETI and each of the comparison companies and divided that by total sales of electricity, such that the O&M costs are expressed in terms of costs per MWh sold. The results of this analysis are summarized in the following table.

Table 1: Non-Production O&M
(Dollars Per MWh of Sales)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$23.65	$8.56	36%	4
2019	$23.65	$9.50	40%	8
2020	$22.28	$9.48	42%	9
2021	$23.36	$9.61	41%	7

ETI's non-production costs per MWh sold are below the industry average. Its rank is in the top decile of the companies analyzed.

Q14. DID YOU ALSO PERFORM AN ANALYSIS OF PARTICULAR SUBCOMPONENTS OF NONPRODUCTION O&M COSTS?

A. Yes. I performed additional analyses of non-production O&M costs for the following sub-components:

1. Distribution O&M;
2. Transmission O&M;
3. Customer Accounts, Service and Informational, and Sales Expense O&M; and
4. Administrative and General O&M.

Each of these was analyzed in the same manner as non-production O&M. The O&M costs for ETI and each company in the comparison group were determined and then divided by its sales (MWh) to arrive at a cost per MWh sold. A summary of the results of these analyses is presented in the following tables.

Table 2: Distribution O&M
(Dollars Per MWh of Sales)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$4.39	$2.00	45%	12
2019	$4.76	$2.08	44%	10
2020	$5.59	$2.23	39%	16
2021	$5.92	$2.30	38%	16

As may be seen, ETI's rank among the peer group for distribution O&M is inside the top decile in 2018 and 2019 and just above the top decile in 2020 and 2021.

Table 3: Transmission O&M
(Dollars Per MWh of Sales)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$4.70	$1.47	31%	23
2019	$5.10	$1.40	27%	17
2020	$5.36	$1.39	25%	18
2021	$5.61	$1.43	25%	15

As may be seen, transmission costs per MWh are well under the industry average, residing in the top quartile.

Table 4: Customer Accounts, Service and Informational, and Sales Expense O&M (Dollars Per MWh of Sales)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$3.65	$1.58	43%	28
2019	$3.72	$1.66	44%	29
2020	$3.98	$1.64	41%	29
2021	$4.12	$1.57	38%	26

As may be seen, the customer accounts and sales costs per MWh reside in the top quartile.

Table 5: Administrative and General O&M (Dollars Per MWh of Sales)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$10.83	$3.36	31%	20
2019	$9.99	$4.22	42%	28
2020	$7.26	$4.06	55%	28
2021	$7.63	$4.16	54%	27

ETI's administrative and general costs expressed on a per MWh sold basis are lower than the electric utility industry average and reside in the first quartile. The details for ETI and each of the comparison group companies are contained in Exhibits BRS-1 through BRS-20.

Q15. DID YOU ALSO ANALYZE THE EFFECT OF ELIMINATING CERTAIN ADMINISTRATIVE AND GENERAL ("A&G") EXPENSE ACCOUNTS?

A. Yes. I have removed from the total A&G O&M expenses, the amounts associated with the following accounts:

1. Property Insurance (Account 924);
2. Injuries and Damages (Account 925);
3. Employee Pensions and Benefits (Account 926); and
4. Regulatory Commission Expenses (Account 928).

In each case, the expenses tend to be volatile and reflect circumstances unique to each company. For example, Property Insurance and Injuries and Damages reflect the effect of storms and damage claims generally outside the control of the company. Employee Pensions and Benefits vary with many variables such as the health of the employees and retirees, and Regulatory Commission expenses reflect the effect of fees and/or consulting costs billed to the company by a regulatory authority.

The analysis of A&G costs per MWh sold, after removal of the costs associated with Account Nos. 924, 925, 926, and 928 is shown in the following table:

Table 6: Administrative and General O&M Excluding Account Nos. 924, 925, 926, and 928 (Dollars Per MWh of Sales)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$3.67	$1.95	53%	17
2019	$3.81	$2.74	71%	37
2020	$3.88	$2.46	63%	28
2021	$4.10	$2.56	62%	28

Again, this subset of ETI's administrative and general costs expressed on a per MWh sold basis is lower than the electric utility industry average and resides in the second quartile in 2019 and top quartile in 2020 and 2021. The detailed analysis of adjusted A&G O&M is contained in Exhibit BRS-21 through Exhibit BRS-24.

Q16. DID YOU ANALYZE THE O&M EXPENSE CATEGORIES ON A BASIS OTHER THAN PER MWH SOLD?

