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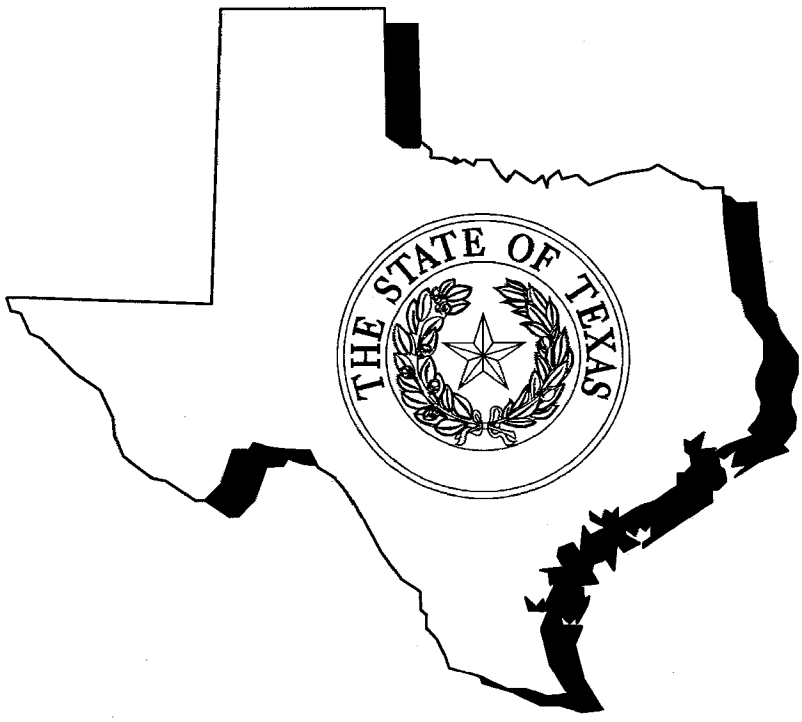
APPLICATION OF ENTERGY TEXAS, INC. FOR AUTHORITY TO CHANGE RATES	§§§§§§§	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**



REVENUE REQUIREMENT PHASE

DIRECT TESTIMONY OF

MARK FILAROWICZ

RATE REGULATION DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

NOVEMBER 2, 2022

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I. STATEMENT OF QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Mark Filarowicz. My business address is 1701 North Congress Avenue, Austin, Texas.

Q. Who is your employer and what is your position?

A. I am employed by the Public Utility Commission of Texas (Commission) as a Senior Financial and Accounting Analyst in the Rate Regulation Division.

Q. What are your principal responsibilities as a Senior Financial and Accounting Analyst for the Commission?

A. My responsibilities include testifying as an expert witness on accounting and financial matters in rate cases and other applications filed with the Commission and participating in the overall examination, review, and analysis of such applications. My responsibilities also include leading or participating in Commission rulemakings.

Q. Please describe your professional and educational background.

A. In December 2003, I graduated *summa cum laude* from the University of Texas at Austin with a Bachelor of Science degree in Actuarial Mathematics and a Bachelor of Arts degree in Philosophy.

I am licensed as a Certified Public Accountant (CPA) in the state of Texas. I have worked in various aspects of governmental and regulatory accounting for ten years.

I am a Chartered Financial Analyst (CFA) charterholder and a member of the CFA Institute. The CFA charter is obtained after fulfillment of a relevant four-year work experience requirement and successful completion of the three-part CFA Examination (CFA Exam) over a minimum three-calendar-year period. The curriculum for the CFA Exam is extensive and comprehensive; it covers a core body of knowledge fundamental to the practice of investment management and includes the subjects of finance, economics,

statistics, accounting and financial reporting, equity, fixed income, alternative investments, derivatives, asset allocation, behavioral finance, and ethical and professional conduct.

From June 2009 to June 2015, I worked for the Railroad Commission of Texas in varying capacities as a legal assistant and researcher, as an accountant, and as a budget analyst. In July 2015, I began employment with the Commission as a regulatory accountant with duties similar to those in my current position. During my time at the Commission, I have reviewed numerous electric utilities' rate-change applications.

Q. Have you previously filed testimony in regulatory proceedings before the Commission?

A. Yes. Attachment MF-10 details the dockets in which I have filed testimony on behalf of the public interest before the Commission. I have also filed memoranda and otherwise participated in myriad other dockets and projects before the Commission.

II. PURPOSE AND SCOPE OF TESTIMONY

Q. What is the purpose of your testimony in this proceeding?

A. The first purpose of my testimony is to present Staff's financial recommendations regarding a fair return on equity (ROE) and overall rate of return on invested capital regarding Entergy Texas, Inc.'s (ETI) request to change its rates in this docket based on a test year comprising the 12-month period ending December 31, 2021 (test year). ETI's most recent base-rate case was Docket No. 48371,[1] based on a test year ending December 31, 2017. My recommendation reflects my calculation of an estimated cost of equity for ETI; my analysis of ETI's cost of debt and cost of preferred stock; and my assessment of the reasonableness of the capital structure that ETI requests the Commission use in

[1] *Entergy Texas, Inc.'s Statement of Intent and Application for Authority to Change Rates,* Docket No. 48371, Order (Dec. 20, 2018).

calculating its authorized rate of return. In the course of my testimony, I describe the bases and analytical techniques used in developing recommendations for an electric utility's estimated cost of equity. Then, I convert the cost of equity, cost of debt, cost of preferred stock, and capital structure into the rate of return that I recommend the Commission authorize ETI to earn on its invested capital.

The second purpose of my testimony is to provide Staff's recommendation regarding necessary financial protections (commonly called "ring-fencing" provisions) to ensure that ETI is protected from adverse financial impacts from its parent and sister companies and able to provide service at just and reasonable rates.

Q. What issues identified in the Preliminary Order does your testimony address?

A. The recommendation contained in my testimony pertains to the following issues from the Commission's Preliminary Order filed August 4, 2022,[2] for the Application:

7. What is the appropriate debt-to-equity capital structure for Entergy?
    a. Is it appropriate for Entergy to include preferred stock in its capital structure for ratemaking purposes?
    b. What is the appropriate overall rate of return, return on equity, and cost of debt for Entergy?
        i. Should the Commission approve Entergy's requested return-on-equity adder of 30 basis points for high quality performance? [and]
8. Are any protections, including financial protections, appropriate to protect Entergy's financial integrity and ability to provide reliable service at just and reasonable rates?[3]

Q. What is the scope of your review?

A. My review encompasses analysis of the *Application of Entergy Texas, Inc. for Authority to Change Rates* (the Application) as filed on July 1, 2022; ETI's required 45-day update filed on August 12, 2022; and its responses to parties' requests for information (RFIs) throughout the discovery phase of this proceeding.

[2] Preliminary Order (Aug. 4, 2022).

[3] *Id.* at Page 5 of 18.

Q. What is the basis of your recommendation?

A. The basis of my recommendation is my review and evaluation of ETI's testimony, workpapers, supporting documentation, and responses to RFIs.

Q. What documents and data did you review in arriving at the conclusions and recommendations contained in your testimony?

A. In preparing my testimony for this proceeding, I examined and analyzed the Application and the responses to various RFIs that ETI provided during the discovery period. I also considered and analyzed data from financial resources such as Standard and Poor's (S&P), Value Line Investment Survey (Value Line), Zacks Investment Service (Zacks), and S&P Global Market Intelligence (S&P Global) (formerly SNL Financial).

Q. What standards are you applying in the determination of the reasonableness of Oncor's financial requests and overall requested rate of return?

A. I am applying standards set forth in the Public Utility Regulatory Act, Texas Utilities Code Annotated (PURA) § 36.051, which states:

> In establishing an electric utility's rates, the regulatory authority shall establish the utility's overall revenues at an amount that will permit the utility a reasonable opportunity to earn a reasonable return on the utility's invested capital used and useful in providing service to the public in excess of the utility's reasonable and necessary operating expenses.

I am also applying 16 Texas Administrative Code (TAC) § 25.231, otherwise known as the Commission's cost-of-service rule, which states in part:

> (a) **Components of cost of service**. Except as provided in subsection (c)(2) of this section, relating to invested capital; rate base, and §23.23(b) of this title (relating to Rate Design), rates are to be based upon an electric utility's cost of rendering service to the public during a historical test year, adjusted for known and measurable changes. The two components of cost of service are allowable expenses and return on invested capital.
>
> (b) **Allowable expenses**. Only those expenses which are reasonable and necessary to provide service to the public shall be included in allowable expenses. In computing an electric utility's allowable expenses, only the electric utility's historical test year expenses as adjusted for known

and measurable changes will be considered, except as provided for in any section of these rules dealing with fuel expenses.

(c) **Return on invested capital**. The return on invested capital is the rate of return times invested capital.

(2) **Invested capital; rate base**. The rate of return is applied to the rate base. The rate base, sometimes referred to as invested capital, includes as a major component the original cost of plant, property, and equipment, less accumulated depreciation, used and useful in rendering service to the public.

Q. Under what provisions of the PURA are you making your recommendation regarding financial protections?

A. PURA §§ 11.002 (Purpose and Findings) and 14.001 (Power to Regulate and Supervise) provide the bases for my recommendation regarding financial protections in this proceeding. PURA § 11.002 provides in subsections (a) and (b) that:

(a) This title is enacted to protect the public interest inherent in the rates and services of public utilities. The purpose of this title is to establish a comprehensive and adequate regulatory system for public utilities to assure rates, operations, and services that are just and reasonable to the consumers and to the utilities.

(b) Public utilities traditionally are by definition monopolies in the areas they serve. As a result, the normal forces of competition that regulate prices in a free enterprise society do not operate. Public agencies regulate utility rates, operations, and services as a substitute for competition. [4]

PURA § 14.001 states that:

> The commission has the general power to *regulate and supervise* [emphasis added] the business of each public utility within its jurisdiction and to do anything specifically designated or implied by this title that is necessary and convenient to the exercise of that power and jurisdiction.[5]

[4] Public Utility Regulatory Act, Tex. Util. Code Ann. § 11.002 (PURA)

[5] PURA § 14.001.

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of the Commission Staff, whose duty it is to represent the public interest in such proceedings.

III. BACKGROUND

Q. Please briefly describe ETI.

A. ETI is a fully integrated electric utility that provides generation, transmission, and distribution services in the state of Texas. ETI is a wholly owned subsidiary of parent company Entergy Corporation.

IV. SUMMARY OF RECOMMENDATION ON RATE OF RETURN

Q. Please summarize your recommendations in this docket with respect to the rate of return on invested capital.

A. My conclusions and recommendations regarding rate of return on invested capital in this docket are as follows:

- The cost of equity for ETI is in the range of 8.61% to 9.98%, as calculated using discounted cash flow (DCF) analyses and equity risk-premium models. The point estimate for my recommended return on equity (ROE) for ETI is 9.45%. My recommended point estimate—which is the average of the results of the 75th percentile of my DCF analyses, the result of my equity risk-premium model (using three months of bond data), and the result of my capital asset pricing model (CAPM) analysis—incorporates considerations for ETI's business holistically. Staff's final recommendation on ROE is 9.45%.