A. Yes. I also analyzed the same O&M categories of Total Non-Production O&M, Distribution O&M, Transmission O&M, Customer Accounts, Service and Informational, and Sales Expense O&M, and A&G (including and excluding certain accounts) on a per customer basis. I should note that I do not believe that per customer benchmarking analyses are as useful as per MWh analyses in drawing conclusions concerning ETI's efficiency. O&M costs are not generally caused by the number of customers nor, for the most part, are such costs billed to

customers on a per customer basis. Customers do not pay the same charge as any other customer just because they are a customer. You pay for how much you use. However, I do recognize that certain ESL billing methods are appropriately based on the number of customers; therefore, I have analyzed the O&M costs on this basis as well. The results of these analyses are summarized in the following tables:

Table 7: Total Non-Production O&M
(Dollars Per Customer)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$655.51	$410.11	62%	15
2019	$642.72	$430.95	67%	27
2020	$582.39	$418.51	71%	27
2021	$604.69	$439.94	72%	25

Table 8: Distribution O&M
(Dollars Per Customer)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$121.67	$95.91	78%	33
2019	$129.43	$94.49	73%	33
2020	$146.25	$98.56	67%	44
2021	$153.19	$105.41	68%	45

Table 9: Transmission O&M
(Dollars Per Customer)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$130.40	$70.21	53%	46
2019	$138.64	$63.69	45%	41
2020	$140.13	$61.53	43%	37
2021	$145.30	$65.53	45%	36

Table 10: Customer Accounts, Service and Informational, and Sales Expense O&M
(Dollars Per Customer)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$101.12	$75.89	75%	47
2019	$101.02	$75.35	74%	42
2020	$104.09	$72.17	69%	42
2021	$106.73	$71.88	67%	39

Table 11: Administrative and General O&M
(Dollars Per Customer)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$300.28	$161.04	53%	52
2019	$271.57	$191.16	70%	64
2020	$189.89	$179.32	94%	64
2021	$197.57	$190.17	96%	60

Table 12: Administrative and General O&M Excluding Account Nos. 924, 925, 926, and 928 (Dollars Per Customer)

Year	Weighted Industry Average	ETI	ETI as a % of Industry Average	Rank Among Peer Group
2018	$101.77	$93.36	91%	52
2019	$103.45	$124.47	120%	72
2020	$101.50	$108.73	107%	64
2021	$106.16	$117.39	110%	57

As mentioned previously, ETI's costs expressed on a per MWh sold basis were consistently lower than the electric utility industry average. ETI's costs expressed on a per customer basis, however, are somewhat higher relative to the industry average than when such costs are expressed on a per MWh sold basis, though they still remain below or near industry average. This difference between the results of the two metrics is because ETI's MWh sales per customer are greater (approximately 77%) than the industry average, which is a function of customer-usage – not any action on the part of the Company. Thus, ETI's customers consume more energy on a per customer basis than the industry.

The detailed results of these per customer-based analyses are contained in Exhibits BRS-25 through BRS-48.

IV. PRO FORMA ADJUSTMENTS

Q17. ARE YOU SPONSORING ANY PRO FORMA ADJUSTMENTS?

A. Yes. In addition to the cost of debt adjustment discussed earlier in my testimony, the pro forma adjustments that I sponsor are listed below.

AJ19A	Affiliate Non-Recoverable Expenses	The adjustment is to eliminate affiliate expenses not allowed for recovery.
AJ19B	Adjustment to eliminate Energy Efficiency Program costs	This adjustment is to eliminate affiliate Energy Efficiency expenses that are to be included in a separate rider.
AJ19C	Remove affiliate rate case expense	This adjustment is to remove costs associated with prior rate case dockets, and also to remove costs for this docket so that they can be added to rider.
AJ19H	Affiliate Non-qualified Supplemental Pension Plan	This adjustment to remove affiliate costs associated with the non-qualified supplemental portion of the pension plan.
AJ19O	Remove Affiliate Corporate Aircraft Costs	This adjustment is to remove company aircraft costs.
AJ19P	Remove costs from Affiliate Gas and Nuclear organization	This adjustment is to remove costs associated with ESL Gas & Nuclear departments.

These test year pro forma adjustments are for items that the Company has removed because they are not being sought for recovery and/or because they are not recoverable pursuant to 16 TAC § 25.231(b)(2). For example, AJ19O removes the costs of Company-owned aircraft from the cost of service. Exhibit RMD-12 to the testimony of Ryan Dumas describes each of these test year pro forma adjustments.

V. ENTERGY'S COST CONTROL AND MONITORING PROCESS

Q18. PLEASE DESCRIBE ENTERGY'S COST CONTROL AND MONITORING PROCESS.

A. The cost control and monitoring process applies to the entirely of Entergy Corporation ("Entergy" or the "Corporation") and its affiliates. It consists of (1) establishing annual budgets; and (2) reporting actual results against these budgets.

A. Establishing Annual Budgets

Q19. WHAT BUDGETING PROCESS IS IN PLACE TO CONTROL COSTS THAT GET ALLOCATED TO ETI?

A. ETI and the other Entergy-affiliated companies rely upon a three-phase budgeting process that begins with Entergy's executive management, and is ultimately relied upon by ETI in developing its annual budget for non-fuel O&M and capital expenditures. In the first phase, called "target-setting," Entergy's executive management team establishes long-range financial plans, based upon the Corporation's prior year's performance and future objectives. The long-range financial plans, which encompass operational expectations, are used to develop functional spending targets. Executive management establishes a process to cascade these functional spending targets down through their respective functions, ultimately reaching individual departments within the organization. In this context, when I use the term "function," I mean operational activities, such as Distribution, Transmission, Nuclear, Corporate Services, and Power Generation.

Q20. WHAT IS THE NEXT PHASE OF THE BUDGETING PROCESS?

A. The second phase is referred to as the "detailed budgeting phase." During this phase each department within Entergy Corporation prepares an operating expense and capital budget to include all the costs within that department. These costs are entered into the budget system to meet functional spending targets.

Q21. WHAT IS A "DEPARTMENT" IN THE CONTEXT OF THE BUDGETING PROCESS?

A. A department is the designation given a grouping of personnel and tasks under common management. For example, within the Finance Function (which is further described later in my direct testimony), the payroll group would be considered a budgeting department.

Q22. DOES THE BUDGET PROCESS CONSIDER THE BUSINESS UNIT PERSPECTIVE, MORE SPECIFICALLY, THE PERSPECTIVE OF ETI?

A. Yes. As noted above, each department within the Corporation has a prepared budget. Some costs are budgeted specifically to ETI and other costs are budgeted to ESL. If a cost is budgeted to ESL, a "project code" is required. "Project code" is the accounting designation whereby ESL divides its work into various discrete activities and projects. Mr. Dumas discusses project codes further in his testimony. The use of project codes by ESL creates the linkage from the department perspective to the business unit perspective because, as explained in more detail by Mr. Dumas, and project codes are used to bill ETI and the other EOCs for

services provided by ESL. When a department budgets to provide services from ESL, the level of such services is estimated based on historical service levels and adjusted for anticipated changes. Once the estimated level of service is determined, budgeted cost will be assigned and allocated to ETI based on the corresponding billing methods.

Q23. HOW DO THESE AMOUNTS GET INCORPORATED INTO ETI'S BUDGET?

A. When the detailed budgeting process is complete, the budgeting system generates a business unit view of expense and capital data entered by each department. For costs budgeted to ESL "project codes," the ESL billing process generates a "processed view" or "financial view" of costs by business unit. The combination of ESL costs (affiliate costs) plus direct ETI budgeted costs (non-affiliate costs) creates the ETI non-fuel operation and maintenance expense and capital expenditure budgets.

Q24. HOW ARE BUDGETS APPROVED?

A. During the third phase of the budget process, reviews are conducted in an iterative process, at increasingly higher levels of responsibility. First, the department's manager reviews the final budget, comparing it to the target that was initially cascaded by the executive leading his/her function. Then, budgets are summarized and reviewed by each function executive. Jurisdictional presidents, Eliecer Viamontes in the case of ETI, then review the budgets of all the functions impacting their respective jurisdiction, including costs that are budgeted to ESL

"project codes." Ultimately, this process includes review and approval of the overall budget by the Entergy's executive management team.

Q25. DO YOU BELIEVE THAT THE APPROPRIATE PARTIES ARE INVOLVED IN THE BUDGET PROCESS?

A. Yes. The multi-level approach to budgeting ensures that the planned budgets are as accurate and as cost-efficient as possible. By giving the responsibility for the initial detailed budgeting process to lower level department managers, the Entergy Companies ensure that those persons who can have the most impact on day-to-day management of costs are involved in budgeting both expenses and capital costs. The various reviews, up through the department manager, function manager, jurisdictional president, and then to higher management levels, create a budget that incorporates overall goals and balances priorities between functions. The final product is a budget that can be effectively implemented and managed and that ensures that total costs are reasonable.

B. Reporting Actual Results Versus Budget Estimates

Q26. PLEASE DESCRIBE THE COST REPORTING PROCESS THAT IS USED TO MONITOR AND CONTROL COSTS.

A. Cost reports are available electronically to department management through various cost reporting systems. Department management reviews actual charges and compares them to the budget. Cost reports compare a department's actual charges to budgeted charges on a monthly and year-to-date basis and provide

several ways to review the data (e.g., by project, activity, and resource codes). Each department manager is held accountable for his or her department's budget and is responsible for explaining variances between actual charges and budgeted amounts. Executive management for ETI and the Corporation are also involved in the ongoing review of cost reporting.

Q27. DO YOU BELIEVE THAT THE COST CONTROL AND MONITORING PROCESS IS EFFECTIVE FOR CONTROLLING THE COSTS OF ETI?