- ETI's requested cost of debt of 3.47% is its actual cost of debt from the test year. I recommend the Commission approve the requested 3.47% cost of debt for ETI.

- ETI's requested cost of preferred stock of 5.35% is its actual cost of preferred stock. I recommend the Commission approve the requested 5.35% cost of preferred stock for ETI.

- ETI's requested capital structure for rate-setting purposes consists of 47.97% (all percentages rounded to two decimal places) long-term debt, 0.81% preferred stock, and 51.21% equity. The requested capital structure is ETI's actual capital as of the

end of the test year. I recommend that the Commission adopt ETI's requested regulatory capital structure for rate-setting purposes.

- The weighted-average cost of capital and recommended overall rate of return for ETI is 6.55%. Attachment MF-1 presents the calculation of this value from the recommended capital structure and the component costs of capital.

V. COST OF EQUITY

A. PRINCIPLES UNDERLYING THE COST OF EQUITY

Q. Please provide your understanding of the legal guidelines for the determination of the cost of equity.

A. The general framework for evaluating the cost of equity for regulated utilities is based on two decisions of the U.S. Supreme Court. In the decision for *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia* (*Bluefield*),[6] the Court stated:

> The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.[7]

This decision established financial integrity and capital attraction as standards to be met in setting the rate of return. In the decision for *Federal Power Commission v. Hope Natural Gas Co.* (*Hope*),[8] the Court stated:

> . . . [T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and to attract capital.[9]

[6] *Bluefield Waterworks & Imp. Co. v. Pub. Serv. Comm'n of W. Va.*, 262 U.S. 679 (1923).

[7] *Id.* at 693.

[8] *Fed. Power Comm'n v. Hope Nat. Gas Co.*, 320 U.S. 591 (1944).

[9] *Id.* at 603.

This decision reinforced the standards of financial integrity and capital attraction, and it further established the standard of setting a return on equity that is commensurate with the risks faced by the equity investor. From a financial perspective, investors in a utility must be given the opportunity to recover their reasonable capital costs, including a reasonable return on equity.

Q. Did these court decisions address the specific methods by which the return on equity should be determined?

A. No. Although these court decisions were helpful in establishing a general framework for evaluation, they did not specify particular methods to achieve this objective. Consequently, analysts use various techniques in determining the cost of equity. These techniques continue to evolve as new financial theories are advanced and the understanding of capital markets improves.

Q. What ultimately determines required returns on equity?

A. Ultimately, capital markets determine the required return on equity for an investor-owned electric utility or any publicly traded company. Through the interaction of the buyers and sellers of a company's common stock, the company's equity cost, i.e., the required return on equity, is established. Given the market price for a share of common stock, a financial analyst desiring to measure the cost of equity must accurately assess the sum of all investor expectations for the company in question, for a group of comparable companies, or for both. Data generated by stock exchanges and the opinions of investment advisors are important considerations in making these assessments.

Q. Is variation common among analysts in their estimates of the cost of equity?

A. Yes. Because estimating the cost of equity involves subjective opinion at various stages of the analysis, there is no single infallible approach that is appropriate in all circumstances. The opinions of experts can differ widely on many factors relevant to the cost of equity, such as basic assumptions about risk, economic conditions, and investor

expectations. Variations in the chosen approaches, and even in the application of the same approach by different analysts, are commonplace and can be expected. To rely solely on one approach for all companies under all market conditions and economic environments would be inappropriate. The results of various appropriate methods, however, should generally be close to each other or their estimates should have overlapping ranges.

Q. Is variation common among models and the inputs used in those models?

A. Yes. Certain financial models have a long tenure with regard to utility financial analysis. It is common, however, for rate-of-return witnesses to employ different specific models, and it is even more common for inputs used in the models to vary between rate-of-return witnesses.

As a general matter, an input to a financial model should be judged on how it functions within the operations of the overall model, and not on its own outside the context of the model in which it is used. A model, moreover, should be judged by its holistic mechanics and the reasonableness of the results that it yields, not by any individual inputs.

Q. What models and techniques did you use to estimate the cost of equity for ETI?

A. I used four approaches to estimate a cost of equity for ETI. Two are DCF approaches and two are risk-premium approaches.

The DCF methodology determines the price of a stock by estimating the value of future cash flows that the stock will produce for its owners. I discuss this method and its application in the analysis in Part C of this section of my testimony.

The conventional risk-premium approach that I use in my testimony relies on the historical relationship between two indices. A value for one of the indices, which is unknown in a particular period, is forecasted using its historical relationship to the other index, where the value for that same period is known. I discuss this approach, as well as the Capital Asset Pricing Model (CAPM), in Part D of this section of my testimony.

The use of DCF analyses and risk-premium methodologies is well-established at this Commission, which has relied upon these methods in rate-case decisions for at least the last three decades.

B. COMPARABLE COMPANY ANALYSIS

Q. What is the purpose of a comparable company analysis?

A. The objective of a comparable company analysis is to estimate the cost of equity for a target company by estimating the costs of equity for companies with similar risk characteristics. Cash flows are subject to the influence of many factors, not all of which may be identified. The use of multiple proxy companies in determining the target company's cost of equity mitigates the influence of unknown factors by spreading them over the several companies in the comparable company analysis.

Q. Please describe the group of comparable companies you used to perform your cost-of-equity analysis.

A. I selected comparable companies for my analysis by starting with all the electric utility companies on which Value Line reports in its *Ratings and Reports* publication and selecting those companies as much like ETI as possible without unreasonably restricting their number. The more companies there are in the analysis, the more the effects of an unexpected anomaly in one will be diluted by the rest; and, therefore, the better the comparison to the target company will be. On the other hand, choosing less stringent screening criteria to increase the number of comparable companies might result in the selection of companies with characteristics unlike those of ETI.

Q. On what basis did you select your group of comparable companies?

A. In selecting a group of companies that I think are appropriately comparable to ETI, I selected those electric utilities that:

- are followed by Value Line;

- have a current capital structure with a long-term debt proportion between 40% and 60%;
- have a positive (greater than 0%) long-term forecast of earnings growth rate from Value Line and, if Zacks provides an estimate for long-term earnings growth rate, have a positive (greater than 0%) long-term forecast of earnings growth rate from Zacks;
- are covered by S&P; have an investment grade credit rating; and, if the outlook is negative or if the utility has a negative credit watch, would not lose an investment-grade rating if downgraded one notch in credit rating;
- have not had recent and do not have planned or expected potential merger activities or other major capital expansion or contraction, and have not had any major, recent extraordinary events that would affect overall financial condition;
- have not had recent dividend omissions or cuts; and
- are not otherwise considered inappropriate for being a proxy to target the cost of equity for ETI.

Q. Please list the companies that met the screening criteria.

A. Listed below are the companies that met the screening criteria:

Ticker Symbol	Company
ALE	ALLETE, Inc.
LNT	Alliant Energy
AEE	Ameren Corporation
AEP	American Electric Power Company, Inc.
AVA	Avista Corporation

BKH	Black Hills Corporation
ED	Consolidated Edison, Inc.
D	Dominion Resources, Inc.
DUK	Duke Energy Corporation
EIX	Edison International
EVRG	Evergy, Inc.
ES	Eversource Energy
FTS	Fortis Inc.
HE	Hawaiian Electric Industries
IDA	IDACORP, Inc.
NEE	NextEra Energy, Inc.
NWE	NorthWestern Corporation
OGE	OGE Energy Corporation
OTTR	Otter Tail Corporation
PNW	Pinnacle West Capital Corporation
POR	Portland General Electric Company
PEG	Public Service Enterprise Group Incorporated
SRE	Sempra Energy
WEC	WEC Energy Group, Inc.
XEL	Xcel Energy

Q. Are these the same companies that constitute the comparable group that ETI's witness Ann E. Bulkley used for her analysis?

A. No. The group of companies that I believe are comparable to ETI is not the same as Ms. Bulkley's group of comparable companies, although there is some overlap.

Q. Would you expect that the composition of the comparable group would be the same for every rate-of-return witness in a utility rate case?

A. No. Differences in selection criteria will lead to different compositions of comparable groups. It is common in utility rate cases for the compositions of rate-of-return witnesses' comparable groups to differ.

C. DISCOUNTED CASH FLOW ANALYSIS

Q. Please explain the DCF methodology.

A. The DCF methodology derives from the Gordon dividend constant-growth model. In its original form, the Gordon dividend growth model is a tool used for determining the value of a share of common stock. The theory underlying the model holds that the price of a share is equal to the present value of all future dividends. It is expressed mathematically as follows:

$$P_o = \frac{D_1}{(1+k)^1} + \frac{D_2}{(1+k)^2} + \ldots + \frac{D_n}{(1+k)^n}$$

where: P_o = current share price;

D_i = expected dividend in year i;

k = investors' required rate of return

n = year of expected share price realization

When the dividends are assumed to grow at a constant rate—*g*—the DCF is of the constant-growth variety and all future dividends can be expressed in terms of the current dividend, D_o, by the following equation:

$$P_o = \frac{D_o(1+g)^1}{(1+k)^1} + \frac{D_o(1+g)^2}{(1+k)^2} + \ldots + \frac{D_o(1+g)^n}{(1+k)^n}$$

Finally, if the discount rate or required rate of return—*k*—is assumed to be constant from year to year, and *k* is greater than *g*, then the equation above reduces to the following form as *n* approaches infinity:

$$P_o = \frac{D_o(1+g)}{(k-g)}$$

For purposes of estimating the cost of common equity, the equation above may be rearranged to solve for the investor's required rate of return:

$$k = \frac{D_o(1 + g)}{P_o} + g$$

or more simply:

$$k = \frac{D_1}{P_o} + g$$

The constant-growth DCF model recognizes that the return to the stockholder consists of two parts: dividend yield and growth. Equity investors expect to receive a portion of their total required return in the form of current dividends and the remainder through price appreciation.

Q. Are there variations of the constant-growth DCF model?

A. Yes. For conditions in which significantly different growth rates are expected over different periods of time, analysts often employ a multistage version of the DCF model. For example, the expected near-term growth of a given company may be significantly higher or lower than the expected sustainable growth rate. In these situations, it is appropriate to apply a multistage DCF model that incorporates the various growth rates expected over time.

Under the multistage DCF, the equation for the constant-growth DCF is simply expanded to incorporate two or more growth-rate periods, with the assumption that a permanent constant growth rate can be estimated for some point in the future:

$$P_o = \frac{D_0(1+g_1)}{(1 + k)^1} + \frac{D_1(1+g_2)}{(1 + k)^2} + \ldots + \frac{D_{(n-1)}(1+g_n)}{(1 + k)^n}$$

where the variables are the same as in the equation in the previous question-and-answer, but there are more subscripts to indicate the different time periods to which the variables apply—e.g., g_1 represents the growth rate for the first period; D_2, the dividend rate for the second period; g_2 the growth rate for the second period; and so on. The "n" subscript represents however many periods are to be included (up to infinity).

Q. What prices did you use for your DCF analyses?

A. As shown on Attachment MF-3, I used stock prices that are an average of weekly prices over a recent 12-week period. The 12-week period is both long enough to smooth out stock market fluctuations and provide an assessment of long-term expectations, and short enough to capture the impact of current information on market perceptions of risk, earnings growth, and dividend growth. Twelve weeks is a reasonable period of time to balance capturing the benefits of both these goals.

Q. What versions of the DCF model did you use in your analysis?

A. I used both a single-stage version and a multistage version of the DCF model. In the single-stage version, the stock's dividend growth is based on analysts' estimates of the utility's earnings growth over the next five years. In the multistage version of the DCF model, I used a two-stage growth approach. The first stage in this version covers five years and uses the same analysts' estimates that I used in the single-stage version. The second stage, which covers years six through 150, is based on a 5.18% projected long-term growth in Gross Domestic Product (GDP), as discussed below.

Q. Why did you use two versions of the DCF model?

A. I used two versions of the DCF model because each model is reasonable in its own right and therefore likely to be used by investors. By blending the two, I more closely approximate the expectations of investors on average than if I were to use either one alone.

Q. What are the key assumptions underlying the DCF model?

A. The model rests on three principal assumptions. First, investors evaluate the expected risk and expected cash flows of all securities in the capital markets and, through the trading process, adjust the price of each security so that the expected return is commensurate with the expected risk. Second, investors discount the expected cash flows at the same rate—*k*—in every future period. Third, dividends, rather than earnings *per se*, constitute the source of value for a share of stock. Absent a sale of the stock, dividends are the only cash flows received by investors. The earnings of the company that issued the stock, however, are critical because they make it possible to pay dividends, and the level of earnings ultimately determines the level of growth in the company and the growth in dividends over time.

Q. Please describe the growth component of the DCF model.

A. Because of the relationship between sustainable earnings growth and dividend growth, the growth rate commonly used in the DCF is the earnings growth of the company whose cost of equity is being estimated. Estimates of earnings growth are appropriate because the issue is not the rate at which the firm will actually grow (which is primarily a function of economic conditions, management ability, regulatory environment, etc.), but rather the growth expectation that investors have embodied in the current price of the stock.

Q. Is it possible to know what expected earnings growth rate is actually embodied in the price of a stock?

A. No. There is no objective way to precisely determine the growth rate expected by a consensus of investors. No matter what technique is used, the best that can be said of any estimate developed by a rate-of-return analyst is that it is a reasonable proxy for investors' consensus expectations about growth.

Q. What estimates for the growth expectations of investors did you use in your DCF analyses?

A. I relied upon Value Line and Zacks for the earnings growth rates in the single-stage DCF model and the first stage of the multistage DCF model. I used Value Line because it is one of the nation's largest independent investment research services, as well as a major money management institution,[10] and I included Zacks because it compiles consensus earnings forecasts from groups of professional security analysts.[11]

For the second stage of the multistage DCF model, I used an expected long-run nominal growth rate of 5.18%, consisting of the 3.18% per year average real growth-rate of GDP for the period 1950 through 2021 as calculated from data reported by the U.S. Bureau of Economic Analysis,[12] and the 2.00% rate of long-run inflation forecast by the Board of Governors of the Federal Reserve System in its most recent estimate.[13] These are widely disseminated data that investors generally consider credible.

Q. Why do you use a consensus forecast from professional security analysts rather than historical data as a proxy for investor expectations of growth?

A. There are several reasons why I use professional security analysts' forecasts instead of historical data. First, the cost of equity is a forward-looking concept, and security analysts use extensive and sophisticated financial models to forecast growth rates. To the extent that historical growth rates for dividends, earnings, and book values are relevant to future growth, they are already incorporated into these forecasts. In addition, other pertinent information—such as general economic projections and the impact of new legislation, regulatory actions, and technological advancements—is factored into the projections

[10] www.valueline.com.

[11] www.zacks.com.

[12] U.S. Bureau of Economic Analysis, Real Gross Domestic Product (GDPC1), retrieved from FRED, Federal Reserve Bank of St. Louis; *accessible at* https://fred.stlouisfed.org/series/GDPC1 (Oct. 5, 2022).

[13] Monetary Policy Report to the Congress, Board of Governors of the Federal Reserve System at 51 (Jun. 17, 2022).

made by investment advisory firms, providing a more comprehensive estimate and reflecting a broader base of relevant information.

Second, it is not plausible to assume that the large institutional investors who dominate stock trading use valuation techniques based on the assumption that historical trends in earnings and dividends will simply be repeated. These institutions pay substantial amounts of money to investment services such as Value Line for information that includes earnings forecasts. The substantial payment suggests that these investors consider the information valuable and actually use it when making investment decisions.

Third, a long history of empirical academic research by authorities such as Dr. Myron Gordon, the originator of the Gordon dividend growth model described earlier, has shown that consensus forecasts from professional security analysts do a better job of predicting the valuation of common stocks than mechanically derived forecasts from historical data.

Q. What are the results of your DCF analyses?

A. Attachment MF-4 shows recent stock price averages and forecasted dividends for companies in the comparable group; these data feed into the single-stage DCF and multistage DCF calculations in Attachment MF-5 and Attachment MF-6, respectively. Attachment MF-5 includes a summary of the results of my single-stage DCF analysis. Using the average of earnings growth rates projected by Value Line and, where applicable, those projected by Zacks, the estimates for the unadjusted comparable companies yields an average cost of equity of 8.81%, with a 75th percentile result of 9.52%. The multistage DCF yields a cost-of-equity estimate with an average of 8.61% and a 75th percentile result of 8.99%, as shown on Attachment MF-6.

Q. Why do you use the 75th percentile results from your DCF analyses in this proceeding?

A. I use the 75th percentile results, instead of the averages or medians, from my DCF analyses in this proceeding because, in my professional opinion, it is more appropriate given the current market environment, the proxy group selected in this case, and the nature of ETI's operations. In this instance, it is important to note that the 75th percentile results accord with recent trends in authorized ROEs at this Commission and across the country.

D. RISK-PREMIUM ESTIMATES OF THE COST OF EQUITY

Q. Please describe the general methodology of your risk-premium analysis.

A. Because the cost of equity is not directly observable, estimates for it may be derived by examining bond yields, which are readily observable, and adding a premium to compensate for the additional risk assumed to exist in equity investments. Equity investments have traditionally been viewed as being riskier than debt investments because stockholder payments are not contractually defined and because debt holders generally have a senior claim on the assets of a firm if it declares bankruptcy. The yields on long-term bonds are typically used in risk-premium analyses because equity investments are usually thought of as long-term investments. Because the holding periods for these investments are assumed to be similar, the inflation expectations built into long-term bond yields should also be applicable to equity investments.

Q. Are equity risk premiums stable over time, or do they vary with capital market conditions?

A. Several empirical studies have demonstrated that equity risk premiums vary over time as changes occur in the capital markets. In addition, it is reasonable to expect the equity risk premium for a particular company to change as the specific risks facing a company change over time. With regard to the influence of capital market conditions, several studies have identified an inverse relationship between the level of interest rates and the size of equity

risk premiums. One explanation for this phenomenon is the differential impact of inflation on debt and equity investments. Because bond interest payments are fixed upon issuance, there is no mechanism for adjusting returns for changes in inflation and purchasing power. Therefore, when inflationary fears rise, the perceived risk associated with bond investments increases, and interest rates rise. On the other hand, equity investors may be shielded somewhat from inflation by the company's ability to raise dividend payouts during inflationary periods. Because stocks may be viewed as a better hedge against inflation, the cost of equity will tend to rise less than the cost of debt. Consequently, the equity risk premium can be expected to fall as interest rates rise.

In addition to the influence of inflation, changes in investor risk preferences can significantly affect equity risk premiums. For example, if a major economic disruption or a recession were anticipated, a move to higher quality investments would likely occur. This would have the probable effect of decreasing the returns that investors require for investing in U.S. Treasury bonds and high-grade corporate bonds. If the returns on these securities were used to measure risk premiums, the observed equity risk premiums would likely be higher. Conversely, if the demand for higher quality investments were to fall, thereby pushing up the required returns, the observed equity risk premiums would likely be lower.

1. CONVENTIONAL RISK-PREMIUM ESTIMATE

Q. Please describe the "conventional" risk-premium approach that you used in your estimate of cost of equity for ETI.

A. I refer to the risk-premium approach I use in the quantitative part of my testimony as the "conventional" risk premium to distinguish it from the concept of risk premiums in general and to denote that it is the primary risk-premium method on which Staff has relied for many years. The conventional risk premium is a risk premium that estimates the cost of equity for ETI by comparing the costs of equity authorized for utilities across the United

States to the yields of large-company corporate bonds that are rated Baa by Mergent Bond Data. The timeframe I have used for this purpose is 1980 through 2021. I did not use data from earlier than 1980 because of a sharp reduction in the money supply at that time.

Q. How did you use the relationship between the authorized costs of equity and the bond yields to quantify the cost of equity for ETI?

A. I quantified the relationship by subtracting the bond yields from the authorized costs of equity to determine a risk premium for the riskier equity.

Q. Did you test the data for correlation as you described earlier in the introduction to Part D?

A. Yes. I performed a regression analysis to analyze the relationship between the risk premium and the bond yields in the corresponding period. The regression analysis shows, with high confidence, that there is a trend in the relationship. It is an inverse trend, in which the risk premiums increase as bond yields decrease. On average, during 1980 through 2021, risk premiums increased 0.4503% for every 1.00% that bond yields decreased.

Q. Did you incorporate that relationship in your risk-premium estimate?

A. Yes. The calculation of the adjustment to the risk premium that the regression analysis indicates is shown on Page 2 of Attachment MF-7.

Q. What current interest rate data do you use in your risk-premium estimate?

A. I use bond data from a recent three-month period as the starting point in the calculation of the risk premium on Page 2 of Attachment MF-7. The three-month period covers June through August 2022. The average Baa corporate bond yield for that three-month period is 5.21%.

Q. What are the results of your risk-premium analysis, using a recent three-month period for bond data?

A. As shown on Page 2 of Attachment MF-7, the conventional risk-premium analysis implies a cost of equity of 9.98%.

Q. Would it be appropriate to use a longer period for recent bond data?

A. Possibly. In times of changing interest rates, it could also be appropriate to use a 12-month period of bond data as the starting point in the calculation of the risk premium.

Q. What would be the result of your risk-premium analysis using bond data from a 12-month period?

A. Bond data for the 12-month period covering September 2021 through August 2022 shows that the average Baa corporate yield was 4.22%, which is lower than the average yield for the three months of June, July, and August 2022. As shown on Page 3 of Attachment MF-7, using the data for the recent 12-month period, the equity risk-premium model would yield an implied cost of equity of 9.44%. Although I use the higher result that starts from three months of recent data, the fact that the equity risk-premium model yields a result of 9.44% when using 12 months of bond data further confirms the appropriateness of my overall pointe estimate of 9.45% for ROE in this proceeding.