A. Yes. Cost reporting allows management at all levels to monitor actual costs in comparison with budget amounts, and is a key component of ETI's ability to monitor and manage its costs. The controls resulting from detailed budget preparation and cost reporting, combined with ongoing management reviews, ensure that O&M expenses and capital costs are properly managed. This control provides assurance that ETI's costs, affiliate and non-affiliate, are reasonable.

VI. FINANCIAL SERVICES AFFILIATE CLASS

Q28. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. I sponsor the Financial Services Class of affiliate services and charges to ETI during the test year of January 1, 2021 through December 31, 2021. My testimony shows that the services and costs of this class are reasonable and necessary. I also show that the price charged for these services to ETI is no higher than the price charged to other affiliates for the same or similar services and that such prices charged represent the actual cost of the services.

Q29. WHAT ARE THE TOTAL TEST YEAR AFFILIATE CHARGES FOR THE FINANCIAL SERVICES AFFILIATE CLASS YOU ARE SPONSORING?

A. The total affiliate charges for the Financial Services Class I sponsor are shown below in Table 13.

Table 13: Total Affiliate Charges — Financial Services Class[1]

		Total ETI Adjusted		
Class	**Total Billings**	**Amount**	**Direct Billed Percentage**	**Allocated Percentage**
Financial Services	$76,767,954	$5,278,917	15%	85%

Q30. PLEASE DESCRIBE THE EXHIBITS THAT SUPPORT THE INFORMATION INCLUDED IN TABLE 13.

A. Attached to my testimony are exhibits showing, for the Financial Services Class, the calculation of the requested recovery amount. In Exhibit BRS-A, the information is shown broken down by the departments comprising the class. Exhibit BRS-B shows the same information broken down by project code and the billing method assigned to each project code. Exhibit BRS-C shows the information by department, project code, and the billing method assigned to the project code.

[1] **Total Billings** is ESL's total billings to all Entergy companies for the Test Year, plus all other affiliate charges that originated from any Entergy company. This is the amount from Column C of Exhibits BRS-A, BRS-B, and BRS-C. **Total ETI Adjusted Amount** is ETI's cost of service amount after pro forma adjustments and exclusions. **% Direct Billed** is the percentage of the Total ETI Adjusted Amount that was billed directly to ETI for the Test Year. **% Allocated** is the percentage of the Total ETI Adjusted Amount that was allocated to ETI for the Test Year.

For a description of Columns A through H and what they represent, please refer to Mr. Dumas' direct testimony. Mr. Dumas also describes the calculations that take the dollars of support services in Column A to the Total ETI Adjusted figures shown on Column H.

Q31. ARE THERE ANY PRO FORMA ADJUSTMENTS TO THIS CLASS?

A. Yes. The pro forma adjustments for my class are shown on Exhibit BRS-D, which also indicates the Company witnesses who sponsor the pro forma adjustments.

A. Overview of Financial Services Affiliate Class

Q32. PLEASE PROVIDE AN OVERVIEW OF THE FINANCIAL SERVICES AFFILIATE CLASS.

A. The Financial Services Affiliate Class consists of three major groups that provide core accounting, planning, analytic, and internal audit services to the Company: (1) Chief Financial Officer Services; (2) Accounting & Financial Processes; and (3) Internal Audit Services. The Chief Financial Officer Services and Accounting & Financial Processes groups are comprised of several subgroups detailed below. The Chief Financial Officer Services group is comprised of:

- Office of the Chief Financial Officer;
- Corporate Development & Strategic Initiatives;
- Enterprise Data & Analytics;
- Investors Relations;

- Finance Business Partners;
- Sales & Load Forecasting; and
- Revenue Forecasting.

The Accounting & Financial Processes group is comprised of:

- Office of the Chief Accounting Officer;
- Accounting Policy & External Reporting;
- Utility Operations Accounting; and
- Accounting Governance and Controls.

Q33. WHAT ARE THE MAJOR COST COMPONENTS OF THE FINANCIAL SERVICES AFFILIATE CLASS?

A. As shown on Exhibit BRS-A, the Total ETI Adjusted amount for the Financial Services Affiliate Class during the test year was $5,278,917. The major cost components are as follows:

Table 14: Cost Components

Cost Component	Total ETI Adjusted Amount	% of Total
Payroll and Employee Costs	$3,834,435	73%
Service Company Recipient	$558,426	11%
Outside Services	$639,325	12%
Office and Employee Expenses	$226,673	4%
Other	$20,059	0%
TOTAL *(Total may not foot due to rounding)*		**100%**

Q34. WHAT IS THE IMPORTANCE OF THESE COST COMPONENTS?

A. I sponsor the costs shown in this table because they comprise the Total ETI Adjusted amount for my class. This breakout of costs provides an additional view of the components of the costs in this class. This breakdown is significant, moreover, because other Company witnesses in this case provide additional overall support for the affiliate costs included in several of these categories. Jennifer A. Raeder, for instance, further supports the market competitiveness and overall reasonableness of the compensation included in the "Payroll and Employee Costs" component. Mr. Dumas explains the "Service Company Recipient" loading process that distributes ESL operating costs, such as information technology support and rents, to the operating companies. "Outside Services" pertains to services provided by non-Entergy employees and firms, such as outside consultants and vendors. Dawn D. Renton provides support for aspects of the "Office and Employee Expense" costs allocated to the affiliate classes, including to Financial Services. Specifically, Ms. Renton supports costs associated with workspaces and office supplies. Because the costs in this category are for services provided to the Financial Services Affiliate Class, my discussion of the necessity and reasonableness of the Financial Services Affiliate Class covers these costs.

Q35. WHAT WERE THE COSTS CHARGED TO ETI BY THE FINANCIAL SERVICES CLASS FOR THE 2018-2020 TIME PERIOD AS WELL AS THE TEST YEAR?

A. The following table shows the total affiliate O&M charges to ETI for services provided by the Financial Services Class for the years 2018–2020 and the Test Year. These cost trends have been adjusted to remove Corporate Aviation costs and Nuclear and Gas department costs.

Table 15: Financial Services Class Charges
Total ETI Amount in Dollars $
(Excludes pro forma adjustments except as described above)

2018	2019	2020	Test Year
$4,834,082	$4,843,038	$5,024,269	$5,278,917

Q36. PLEASE DISCUSS THE TREND IN THE CHARGES FOR FINANCIAL SERVICES BETWEEN 2018 AND THE TEST YEAR.

A. The charges for this class varied somewhat from year to year, with a modest increase in 2021, primarily driven by increases in payroll costs and outside consulting services.

Q37. IS THERE ANY GENERAL BENCHMARKING SUPPORT IN THE COMPANY'S FILING?

A. Yes. Earlier in my testimony, I addressed benchmarking applicable to ETI total company non-production O&M costs, and Mr. Dumas addresses benchmarking that applies at the service company (ESL) level. These results show that ESL and

ETI, as a whole, compare favorably to their peer groups with regard to costs and cost controls, particularly with regard to administrative and general costs, where significant levels of affiliate support costs for this Class are booked.

B. Financial Services Class Description

Q38. PLEASE DESCRIBE IN MORE DETAIL THE CHIEF FINANCIAL OFFICER SERVICES GROUP WITHIN THE FINANCIAL SERVICES CLASS.

A. The Chief Financial Officer Services Group within the Financial Services Class is comprised of the following areas: the Office of the Chief Financial Officer, Corporate Development & Strategic Initiatives, Investor Relations, Finance Business Partners, Revenue Forecasting and Sales & Load Forecasting.

The Office of the Chief Financial Officer is responsible for directing financial activities and enabling the proper delivery of the Finance Function services. The Chief Financial Officer also provides strategic direction; in particular, strategic input affecting the financing of investments in, and returns on, assets.

Corporate Development & Strategic Initiatives is responsible for: (1) providing valuation support on investment decisions and providing financial advisory services regarding work on mergers, acquisitions and other financial transactions in support of ETR's corporate strategic initiatives; (2) providing project management and decision-making frameworks to support the corporate strategic initiatives; (3) monitoring, analyzing, and modeling key market drivers, commodity markets, and economic environment impacting our business and

informing executive management and the EOCs of these findings; (4) providing data analysis advisory services to help EOCs solve problems, mitigate risks, and achieve goals; and (5) maintaining a data analytics platform comprised of software and other digital tools that houses data from various IT systems that is used for analysis and reporting by the analytics function as well as other functions across the company.

Enterprise Data & Analytics is responsible for: (1) providing data analysis advisory services to help EOCs solve problems, mitigate risks, and achieve goals; and (2) maintaining a data analytics platform comprised of software and other digital tools that houses data from various IT systems that is used for analysis and reporting by the analytics function as well as other functions across the company.

Investor Relations is responsible for: (1) the timely communication of information pertinent to an investment in Entergy and its affiliates to members of the financial community; and (2) quarterly earnings releases, presentations, analyst meetings, Entergy Corporation's annual report to shareholders, and the investor guide/statistical supplement.

The Finance Business Partners provide: (1) financial decision support services and overall financial planning and analysis for current and projected business results for all of Entergy's departments; and (2) decision support to the individual functions and operating companies, support financial planning & analysis, and provide variance reporting & analysis. This group includes the Operating Company Finance Directors who provide jurisdiction specific

monitoring, performance analysis and decision support for each of the regulated utility companies, including ETI.

The Revenue Forecasting and Sales & Load forecasting departments provide projected sales and revenues for financial planning purposes and support analysis and decision making around business objectives.