2. CAPITAL ASSET PRICING MODEL (CAPM)

Q. What is the CAPM?

A. The CAPM is one of the cornerstones of financial theory. In its simplest sense, the model describes the relationship between the risk of an asset and its expected return, and it assumes that investors will not hold a risky asset unless they are adequately compensated for the risk. In the CAPM framework, the risk of an asset is represented by its *beta*, which is a statistical concept that measures the sensitivity of an individual security's return to changes in the returns of the overall market. The higher the beta of an asset, the greater

the risk of the asset relative to the risk of the overall market, and the greater the rate of return required by investors to hold the asset.

Q. How is the rate of return calculated in the CAPM?

A. The rate of return is calculated in the CAPM as,

$$k = R_f + ß(R_m - R_f)$$

where: k = required rate of return;

ß = beta of the asset;

R_f = risk-free rate; and

R_m = market return.

The value of $R_m - R_f$ in the equation above represents the additional risk of the market over the risk-free rate, i.e., the market risk premium of equity returns over a risk-free investment in a U.S. Treasury security. The CAPM formula calculates the relative amount of risk premium for a security by multiplying the market risk premium by the security's beta. The beta-adjusted risk premium is then added to the risk-free rate to provide the total rate of return for that security.

Q. Please describe the inputs you used in your CAPM analysis to estimate the cost of equity for ETI.

A. For the risk-free rate in the CAPM equation, I used a rate of 3.50%. This rate was the average yield of the 20-year Treasury bond for the period July 1 through August 31, 2022. The 20-year maturity of the Treasury bond is appropriate to use for this purpose rather than a shorter-maturity yield because a longer investment time horizon is more comparable to the typical investment time frame for equity securities, especially utility stocks. Another reason that a longer-term rate is a more appropriate input to the CAPM

is that longer-term rates are less volatile and less likely to be influenced by random, short-term phenomena than are short-term rates.

For the beta inputs to the model, I relied on the betas as published by Value Line. In the CAPM model, the relevant risk in the pricing of a security is *market* risk, and the risk of the overall market is, by definition, equal to 1. Because the risk—and hence stock-price volatility—of electric utilities is typically lower than that of the overall market, the betas for these companies are ordinarily lower than the value of 1. The beta values for the companies in my comparable group can be seen on Attachment MF-8.

Finally, for the market risk premium, I used a rate of 6.36%. This rate is the arithmetic mean return value between common stocks and long-term government bonds as calculated by Duff and Phelps. The information was previously published annually in the *Valuation Handbook – U.S. Guide to Cost of Capital*.[14] The information summarizes return data for various types of investments from the beginning of 1926 through the end of 2021, and it shows that the risk premium for common stocks over long-term government bonds for the 96-year period is 6.36%. A 96-year period is preferable to a shorter period because short-term phenomena can distort the relationship between stocks and bonds.

Q. What are the results of your CAPM analyses?

A. The CAPM yields a cost of equity for ETI of 9.01%.

E. SUMMARY OF COST-OF-EQUITY ANALYSES

Q. Please summarize the results of your cost-of-equity analyses.

A. The results obtained from the analyses appear on Attachment MF-9 and in the following table:

[14] Roger J. Grabowski, James P. Harrington, and Carla Nunes, *2018 Valuation Handbook – U.S. Guide to Cost of Capital*, (2018) (formerly Morningstar's *Ibbotson SBBI Valuation Yearbook*).

Methodology	Point Estimate	Range
Single-stage DCF Analyses	8.81%	5.11% - 13.95%
Multistage DCF Analysis	8.61%	7.36% - 10.34%
Single-stage DCF Analyses – 75th %	9.52%	N/A
Multistage DCF Analysis – 75th %	8.99%	N/A
Combined DCF Analysis – 75th %	9.26%	N/A
Conventional Risk Premium	9.98%	N/A
CAPM	9.01%	N/A
Unadjusted ROE Estimate	***9.45%***	8.61% - 9.98%

Q. What is your recommendation for the return on equity for ETI?

A. Considering the DCF analyses of companies that are comparable to ETI, the conventional risk-premium analysis, and the CAPM described previously in my testimony, I recommend an ROE for ETI of 9.45%.

In calculating my recommended point estimate for ETI, I averaged the results of the 75th percentile result of my DCF analyses, the result of my equity risk-premium analysis using data from a recent three-month period, and the result of my CAPM analysis. Using either the average results of my DCF analyses or the result of the equity risk-premium analysis using bond data from a recent 12-month period would result in a significantly lower point estimate for ROE for ETI in this proceeding. (Similar to the corporate bond data in the equity risk-premium analysis, using a longer time period for data for the 20-year treasury bond yields in the CAPM would have resulted in a lower implied cost of equity.) Although I chose not to use the average or median results of the DCF analyses or the result of the risk-premium model using data from a recent 12-month period when calculating my point estimate for ROE, the lower results of these analyses convince me that the appropriate cost of equity for ETI remains much lower than the range that Ms. Bulkley suggests.

My point estimate of 9.45% lies near the middle of the range of 8.61% to 9.98% as calculated by my DCF and risk-premium analyses. After assessing additional factors such as current capital market conditions and recent Staff rate-of-return testimonies for vertically integrated utilities, TDUs, and transmission-only utilities, I concluded that the best estimate for a cost of equity for ETI lies near the middle of this range. Accordingly, I selected my point estimate for ETI's return on equity of 9.45% because it lies squarely in the middle of the range, because it aligns itself with recent Staff recommendations, and because it promotes the public interest by balancing the concerns of ratepayers while affording ETI a reasonable opportunity to earn a reasonable return on its invested capital.

Based on my analyses and the foregoing considerations, my overall recommendation of 9.45% is a reasonable estimate of the ROE for ETI and is fully consistent with the requirements of *Hope* and *Bluefield* that I referenced earlier in my testimony.

VI. COST OF DEBT

Q. What cost of debt did ETI request in its Application?

A. It its Application, ETI requested a cost of debt of 3.47%, which was its actual cost of debt for the test year.[15]

Q. Do you believe that the cost of debt that ETI requests in its Application is appropriate for rate-setting purposes?

A. Yes. The requested cost of debt is ETI's actual cost of long-term debt for the test year, and I believe that it is appropriate to use it when setting rates and calculating ETI's authorized rate of return. I recommend the Commission approve ETI's requested cost of long-term debt of 3.47% for rate-setting purposes.

[15] Application, Schedule K-3 at Page 2 of 2.

VII. COST OF PREFERRED STOCK

Q. What cost of preferred stock did ETI request in its Application?

A. It its Application, ETI requested a cost of preferred stock of 5.35%, which was its actual cost of preferred stock for the test year.[16]

Q. Do you believe that the cost of preferred stock that ETI requests in its Application is appropriate for rate-setting purposes?

A. Yes. The requested cost of preferred stock is ETI's actual cost of preferred stock for the test year, and I believe that it is appropriate to use it when setting rates and calculating ETI's authorized rate of return. I recommend the Commission approve ETI's requested cost of long-term debt of 5.35% for rate-setting purposes.

VIII. CAPITAL STRUCTURE

Q. What capital structure did ETI propose in its Application?

A. It its Application, ETI requested a capital structure consisting of 47.97% (all percentages rounded to two decimal places) long-term debt, 0.81% preferred stock, and 51.21% common equity for the purpose of establishing rates.[17]

Q. Is the capital structure that ETI requests its actual capital structure from the test year?

A. Yes. The requested capital structure is ETI's actual capital structure at the end of the test year.[18]

[16] Application, Schedule K-2 at Page 1 of 2.

[17] Application, Schedule K-1 and Direct Testimony of Bobby R. Sperandeo at Page 3 of 57.

[18] *Ibid.*

Q. Does every capital structure and authorized rate of return for every electric utility include preferred stock? If not, why is it appropriate to include here?

A. No. Many other electric utilities in the state of Texas have capital structures that consist of long-term debt and equity (and nothing else). Despite this fact, it is appropriate to include preferred stock in ETI's capital structure in this case. The rate filing package for an investor-owned generating utility (such as ETI) allows for preferred stock in the capital structure. ETI issued preferred stock in September 2019 and therefore has preferred stock in its actual capital structure.[19] In this case, I recommend the Commission authorize for ETI a capital structure that includes preferred stock.

Q. Do you believe that the capital structure that ETI is requesting in its Application is appropriate for rate-setting purposes?

A. Yes. The requested capital structure is ETI's actual capital structure from the test year. I recommend the Commission approve ETI's requested regulatory capital structure consisting of 47.97% long-term debt, 0.81% preferred stock, and 51.21% common equity for rate-setting purposes.

IX. OVERALL RATE OF RETURN

Q. How did you calculate the overall cost of capital?

A. To calculate the recommended rate of return for ETI, I employed the weighted-average cost-of-capital methodology, the use of which involves three steps in a regulatory setting.

First, the analyst must identify the sources of capital and estimate the component cost of each source of capital in the target company's capital structure. Sources of capital generally consist of long-term debt, common equity, and, when applicable, preferred stock in the electric utility regulatory setting. The determination of cost for long-term debt is relatively straightforward because the costs of this capital source are embedded—i.e., they

[19] Application, Direct Testimony of Bobby R. Sperandeo at Page 4 of 57.

are set by contractual obligation and are therefore directly observable. The same is true for preferred stock. In contrast, the cost of equity is not directly observable and must be estimated using analytical models, as I have done earlier in Parts A through E of Section V of my testimony.

Second, the analyst must recommend an appropriate capital structure for regulatory purposes. For each source of capital identified, the analyst must recommend an appropriate weight. I do this in Section VIII of my testimony.

Third, the cost of each capital source is weighted by its relative proportion in the recommended capital structure. The sum of these weighted component costs represents the weighted-average cost of capital—i.e., the overall rate of return. For ratemaking purposes for an electric utility, this overall rate of return is multiplied by the utility's invested capital (the rate base) in order to calculate the return component of the cost of service.

Q. What overall rate of return are you proposing for ETI in this proceeding?

A. As shown on Attachment MF-1, ETI's requested capital structure, cost of debt, and cost of preferred stock, when combined with my recommended cost of equity, result in a weighted-average cost of capital of 6.55%.

X. OTHER CONSIDERATIONS ON RATE OF RETURN

Q. Please describe ETI's requested adder to its requested ROE in this proceeding.

A. In her direct testimony, Ms. Bulkley explains that ETI's requested ROE of 10.80% in this proceeding represents her recommendation of an ROE of 10.50% coupled with a requested 30 basis point adder for performance.[20] In his direct testimony, ETI witness Jess K. Totten explains how ETI believes that its operational and managerial performance warrants an adder of 30 basis points to its ROE comprised as follows: 10 basis points for

[20] Application, Direct Testimony of Ann E. Bulkley at Page 4 of 90.

having "low retail rates and low operations and maintenance (O&M) costs" compared to regional and national utilities; 10 basis points for having "responded very well to significant storms that have landed in its service territory;" and a final 10 basis points because "ETI manages through difficult circumstances and brought the benefits of MCPS [the Montgomery County Power Station] to customers early and under budget."[21]

Q. Are you responding to ETI's assertions about its operations and managerial performance that underlie its request for an adder of basis points to its authorized ROE?

A. No. I am not responding to any assertions about ETI's operations or managerial performance. I am merely commenting on the uncommon nature of ETIs' request and otherwise presenting Staff's holistic recommendation on rate of return that contains a recommendation on ROE that does not include any adder of basis points.

Given the unusual nature of ETI's request in this docket, my silence—or that of any other financial analyst—should not be misconstrued as agreeing with the premises that underlie the extraordinary request.

Q. As a general matter, is it common for electric utilities to receive adders of basis points to authorized ROEs in a rate-setting context?

A. No.

Q. In fact, do you know of any instance where the Commission has awarded an adder of basis points to authorized ROE for superior operational and managerial performance?

A. No. I do not know of any such instance. I have conferred with other Staff financial analysts and senior Staff members, and we do not know of any instance where the Commission has awarded an adder of basis points to a Texas electric utility's authorized

[21] Application, Direct Testimony of Jess K. Totten at Page 3 of 19.

ROE since at least the beginning of the state's competitive electricity marketplace in 2002. ETI's request in this docket is for unprecedented treatment in this regard.

Q. Does ETI know of any instance where the Commission has awarded an adder of basis points to authorized ROE for superior operational and managerial performance?

A. No. In response to an RFI, ETI acknowledges that it is not aware of any docket where the Commission awarded an adder of basis points to a Texas electric utility's authorized ROE for superior operational and managerial performance.[22]

Q. Have other electric utilities requested adders of basis points to ROE for reasons other than operational and managerial performance?

A. Yes. Although ETI's request in this docket is the first instance I am aware of where an electric utility requested an adder of basis points to ROE for operational and managerial performance, I am aware of other dockets where electric utilities have requested adders of basis points for reasons including a size premium or credit-risk premium. In all these cases, I am not aware of any instance where the Commission has awarded an adder of basis points to an electric utility's authorized ROE. When asked in an RFI, ETI acknowledged that it is not aware of any docket where the Commission awarded an adder of basis points to a Texas electric utility's authorized ROE for any reason.[23]

Q. Can you provide a recent example of a docket where an electric utility requested a specific adder of basis points or a premium to ROE for reasons other than operational and managerial performance?

A. Yes. In Docket No. 51415, SWEPCO requested a size premium (adjustment to ROE) of 20 basis points as well as a credit-risk premium of 27 basis points.[24] The order in Docket

[22] Response of Entergy Texas, Inc. to Staff's Sixth Request for Information, Response to Question No. Staff 6-1 (Oct. 11, 2022).

[23] *Ibid.*

[24] *Application of Southwestern Electric Power Company for Authority to Change Rates*, Docket No. 51415, Direct Testimony of Dylan W. D'Ascendis at 52-57 (Oct. 14, 2020).

No. 51415 explicitly rejects SWEPCO's requests for a size premium and credit-risk premium.[25] Instead, the Commission holistically considered SWEPCO's application when setting an overall authorized ROE.

Q. On the other hand, has the Commission ever ordered a specific reduction of basis points to an electric utility's authorized ROE for inferior operational or managerial performance or any reason?

A. Yes. Although it would be unprecedented for the Commission to award an adder of basis points to an electric utility's authorized ROE, there have been Commission final orders that reduced an electric utility's ROE by a specified number of basis points for poor operational and managerial performance or another reason.

Q. Can you provide an example of a docket where the Commission issued a final order that included a specified reduction in basis points to an electric utility's authorized ROE for poor operational and managerial performance?

A. Yes. In Docket No. 18249, the Commission ordered a specific reduction of 60 basis points to the authorized ROE of Entergy Gulf States, Inc.[26] The Order on Rehearing in Docket No. 18249 provided that the "reduction [of 60 basis points to ROE] shall be implemented in recognition of the historically inadequate performance of EGS' [Entergy Gulf States, Inc.] distribution system."[27]

[25] Docket No. 51415, Order at Finding of Fact No. 99 (Jan. 14, 2022).

[26] *Entergy Gulf States, Inc. Service Quality Issues (Severed from Docket No. 16705)*, Docket No. 18249, Order on Rehearing at 27-28; see also page 6, footnote 13 for earlier dockets with specific ROE reductions (Apr. 22, 1998).

[27] *Id.* at 27.

Q. Even if the Commission agreed with some or all of ETI's arguments for why it thinks it deserves an adder of basis points to its authorized ROE, would it be appropriate for the Commission to adopt your recommendation on ROE in conjunction with ETI's requested adder of basis points?

A. No. It would not be appropriate under any circumstance to adopt my position on ROE with an adder of basis points. My recommendation on ROE in this docket is a holistic recommendation that I formed as a result of comprehensive analysis and review. As explained above, my recommendation incorporates the 75th percentile results of my DCF analyses and uses three months'—instead of 12 months'—data in the equity risk-premium model, both of which increase the results of the ROE range and point recommendation. It would no longer be reasonable to use the 75th percentile results in the DCF analyses and it might no longer be reasonable to use the three months' data in the equity risk-premium model if the Commission were to award an unprecedented adder of basis points to ETI's ROE.

In the end, I present a holistic recommendation on ROE and rate of return that operates entirely separately from ETI's request for ROE in this docket.

Q. Do you, as a financial analyst, think that anything about ETI's specific situation warrants that the Commission consider an adder or basis points when setting ROE?

A. No. I recommend that the Commission reject ETI's extraordinary and uncommon request for an adder of basis points to its authorized ROE in this docket.

XI. FINANCIAL PROTECTIVE MEASURES (RING-FENCING)

Q. In the context of the Commission's regulation of the rates and operations of ETI, are there reasons the Commission may wish to expressly and pre-emptively address possible concerns about the impact on ETI of the business activities of Entergy Corporation and its non-ETI subsidiaries?

A. Yes. Entergy Corporation is a large corporation that provides energy to over 3 million electric customers in Texas, Louisiana, Arkansas, and Mississippi.[28] Entergy Corporation is parent to ETI; Entergy Arkansas, LLC; Entergy Louisiana, LLC; Entergy Mississippi, LLC; Entergy New Orleans, LLC; and System Energy Resources, Inc. Entergy Corporation's 2021 Form 10-K shows that is has total assets of approximately $59.4 billion.[29] The 2021 Form 10-K for Entergy Corporation on page 1 explains Entergy Corporation's operations at a high level:

> Entergy [Corporation] operates primarily through two business segments: Utility and Entergy Wholesale Commodities.
>
> The **Utility** business segment includes the generation, transmission, distribution, and sale of electric power in portions of Arkansas, Louisiana, Mississippi, and Texas, including the City of New Orleans; and operation of a small natural gas distribution business.
>
> The **Entergy Wholesale Commodities** business segment includes the ownership, operation, and decommissioning of nuclear power plants located in the northern United States and the sale of the electric power produced by its operating plants to wholesale customers.[30]

Given the number of subsidiaries discussed above that are part of the overall Entergy Corporation organization, to the degree that there are aspects of operational and financial intermingling or interdependency among the various entities, the effects of

[28] About Entergy *accessible at* https://www.entergy.com/about-us (accessed Oct. 12, 2022).

[29] Entergy Corporation 2021 Form 10-K at 46 *accessible at* https://www.entergycorporation.gcs-web.com/financial-information/sec-filings (accessed Oct. 12, 2022).

[30] *Id.* at 1.

financial instability or weakness in one entity could affect not only Entergy Corporation as the parent company, but other subsidiaries as well. In an extreme case, an event that causes severe financial distress for Entergy Corporation could lead to its bankruptcy—a situation, that, absent the presence of protective measures, could impact subsidiaries like ETI dramatically and drag them along into the bankruptcy process.

Q. Taking into account the above discussion, for a regulated company such as ETI, what do you believe is the principal purpose of establishing regulatory requirements that implement certain financial protections?

A. From a regulatory perspective, the most fundamental reason for the implementation of certain types of financial protections is to provide for the regulated utility a set of safeguards against a parent (or sister) company's financial distress and potential contagiousness and, in an extreme situation, the parent's bankruptcy. Ultimately, I would characterize the goal of a regulatory authority's implementation of protective policies and standards as helping to ensure that the regulated utility maintains its ability to fulfill its core customer-oriented purpose: to provide reliable service at reasonable rates.

Q. Is there a generic phrase that is commonly used to describe different types of mechanisms that provide for some degree of separation between regulated utilities and their parents and affiliates?

A. Yes. That phrase is "ring-fencing," and in a regulatory context it refers to the general concept of establishing various requirements or policies that effectively isolate and thereby insulate a regulated entity from the effects of a parent (or sister) organization's financial distress and, in a worst-case scenario, bankruptcy. A basic regulatory function is the maintenance of a utility's financial ability to deliver reliable service at reasonable rates, and ring-fencing provisions are a tool that the Commission can use to carry out this most fundamental public interest goal.

Q. In what proceedings has the Commission implemented ring-fencing provisions, including the use of measures specifically related to financial protection?

A. The Commission has ordered ring-fencing provisions in a number of dockets. Since 2008, these dockets have included the following sale-transfer-merger (STM) proceedings:

- Docket No. 34077, *Joint Report and Application of Oncor Electric Delivery Company and Texas Energy Future Holdings Limited Partnership Pursuant to PURA § 14.101*;[31]
- Docket No. 45188, *Joint Report and Application of Oncor Electric Delivery Company LLC, Ovation Acquisition I, LLC, Ovation Acquisition II, LLC, and Shary Holdings, LLC for Regulatory Approvals Pursuant to PURA §§ 14.101, 37.154, 39.262(l)-(m), and 39.915*;[32]
- Docket No. 47675, *Joint Report and Application of Oncor Electric Delivery Company LLC and Sempra Energy for Regulatory Approvals Pursuant to PURA §§ 14.101, 39.262, and 39.915*;[33]
- Docket No. 48929, *Joint Report and Application of Oncor Electric Delivery Company LLC, Sharyland Distribution & Transmission Services, L.L.C., Sharyland Utilities, L.P., and Sempra Energy for Regulatory Approvals Under PURA §§ 14.101, 37.154, 39.262, and 39.915*;[34]
- Docket No. 50584, *Joint Report and Application of Wind Energy Transmission Texas, LLC; Axinfra US LP; Hotspur Holdco 1 LLC; Hotspur Holdco 2 LLC; and 730 Hotspur, LLC, for Regulatory Approvals Under PURA §§ 14.101, 39.262, and 39.915*.[35]

[31] *Joint Report and Application of Oncor Electric Delivery Company and Texas Energy Future Holdings Limited Partnership Pursuant to PURA § 14.101*, Docket No. 34077, Order on Rehearing (Apr. 24, 2008).