Q39. PLEASE DESCRIBE IN MORE DETAIL THE ACCOUNTING & FINANCIAL PROCESSES GROUP WITHIN THE FINANCIAL SERVICES CLASS.

A. The Accounting & Financial Processes group is comprised of four areas: the Office of the Chief Accounting Officer ("CAO"), Utility Operations Accounting, Accounting Policy & External Reporting, and Accounting Governance & Controls.

Q40. PLEASE DESCRIBE THE MISSION AND ACTIVITIES OF THE ACCOUNTING & FINANCIAL PROCESSES GROUP.

A. The Office of the CAO provides accounting services through the roles described below. The CAO serves as Senior Vice President and CAO for Entergy Corporation and its subsidiaries. The CAO's activities include technical guidance related to accounting, tax, regulatory, and industry issues; financial and regulatory audits; and participation on special boards and committees; and the investment approval process to provide for the identification and mitigation of risks associated with proposed capital investments, contractual commitments and risk transactions above Entergy System Policy specified thresholds. The CAO also

provides input on accounting matters in support of consolidating financial results in the role as CAO for Entergy Corporation.

Utility Operations Accounting: (1) processes and analyzes revenues for the Entergy Operating Companies, including ETI; (2) accounts for and reports on purchased power, nuclear and fossil fuels consumed in the electric generation process, and performs billing services for co-owned generating stations; and (3) records and analyzes balances related to the Company's property, plant, and equipment.

Accounting Policy & External Reporting evaluates accounting policies, performs research to determine and manage policy impacts on Entergy and its affiliates, and makes recommendations to the CAO. It also facilitates and prepares filings for external parties including, among others, the SEC and FERC, and prepares consolidated Entergy financial statements for review by executive management of the Corporation.

The Accounting Governance and Controls group provides financial transaction services to Entergy and its affiliates, and is responsible for providing direction and oversight of fundamental financial operations. The processes covered in this area include:

- General ledger management and reporting;
- Affiliate accounting and allocations;
- Miscellaneous receivables processing;
- Accounting Processes & Controls

- Accounts payable including employee travel and expense reimbursement process,
- Customer payment and cash operations, and
- Payroll; and

- Accounting Projects.

Q41. PLEASE DESCRIBE IN MORE DETAIL THE INTERNAL AUDIT SERVICES GROUP WITHIN THE FINANCIAL SERVICES CLASS.

A. The Internal Audit Services Group within the Financial Services Class provides financial, operational, and information systems audits. In addition to audits, this group provides management with other services, such as project governance reviews, risk assessments, controls consulting services, and due diligence assistance. The Internal Audit Services Group is also responsible for management oversight of Entergy's internal investigations, such as those related to suspected fraud or personnel complaints.

Q42. PLEASE DESCRIBE THE MISSION AND ACTIVITIES OF THE INTERNAL AUDIT SERVICES GROUP.

A. Internal Audit bases its conduct on the International Standards for the Professional Practice of Internal Auditing, which are created and maintained by the Institute of Internal Auditors, the governing body for internal auditors in the United States. Internal Audit serves as an independent appraisal function for Entergy and its affiliates for the purpose of assisting senior management in the

effective discharge of their responsibilities by furnishing them with analyses, appraisals, recommendations, and opinions concerning internal controls. The Sarbanes-Oxley Act requires public companies of all sizes to report annually on internal controls over financial reporting. On all audits, Internal Audit tests and renders an opinion on the adequacy of controls. The testing of and recommendations regarding controls by Internal Audit ensures compliance with Sarbanes-Oxley.

1. Necessity

Q43. ARE THE SERVICES PROVIDED BY THE FINANCIAL SERVICES CLASS NECESSARY TO PROVIDE ADEQUATE AND RELIABLE SERVICE TO ETI'S CUSTOMERS?

A. The Financial Services Class's services are necessary for and fundamental to the proper functioning of ETI and the provision of electric service to ETI customers. ETI requires services for accounting, financial and investor relations, financial planning, and internal audit, and this group's products and services provide senior management and ETI with information to make informed business decisions. Additionally, without financial statements, ETI would be unable to provide regulators or investors with information on the financial status of the Company, thereby impacting effective regulation of ETI's operations and access to capital markets. Internal Audit provides a necessary independent appraisal function to ensure compliance with regulations such as Sarbanes-Oxley, and provides services that strengthen the efficiency and effectiveness of Entergy's operations

and safeguard its assets. Ultimately, these activities benefit ETI's customers through better service at lower costs.

Q44. ARE ANY OF THE SERVICES PROVIDED BY THE FINANCIAL SERVICES CLASS REQUIRED BY LAW OR OTHER EXTERNAL SOURCES?

A. Yes. Regulatory authorities, including the SEC, FERC, state and local regulators, stock exchanges, and lenders require financial statements and disclosures. For example, FERC prescribes a specific system of accounts and rules and regulations that must be observed by public utilities subject to its jurisdiction. Because the common stock of Entergy Corporation and the preferred stock and/or debt of the EOCs are registered with the SEC, the Securities Act of 1933, as amended, requires that a controller or principal accounting officer sign registration statements.

Entergy Corporation and its subsidiaries are also subject to the disclosure requirements of the Securities Exchange Act of 1934, as amended, which include the filing of an Annual Report on SEC Form 10-K, Quarterly Reports on SEC Form 10-Q, Interim Reports on SEC Form 8-K for disclosure of interim material events, and other reporting as necessary to meet SEC requirements. The Entergy Companies would be unable to comply with these requirements if they did not appropriately maintain their accounting records. Further, without the underlying accounting records, the Entergy Companies would be unable to produce the financial and disclosure statements necessary to comply with various regulations.

And finally, the New York Stock Exchange requires that each listed company have an internal audit function.

2. Reasonableness

Q45. ARE THE COSTS OF THE FINANCIAL SERVICES CLASS REASONABLE?

A. Yes. The costs of the Financial Services Class are shown to be reasonable by the combination of budget controls and benchmarking evidence that I have provided above. 88% of the costs associated with this affiliate class are charged to A&G FERC accounts that have been evaluated as part of my benchmarking analysis discussed earlier. As shown in that study, ETI's administrative and general costs expressed on a per MWh sold basis are lower than the electric utility industry average and reside in the first quartile.

The services provided to ETI by the Financial Services Class are not duplicated elsewhere within ESL, and ETI does not duplicate these services either. Because ESL provides these same services to other Entergy affiliates, ETI receives the benefit of economies of scale. In addition, centralization enables greater specialization in services that might not be possible to the same extent if the services were provided separately by ETI or outside providers.

C. Costs Billed to ETI

Q46. HOW ARE THE COSTS OF THE FINANCIAL SERVICES CLASS BILLED TO ETI?

A. Exhibits BRS-B and BRS-C show all of the costs included in this class, broken down by project code, and the billing method associated with each project code.

Q47. WERE ANY AMOUNTS BILLED DIRECTLY, AND IF SO, WHY?

A. Yes. In the Test Year, ESL directly billed 15% of the services associated with the Financial Services Class. Direct billing for these services was appropriate because services were performed exclusively for ETI. For example, Project Code F3PCF239TX, Corporate Reporting, Analysis/Policy EGS-TX, captures and manages costs associated with performing general financial analysis and reporting activities that are specifically related to ETI. It is appropriate that these and other project costs included in Exhibits ABW-B and ABW-C are billed directly to ETI using the "DIRECTTX" billing method because only ETI benefits from these services.

Q48. DOES ESL ALLOCATE A PORTION OF THE COSTS OF THIS CLASS TO ETI?

A. Yes, however, only costs incurred that benefit more than one of the Entergy Companies are billed to these companies through an allocation.

Q49. ON WHAT BASIS ARE COSTS IN THIS CLASS ALLOCATED?

A. Each class is made up of services and related costs captured in one or more project codes. As Mr. Dumas explains, only one allocation method is assigned to each project code. Several departments may charge to a single project code, but the allocation method for that project code remains the same. An allocation method is selected based on cost causation. I will provide examples of this later in my testimony. This practice ensures that each affiliate is charged the same price (that is, its appropriate allocated share of the actual cost of the service). Through this process, assurance can be had that the prices charged to ETI for the services are not higher than the prices charged other affiliates for the same or similar services and represent the actual cost of the services.

Q50. WHAT ARE THE PREDOMINANT BILLING METHODS USED FOR THIS CLASS OF SERVICES?

A. For this class of services, the following combination of billing methods account for 90% of the Total ETI Adjusted amount associated with this class of services:

CUSTEGOP	20%
ASSTSALL	15%
DIRECTTX	15%
GENLEDAL	11%
CUSEOPCO	6%
PKLOADAL	5%
ASSTSREG	5%
CAPAOPCO	4%

APTRNALL	2%
ARTRNALL	2%
TRSBLNOP	2%
LBRUTOPN	2%
Total *(Total may not foot due to rounding)*	**90%**

I previously discussed amounts billed directly to ETI using billing method DIRECTTX. I discuss the other predominant billing methods in detail in my Exhibit BRS-49.

Q51. YOU HAVE ADDRESSED 90% OF THE TOTAL ETI ADJUSTED AMOUNT FOR THE FINANCIAL SERVICES CLASS. WHY HAVE YOU NOT SPECIFICALLY ADDRESSED THE REMAINING 10% OF THE COSTS OF THIS CLASS?