[32] *Joint Report and Application of Oncor Electric Delivery Company LLC, Ovation Acquisition I, LLC, Ovation Acquisition II, LLC, and Shary Holdings, LLC for Regulatory Approvals Pursuant to PURA §§ 14.101, 37.154, 39.262(l)-(m), and 39.915*, Docket No. 45188, Order (Mar. 24, 2016).

[33] *Joint Report and Application of Oncor Electric Delivery Company LLC and Sempra Energy for Regulatory Approvals Pursuant to PURA §§ 14.101, 39.262, and 39.915*, Docket No. 47675, Order (Mar. 8, 2018).

[34] *Joint Report and Application of Oncor Electric Delivery Company LLC, Sharyland Distribution & Transmission Services, L.L.C., Sharyland Utilities, L.P., and Sempra Energy for Regulatory Approvals Under PURA §§ 14.101, 37.154, 39.262, and 39.915*, Docket 48929, Order (May 9, 2019).

[35] *Joint Report and Application of Wind Energy Transmission Texas, LLC; Axinfra US LP; Hotspur Holdco 1 LLC; Hotspur Holdco 2 LLC; and 730 Hotspur, LLC, for Regulatory Approvals Under PURA §§ 14.101, 39.262, and 39.915*, Docket 50584, Order (Jul. 24, 2020).

- Docket No. 51547, *Joint Report and Application of Texas-New Mexico Power Company, NM Green Holdings, Inc., and Avangrid, Inc. for Regulatory Approvals Under PURA §§ 14.101, 39.262, and 39.915*.[36]

Commission orders for all these STM dockets include various types of ring-fencing provisions, many of which are of a financial protection nature.

Q. Have any recent Commission final orders from rate-related proceedings included ring-fencing provisions?

A. Yes. The following recent Commission final orders from rate-related dockets have included ring-fencing provisions to ensure that Texas ratepayers have meaningful financial protections:

- Docket No. 49421, *Application of CenterPoint Energy Houston Electric, LLC for Authority to Change Rates*;[37]
- Docket No. 49494, *Application of AEP Texas Inc. for Authority to Change Rates*;[38]
- Docket No. 49831, *Application of Southwestern Public Service Company for Authority to Change Rates*;[39]
- Docket No. 51415, *Application of Southwestern Electric Power Company for Authority to Change Rates*;[40]
- Docket No. 51802, *Application of Southwestern Public Service Company for Authority to Change Rates*.[41] and

[36] *Joint Report and Application of Texas-New Mexico Power Company, NM Green Holdings, Inc., and Avangrid, Inc. for Regulatory Approvals Under PURA §§ 14.101, 39.262, and 39.915*, Docket 51547, Order (May 13, 2021).

[37] *Application of CenterPoint Energy Houston Electric, LLC for Authority to Change Rates*, Docket No. 49421, Order, Finding of Fact Nos. 71-87 (Mar. 9, 2020).

[38] *Application of AEP Texas Inc. for Authority to Change Rates*, Docket No. 49494, Order, Finding of Fact Nos. 108-121 (Apr. 6, 2020).

[39] *Application of Southwestern Public Service Company for Authority to Change Rates*, Docket No. 49831, Order, Finding of Fact Nos. 75-91 (Aug. 27, 2020).

[40] *Application of Southwestern Electric Power Company for Authority to Change Rates*, Docket No. 51415, Order, Finding of Fact Nos. 106-110 (Jan. 14, 2022).

[41] *Application of Southwestern Public Service Company for Authority to Change Rates*, Docket No. 51802, Order, Finding of Fact Nos. 83-84 (May 20, 2022).

- Docket No. 52195, *Application of El Paso Electric Company to Change Rates*.[42]

The ring-fencing provisions in these recent Commission final orders are similar or identical to the measures I propose the Commission adopt in this proceeding.

Q. What is your recommendation regarding ring-fencing in this proceeding?

A. I recommend that the Commission require ETI to implement certain policies and requirements that are designed to create an effective degree of insulation between ETI and its parent company Entergy Corporation and Entergy Corporation's other affiliates. These measures would provide ETI with meaningful protection against possible situations of financial distress by non-ETI entities that are part of the Entergy Corporation organization.

Q. What mechanisms do you recommend for the purposes of establishing and maintaining for ETI appropriate separation from potential situations of financial distress of Entergy Corporation and its affiliates?

A. Below is a listing of several financial protection measures the Commission used in the various dockets I cited above. I believe implementation of these provisions would provide a meaningful degree of separation for ETI and serve as insurance against the possibility of ETI being embroiled in a situation of severe financial distress on the part of Entergy Corporation or its other affiliates. I would additionally recommend that, to the extent that any of ETI's existing policies provide compliance with the recommendations below, the Commission require ETI to commit to maintaining those policies.

1. ETI Credit Ratings. ETI will work to ensure that its credit ratings at S&P and Moody's remain at or above ETI's current credit ratings.

2. Notification of Less-than-Investment-Grade Rating. ETI will notify the Commission if its credit issuer rating or corporate rating as rated by either S&P or Moody's falls below investment-grade level.

[42] *Application of El Paso Electric Company to Change Rates*, Docket No. 52195, Order, Finding of Fact Nos. 127-129 (Sep. 15, 2022).

3. Regulatory Return on Equity (ROE) Commitment. If ETI's issuer credit rating is not maintained as investment grade by S&P or Moody's, ETI will not use its below-investment-grade ratings to justify an argument in favor of a higher regulatory ROE.

4. Stand-Alone Credit Rating. ETI will take the actions necessary to ensure the existence of a ETI stand-alone credit rating.

5. No Cross-Default Provisions. ETI's credit agreements and indentures will not contain cross-default provisions by which a default by Entergy Corporation or its other affiliates would cause a default by ETI.

6. No Financial Covenants or Rating-Agency Triggers Related to Another Entity. The financial covenant in ETI's credit agreement will not be related to any entity other than ETI. ETI will not include in its debt or credit agreements any financial covenants or rating-agency triggers related to any entity other than ETI.

7. No Sharing of a Credit Facility. ETI will not share a credit facility with any affiliates.

8. No ETI Debt Secured by Non-ETI Assets. ETI's debt will not be secured by non-ETI assets.

9. No ETI Assets Pledged for Other Entities' Debt. ETI's assets will not secure the debt of Entergy Corporation or its non-ETI affiliates. ETI's assets will not be pledged for any other entity.

10. No Credit for Affiliate Debt. ETI will not hold out its credit as being available to pay the debt of any Entergy Corporation affiliates.

11. No Commingling of Assets. Except for access to the utility money pool and the use of shared assets governed by the Commission's affiliate rules, ETI will not commingle its assets with those of other Entergy Corporation affiliates.

12. Affiliate Asset Transfer Commitment. ETI will not transfer any material assets or facilities to any affiliates, other than a transfer that is on an arm's-length basis in accordance with the Commission's affiliate standards applicable to ETI, regardless of whether such affiliate standards would apply to the particular transaction.

13. No Inter-Company Lending and Borrowing Commitment. Except for any participation in an affiliate money pool, ETI will not lend money to or borrow money from Entergy Corporation affiliates.

14. No Debt Disproportionally Dependent on ETI. Without prior approval of the Commission, neither Entergy Corporation nor any affiliate of Entergy Corporation (excluding ETI) will incur, guaranty, or pledge assets in respect

of any incremental new debt that is dependent on: (1) the revenues of ETI in more than a proportionate degree than the other revenues of Entergy Corporation; or (2) the stock of ETI.

15. No Bankruptcy Cost Commitment. ETI will not seek to recover from customers any costs incurred as a result of a bankruptcy of Entergy Corporation or any of its affiliates.

Q. Why do you believe that implementation of the above provisions would be effective in providing a meaningful degree of separation between ETI and Entergy Corporation?

A. The reason, quite simply, is that they are known to have worked. In the 2014 bankruptcy of Energy Futures Holdings Corporation (EFH), the various ring-fencing provisions that the Commission included in its order for Docket No. 34077 (referenced previously in this section) served their purpose: they effectively insulated Oncor Electric Delivery Company LLC (Oncor) from its parent's bankruptcy filing and preserved Oncor's stand-alone credit status and financial stability. Throughout the entirety of EFH's approximately three-year-long bankruptcy process, Oncor maintained its bankruptcy-remote separateness and its ability to provide reliable delivery service at just and reasonable rates.

It is important to keep in mind the reasonable assumption that, at the time of the Commission's order in Docket No. 34077, the consensus of interested parties was not that a future bankruptcy awaited EFH. Indeed, had the assessment been otherwise, I believe it is reasonable to conclude that the 2007 leveraged buyout (LBO) of TXU Energy—which was (and still is) the largest LBO transaction in history[43]—would never have taken place.

Such generally optimistic expectations notwithstanding, economic events can sometimes take unpredictable twists and turns—and ultimately for EFH, twist and turn they did. Seven years after the Commission's order in Docket No. 34077, EFH declared bankruptcy. Oncor, however, effectively stayed isolated from the bankruptcy fray—and

[43] Gillian Brassil, Scott Mlyn, and Adam Jeffery, Here Are the Top 10 Largest Leveraged Buyouts in History, CNBC Business News, Aug. 7, 2018, *accessible at* https://www.cnbc.com/2018/08/07/here-are-the-top-10-largest-leveraged-buyouts-in-history.html; *see also* Energy Future Holdings, https://en.wikipedia.org/wiki/Energy_Future_Holdings.

the basic reason was that the Commission's ring-fencing provisions achieved the exact objectives for which they were intended. Though the Commission may have implemented ring-fencing provisions in Docket No. 34077 largely out of an abundance of caution, in the end the Commission's prudence and foresight paid off: Oncor remained bankruptcy-remote and effectively financially separated from the morass of legal wrangling as the largest LBO in history deteriorated into a multi-billion-dollar bankruptcy.

Accordingly, given the unpredictable nature of economic realities, I believe it is reasonable to consider how (relatively recent) past events may help inform and guide Commission decisions relevant to the particular circumstances of this proceeding. Consequently, in order to protect ETI's ability to provide reliable service at just and reasonable rates, I recommend that the Commission require ETI to implement the measures I have described here.

Q. If you do not address an issue or position in your testimony, should that be interpreted as support for ETI's position on that issue?

A. No. The fact that I do not address an issue or position in my testimony should not be construed as agreeing with, endorsing, or consenting to any position taken by ETI.