A. The remaining costs are billed via the use of a number of other project codes and allocation methods. Given the number of allocation methods, project codes, and relative dollar amounts, I have not gone into detail in this discussion in an effort to keep the discussion at a manageable level. However, the project codes and allocation methods used to bill the remaining 10% of the costs in this class are provided in Exhibit BRS-B, discussed earlier. A reader may reference this exhibit and then refer to the specific project code summary contained in an exhibit to the direct testimony of Mr. Dumas for a discussion of the particular allocation method used and the cost drivers for the activities captured in the particular project code.

Q52. HAVE YOU DETERMINED THAT THE COSTS REFLECTED IN THE REMAINING 10% OF COSTS ASSOCIATED WITH THIS CLASS HAVE BEEN BILLED APPROPRIATELY?

A. Yes. I reviewed each of the project codes and the associated billing methods used to bill the remaining 10% of the costs of this class. The billing method used to bill the costs assigned to each project code is consistent with and reflects the cost drivers of the services captured in each respective project code. Therefore, the costs charged to ETI reasonably reflect the costs of the services received by ETI and are no higher than the costs charged to other affiliates for the same or similar types of services.

Q53. DO YOU SPONSOR ANY CAPITAL ADDITIONS?

A. Yes. I sponsor approximately $1.76 million worth of software and related capital additions shown in my Exhibit BRS-53, which were necessary to support the affiliate financial services I described above.

VII. THE TREASURY OPERATIONS AFFILIATE CLASS AND WHY THE COSTS IN THIS CLASS ARE NECESSARY

Q54. PLEASE DESCRIBE THE TREASURY OPERATIONS CLASS PORTION OF THE CHARGES DURING THE TEST YEAR THAT YOU ARE SPONSORING.

A. The Treasury Operations Class is part of the Corporate Support Family as depicted on Exhibit BRS-A. The Treasury Operations Class includes the following services and expenses:

- Treasury Operations' services, which include Finance, Cash Management, Investment Management, Credit/Market Risk Management, and Risk & Insurance Management;
- ESL interest expense; and
- ESL insurance premium expense.

Q55. WHAT ARE THE TOTAL ETI ADJUSTED TEST YEAR CHARGES FOR THE TREASURY OPERATIONS CLASS THAT YOU SPONSOR?

A. The total affiliate charges for the Treasury Operations Class are shown in Table 16: Total ETI Affiliate Charges for the Treasury Operations Class for the 2021 test year. The detail supporting the following figures in Table 16 is in my Exhibits BRS-A through BRS-C.

Table 16: Total ETI Affiliate Charges for the Treasury Operations Class for January 1, 2021 – December 31, 2021

		Total ETI Adjusted		
Class	**Total Billings**	**Amount**	**% Direct Billed**	**% Allocated**
Treasury Operations Class	$8,916,843	$1,044,231	24%	76%

Q56. WHAT ARE THE MAJOR COST COMPONENTS OF THE ETI AFFILIATE CHARGES FOR THE TREASURY OPERATIONS CLASS?

A. The major cost components are reflected in Table 17:

Table 17: Major Components of ETI Affiliate Charges for the Treasury Operations Class for January 1, 2021 – December 31, 2021

Cost Component	**Total ETI Adjusted**	**% of Total**
Payroll & Employee Costs	$522,259	50%
Service Company Recipient	$74,022	7%
Outside Services	$976	0%
Office and Employee Expenses	$22,061	2%
Other	$424,913	41%
Total *(Total may not foot due to rounding)*		**100%**

Q57. WHAT IS THE PURPOSE OF TABLE 17 AND ITS COST CATEGORIES?

A. I directly sponsor the costs shown in this table because they comprise the Total ETI Adjusted affiliate charges amount for the Treasury Operations Class. This breakout of costs provides an additional "view" of the components of this class. Other witnesses in this case also provide indirect support for these costs because

they address the corporate structures and practices that underlie these costs. For example, the table demonstrates that 50% of the costs in my class are labor-related costs (Payroll and Employee Costs). Ms. Raeder discusses ESL's overall compensation structure and practices. The cost for "Service Company Recipient," which are services that ESL provides to itself, are in turn spread to all affiliates that receive ESL services. Mr. Dumas explains this service company recipient process. "Office and Employee Expenses" primarily covers the costs of maintaining workspaces, office supplies, and business travel. Ms. Renton discusses expenses associated with workspaces and office supplies in more detail in her testimony. "Outside Services" reflect the services provided by non-Entergy Company employees and firms, such as rating agency fees. The "Other" cost component includes $285,210 of bank fees, $136,146 of ESL insurance expense that was allocated to ETI, as well as $880 in allocated interest costs. My testimony addresses the necessity and reasonableness of the amounts for these costs.

Q58. ARE THERE ANY PRO FORMA ADJUSTMENTS TO THE TREASURY OPERATIONS CLASS?

A. Yes. The pro forma adjustments for the Treasury Operations Class are shown on Exhibit BRS-D, which also indicates the Company witnesses who sponsor those pro forma adjustments.