Q. Does this conclude your testimony?

A. Yes.

WEIGHTED-AVERAGE COST OF CAPITAL

	% of Total	*Component Cost*	*Weighted Avg. Cost*
Long-term Debt	47.97%	3.47%	1.66%
Preferred Stock	0.81%	5.35%	0.04%
Common Equity	51.21%	9.45%	4.84%
(Total may not tie due to rounding)	99.99%		6.55%

SELECTION CRITERIA FOR COMPARABLE COMPANIES & EARNINGS GROWTH

Ticker Symbol	Company	Market Cap.[1] (Millions)	LTD/Capital[1] (%)	S&P Rating[2]	Earnings Growth VL[1]	Zacks[3]	***Average***
ALE	ALLETE, INC.	$3,400	42.2%	BBB	6.00%	8.15%	***7.08%***
LNT	Alliant Energy	$15,700	52.9%	A-	6.00%	6.16%	***6.08%***
AEE	Ameren Corporation	$25,000	56.1%	BBB+	6.50%	7.20%	***6.85%***
AEP	American Electric Power C	$53,000	58.3%	A-	6.50%	6.11%	***6.31%***
AVA	Avista Corporation	$3,100	47.5%	BBB	3.00%	5.38%	***4.19%***
BKH	Black Hills Corporation	$4,700	59.7%	BBB+	6.00%	6.21%	***6.11%***
ED	Consolidated Edison, Inc.	$34,800	53.0%	A-	4.00%	2.00%	***3.00%***
D	Dominion Resources, Inc.	$67,000	56.4%	BBB+	5.00%	6.35%	***5.68%***
DUK	Duke Energy Corporation	$84,600	55.1%	BBB+	5.00%	6.09%	***5.55%***
EIX	Edison International	$23,800	57.6%	BBB	16.00%	2.97%	***9.49%***
EVRG	Evergy, Inc.	$16,100	50.1%	A-	7.50%	5.24%	***6.37%***
ES	Eversource Energy	$30,800	54.2%	A-	6.50%	6.26%	***6.38%***
FTS	Fortis Inc.	$28,300	55.5%	A-	5.00%	5.43%	***5.22%***
HE	Hawaiian Electric Industrie	$4,400	46.4%	BBB-	4.00%	2.57%	***3.29%***
IDA	IDACORP, Inc.	$5,300	42.8%	BBB	4.00%	2.82%	***3.41%***
NEE	NextEra Energy, Inc.	$168,000	57.8%	A-	10.00%	9.66%	***9.83%***
NWE	NorthWestern Corporation	$3,100	52.2%	BBB	3.00%	2.27%	***2.64%***
OGE	OGE Energy	$8,300	52.6%	BBB+	6.50%	3.47%	***4.99%***
OTTR	Otter Tail Corporation	$3,200	42.6%	BBB	4.50%	NA	***4.50%***
PNW	Pinnacle West	$8,100	53.9%	BBB+	0.50%	NA	***0.50%***
POR	Portland General	$4,400	56.8%	BBB+	4.50%	3.74%	***4.12%***
PEG	Public Service Enterprise (	$32,800	51.3%	BBB+	4.00%	3.11%	***3.56%***
SRE	Sempra Energy	$46,700	44.8%	BBB+	7.50%	5.75%	***6.63%***
WEC	WEC Energy	$33,200	55.3%	A-	6.00%	6.08%	***6.04%***
XEL	Xcel Energy	$38,100	58.2%	A-	6.00%	6.43%	***6.22%***
	Averages	*$29,836*	*52.5%*	*BBB+*	*5.74%*	*5.19%*	***5.36%***

Sources: [1]*The Value Line Investment Survey,* July 22, August 12, and September 9, 2022.
[2]*Long-term Issuer Rating,* S&P Global (customized reports from www.spglobal.com, accessed September 21, 2022)
[3]*Zacks Investment Research* (www.zacks.com/stock/quote/, accessed September 20, 2022)

AVERAGE STOCK PRICES

Ticker Symbol	Company	***12-week Average***	12 19-Sep-22	11 12-Sep-22	10 5-Sep-22	9 29-Aug-22	8 22-Aug-22	7 15-Aug-22	6 8-Aug-22	5 1-Aug-22	4 25-Jul-22	3 18-Jul-22	2 11-Jul-22	1 4-Jul-22
ALE	ALLETE, INC.	***$59.91***	$58.27	$58.13	$61.00	$60.06	$60.03	$63.33	$62.65	$60.54	$61.42	$57.81	$58.23	$57.46
LNT	Alliant Energy	***$60.80***	$61.13	$60.86	$63.07	$61.49	$62.27	$64.04	$63.35	$61.28	$60.49	$57.01	$57.74	$56.92
AEE	Ameren Corporation	***$91.66***	$91.24	$91.73	$95.00	$92.34	$94.19	$96.73	$94.23	$90.72	$92.53	$86.87	$87.19	$87.19
AEP	American Electric Power	***$99.48***	$99.76	$100.36	$104.71	$101.09	$101.82	$104.94	$102.97	$98.68	$97.79	$93.61	$94.48	$93.60
AVA	Avista Corporation	***$41.72***	$40.40	$40.80	$41.13	$40.66	$42.64	$44.19	$43.39	$41.66	$41.85	$40.42	$41.78	$41.74
BKH	Black Hills Corporation	***$75.34***	$75.92	$76.41	$78.26	$75.80	$78.02	$78.56	$77.21	$73.84	$76.62	$71.00	$71.83	$70.60
ED	Consolidated Edison, Inc.	***$96.77***	$97.37	$97.41	$100.85	$98.48	$98.53	$99.76	$98.33	$96.42	$98.49	$91.71	$92.66	$91.25
D	Dominion Resources, Inc	***$80.99***	$80.03	$80.82	$83.16	$81.16	$82.40	$84.92	$82.15	$81.90	$81.31	$76.72	$78.55	$78.73
DUK	Duke Energy Corporation	***$107.70***	$105.64	$106.11	$109.88	$107.00	$108.73	$113.24	$109.24	$108.16	$108.93	$104.02	$106.45	$104.94
EIX	Edison International	***$67.10***	$67.71	$67.52	$69.10	$67.96	$69.27	$71.54	$70.75	$68.26	$67.77	$61.33	$61.56	$62.47
EVRG	Evergy, Inc.	***$67.50***	$66.71	$67.07	$70.15	$68.37	$69.48	$70.76	$70.32	$67.28	$67.71	$63.79	$64.52	$63.88
ES	Eversource Energy	***$88.88***	$88.61	$88.80	$91.63	$89.55	$91.60	$93.63	$93.11	$90.38	$88.22	$84.06	$83.66	$83.32
FTS	Fortis Inc.	***$58.89***	$56.19	$56.85	$58.44	$58.25	$58.83	$59.79	$59.74	$59.15	$59.96	$59.58	$60.75	$59.17
HE	Hawaiian Electric Industri	***$40.35***	$38.44	$38.26	$39.99	$39.03	$40.14	$42.41	$42.93	$42.18	$41.96	$39.43	$39.61	$39.77
IDA	IDACORP, Inc.	***$109.42***	$109.59	$108.76	$111.06	$109.14	$111.45	$115.32	$113.78	$108.75	$110.97	$105.28	$104.63	$104.27
NEE	NextEra Energy, Inc.	***$85.14***	$85.69	$84.79	$89.90	$84.70	$87.63	$89.28	$90.03	$87.56	$84.08	$79.86	$78.33	$79.86
NWE	NorthWestern Corporatio	***$54.58***	$53.64	$53.04	$54.56	$52.71	$54.81	$55.64	$55.26	$53.87	$54.81	$53.87	$56.62	$56.18
OGE	OGE Energy	***$40.62***	$41.02	$40.91	$41.85	$40.66	$41.50	$42.78	$41.96	$40.25	$41.08	$38.56	$39.25	$37.60
OTTR	Otter Tail Corporation	***$72.73***	$68.89	$69.80	$75.28	$75.64	$77.69	$80.99	$81.01	$75.35	$69.91	$65.50	$66.59	$66.14
PNW	Pinnacle West	***$73.96***	$73.31	$73.63	$77.04	$74.90	$75.92	$77.96	$77.32	$75.42	$72.62	$69.43	$69.92	$70.05
POR	Portland General	***$51.58***	$50.46	$50.15	$52.15	$51.72	$52.57	$55.23	$54.66	$52.48	$51.34	$50.21	$49.49	$48.48
PEG	Public Service Enterprise	***$64.65***	$65.38	$66.36	$67.45	$63.50	$66.15	$68.84	$67.07	$64.22	$65.14	$59.62	$60.06	$61.96
SRE	Sempra Energy	***$163.17***	$168.86	$168.44	$173.76	$166.80	$166.54	$170.06	$166.37	$159.79	$165.80	$154.24	$151.24	$146.12
WEC	WEC Energy	***$102.55***	$100.96	$101.29	$106.44	$103.01	$104.79	$107.69	$104.91	$102.41	$103.09	$97.18	$100.05	$98.82
XEL	Xcel Energy	***$73.05***	$73.48	$73.42	$76.48	$73.93	$74.44	$76.44	$75.47	$73.32	$72.70	$68.22	$69.51	$69.15

Stock prices obtained from Yahoo Finance, which adjusts the prices to reflect the effects of the date that the next dividend is expected to be paid.

FORECASTED DIVIDENDS

Ticker Symbol	Company	Growth Rate[1] (Attach. MF-2)	Next Four Quarters Next	2nd	3rd	4th	***Total Proj. D_1***	Stock Price (Attach. MF-3)	Dividend Yield
ALE	ALLETE, INC.	7.08%	$0.6500	$0.6960	$0.6960	$0.6960	***$2.74***	$59.91	4.57%
LNT	Alliant Energy	6.08%	$0.4275	$0.4535	$0.4535	$0.4535	***$1.79***	$60.80	2.94%
AEE	Ameren Corporation	6.85%	$0.5900	$0.6304	$0.6304	$0.6304	***$2.48***	$91.66	2.71%
AEP	American Electric Power	6.31%	$0.8292	$0.8292	$0.8292	$0.8292	***$3.32***	$99.48	3.33%
AVA	Avista Corporation	4.19%	$0.4400	$0.4400	$0.4584	$0.4584	***$1.80***	$41.72	4.31%
BKH	Black Hills Corporation	6.11%	$0.5950	$0.6313	$0.6313	$0.6313	***$2.49***	$75.34	3.30%
ED	Consolidated Edison, Inc	3.00%	$0.7900	$0.7900	$0.8137	$0.8137	***$3.21***	$96.77	3.31%
D	Dominion Resources, Inc	5.68%	$0.6675	$0.6675	$0.7054	$0.7054	***$2.75***	$80.99	3.39%
DUK	Duke Energy Corporatio	5.55%	$1.0050	$1.0050	$1.0050	$1.0607	***$4.08***	$107.70	3.78%
EIX	Edison International	9.49%	$0.7000	$0.7664	$0.7664	$0.7664	***$3.00***	$67.10	4.47%
EVRG	Evergy, Inc.	6.37%	$0.5725	$0.6090	$0.6090	$0.6090	***$2.40***	$67.50	3.55%
ES	Eversource Energy	6.38%	$0.6375	$0.6375	$0.6782	$0.6782	***$2.63***	$88.88	2.96%
FTS	Fortis Inc.	5.22%	$0.5629	$0.5629	$0.5629	$0.5629	***$2.25***	$58.89	3.82%
HE	Hawaiian Electric Industr	3.29%	$0.3500	$0.3500	$0.3615	$0.3615	***$1.42***	$40.35	3.53%
IDA	IDACORP, Inc.	3.41%	$0.7500	$0.7756	$0.7756	$0.7756	***$3.08***	$109.42	2.81%
NEE	NextEra Energy, Inc.	9.83%	$0.4250	$0.4250	$0.4668	$0.4668	***$1.78***	$85.14	2.09%
NWE	NorthWestern Corporatio	2.64%	$0.6300	$0.6300	$0.6466	$0.6466	***$2.55***	$54.58	4.68%
OGE	OGE Energy	4.99%	$0.4304	$0.4304	$0.4304	$0.4304	***$1.72***	$40.62	4.24%
OTTR	Otter Tail Corporation	4.50%	$0.4125	$0.4311	$0.4311	$0.4311	***$1.71***	$72.73	2.35%
PNW	Pinnacle West	0.50%	$0.8500	$0.8543	$0.8543	$0.8543	***$3.41***	$73.96	4.61%
POR	Portland General	4.12%	$0.4525	$0.4525	$0.4525	$0.4711	***$1.83***	$51.58	3.55%
PEG	Public Service Enterprise	3.56%	$0.5400	$0.5400	$0.5592	$0.5592	***$2.20***	$64.65	3.40%
SRE	Sempra Energy	6.63%	$1.1450	$1.1450	$1.2209	$1.2209	***$4.73***	$163.17	2.90%
WEC	WEC Energy	6.04%	$0.7275	$0.7714	$0.7714	$0.7714	***$3.04***	$102.55	2.97%
XEL	Xcel Energy	6.22%	$0.4875	$0.4875	$0.5178	$0.5178	***$2.01***	$73.05	2.75%

[1] *The growth rate is applied to the quarterly dividend during the period the dividend has historically been increased.*

DISCOUNTED CASH FLOW

Single-Stage

Ticker Symbol	Company	Stock Price (Attch. MF-3)	Div1 (Attch. MF-4)	Dividend Yield (Attch. MF-4)	Div. Growth (Attch. MF-2)	DCF ROE
ALE	ALLETE, INC.	$59.91	$2.74	4.57%	7.08%	11.65%
LNT	Alliant Energy	$60.80	$1.79	2.94%	6.08%	9.02%
AEE	Ameren Corporation	$91.66	$2.48	2.71%	6.85%	9.56%
AEP	American Electric Power Compa	$99.48	$3.32	3.33%	6.31%	9.64%
AVA	Avista Corporation	$41.72	$1.80	4.31%	4.19%	8.50%
BKH	Black Hills Corporation	$75.34	$2.49	3.30%	6.11%	9.41%
ED	Consolidated Edison, Inc.	$96.77	$3.21	3.31%	3.00%	6.31%
D	Dominion Resources, Inc.	$80.99	$2.75	3.39%	5.68%	9.07%
DUK	Duke Energy Corporation	$107.70	$4.08	3.78%	5.55%	9.33%
EIX	Edison International	$67.10	$3.00	4.47%	9.49%	13.95%
EVRG	Evergy, Inc.	$67.50	$2.40	3.55%	6.37%	9.92%
ES	Eversource Energy	$88.88	$2.63	2.96%	6.38%	9.34%
FTS	Fortis Inc.	$58.89	$2.25	3.82%	5.22%	9.04%
HE	Hawaiian Electric Industries, Inc	$40.35	$1.42	3.53%	3.29%	6.81%
IDA	IDACORP, Inc.	$109.42	$3.08	2.81%	3.41%	6.22%
NEE	NextEra Energy, Inc.	$85.14	$1.78	2.09%	9.83%	11.92%
NWE	NorthWestern Corporation	$54.58	$2.55	4.68%	2.64%	7.31%
OGE	OGE Energy	$40.62	$1.72	4.24%	4.99%	9.22%
OTTR	Otter Tail Corporation	$72.73	$1.71	2.35%	4.50%	6.85%
PNW	Pinnacle West	$73.96	$3.41	4.61%	0.50%	5.11%
POR	Portland General	$51.58	$1.83	3.55%	4.12%	7.67%
PEG	Public Service Enterprise Group	$64.65	$2.20	3.40%	3.56%	6.96%
SRE	Sempra Energy	$163.17	$4.73	2.90%	6.63%	9.52%
WEC	WEC Energy	$102.55	$3.04	2.97%	6.04%	9.01%
XEL	Xcel Energy	$73.05	$2.01	2.75%	6.22%	8.97%
					Average	*8.81%*
					75th Percentile	*9.52%*

DISCOUNTED CASH FLOW

Multistage

	ALE	LNT	AEE	AEP	AVA	BKH	ED	D	DUK	EIX	EVRG	ES	FTS	HE	IDA	NEE	NWE	OGE	OTTR	PNW	POR	PEG	SRE	WEC	XEL
Stock Price	$59.91	$60.80	$91.66	$99.48	$41.72	$75.34	$96.77	$80.99	$107.70	$67.10	$67.50	$88.88	$58.89	$40.35	$109.42	$85.14	$54.58	$40.62	$72.73	$73.96	$51.58	$64.65	$163.17	$102.55	$73.05
Div1	$2.74	$1.79	$2.48	$3.32	$1.80	$2.49	$3.21	$2.75	$4.08	$3.00	$2.40	$2.63	$2.25	$1.42	$3.08	$1.78	$2.55	$1.72	$1.71	$3.41	$1.83	$2.20	$4.73	$3.04	$2.01
5-Yr Growth	7.08%	6.08%	6.85%	6.31%	4.19%	6.11%	3.00%	5.68%	5.55%	9.49%	6.37%	6.38%	5.22%	3.29%	3.41%	9.83%	2.64%	4.99%	4.50%	0.50%	4.12%	3.56%	6.63%	6.04%	6.22%
L-t Growth	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%	5.18%
Cost of Equity	***10.05%***	***8.17%***	***8.00%***	***8.62%***	***9.33%***	***8.56%***	***8.20%***	***8.60%***	***8.99%***	***10.34%***	***8.86%***	***8.23%***	***8.99%***	***8.44%***	***7.75%***	***7.56%***	***9.45%***	***9.38%***	***7.36%***	***9.07%***	***8.57%***	***8.35%***	***8.19%***	***8.19%***	***7.98%***

Average ROE

8.61%

75th Percentile

8.99%

Cash Flows

2022	-$59.91	-$60.80	-$91.66	-$99.48	-$41.72	-$75.34	-$96.77	-$80.99	-$107.70	-$67.10	-$67.50	-$88.88	-$58.89	-$40.35	-$109.42	-$85.14	-$54.58	-$40.62	-$72.73	-$73.96	-$51.58	-$64.65	-$163.17	-$102.55	-$73.05
2023	$2.74	$1.79	$2.48	$3.32	$1.80	$2.49	$3.21	$2.75	$4.08	$3.00	$2.40	$2.63	$2.25	$1.42	$3.08	$1.78	$2.55	$1.72	$1.71	$3.41	$1.83	$2.20	$4.73	$3.04	$2.01
2024	$2.93	$1.90	$2.65	$3.53	$1.87	$2.64	$3.30	$2.90	$4.30	$3.28	$2.55	$2.80	$2.37	$1.47	$3.18	$1.96	$2.62	$1.81	$1.78	$3.43	$1.90	$2.28	$5.05	$3.23	$2.14
2025	$3.14	$2.01	$2.83	$3.75	$1.95	$2.80	$3.40	$3.07	$4.54	$3.60	$2.71	$2.98	$2.49	$1.52	$3.29	$2.15	$2.69	$1.90	$1.86	$3.45	$1.98	$2.36	$5.38	$3.42	$2.27
2026	$3.36	$2.13	$3.03	$3.98	$2.03	$2.97	$3.50	$3.24	$4.79	$3.94	$2.89	$3.17	$2.62	$1.57	$3.40	$2.36	$2.76	$1.99	$1.95	$3.46	$2.06	$2.44	$5.74	$3.63	$2.41
2027	$3.60	$2.26	$3.23	$4.24	$2.12	$3.15	$3.61	$3.42	$5.06	$4.31	$3.07	$3.37	$2.76	$1.62	$3.52	$2.60	$2.83	$2.09	$2.03	$3.48	$2.15	$2.53	$6.12	$3.85	$2.56
2028	$3.79	$2.38	$3.40	$4.46	$2.23	$3.32	$3.80	$3.60	$5.32	$4.53	$3.23	$3.54	$2.90	$1.70	$3.70	$2.73	$2.98	$2.20	$2.14	$3.66	$2.26	$2.66	$6.43	$4.05	$2.69
2029	$3.98	$2.50	$3.58	$4.69	$2.34	$3.49	$3.99	$3.79	$5.60	$4.77	$3.40	$3.73	$3.05	$1.79	$3.89	$2.87	$3.13	$2.31	$2.25	$3.85	$2.38	$2.80	$6.77	$4.25	$2.83
2030	$4.19	$2.63	$3.76	$4.93	$2.46	$3.67	$4.20	$3.98	$5.89	$5.01	$3.57	$3.92	$3.21	$1.88	$4.09	$3.02	$3.30	$2.43	$2.37	$4.05	$2.50	$2.94	$7.12	$4.48	$2.98
2031	$4.40	$2.77	$3.96	$5.18	$2.59	$3.86	$4.42	$4.19	$6.19	$5.27	$3.76	$4.12	$3.38	$1.98	$4.31	$3.18	$3.47	$2.56	$2.49	$4.26	$2.63	$3.09	$7.48	$4.71	$3.13
2032	$4.63	$2.91	$4.16	$5.45	$2.73	$4.06	$4.65	$4.41	$6.51	$5.55	$3.95	$4.34	$3.55	$2.08	$4.53	$3.34	$3.65	$2.69	$2.62	$4.48	$2.77	$3.25	$7.87	$4.95	$3.29
2033	$4.87	$3.07	$4.38	$5.73	$2.87	$4.27	$4.89	$4.64	$6.85	$5.83	$4.16	$4.56	$3.74	$2.19	$4.76	$3.51	$3.84	$2.83	$2.75	$4.71	$2.91	$3.42	$8.28	$5.21	$3.46
2034	$5.13	$3.22	$4.61	$6.03	$3.02	$4.49	$5.14	$4.88	$7.20	$6.14	$4.37	$4.80	$3.93	$2.31	$5.01	$3.70	$4.03	$2.98	$2.90	$4.96	$3.06	$3.60	$8.71	$5.48	$3.64
2035	$5.39	$3.39	$4.84	$6.34	$3.17	$4.73	$5.41	$5.13	$7.58	$6.45	$4.60	$5.05	$4.13	$2.43	$5.27	$3.89	$4.24	$3.13	$3.05	$5.21	$3.22	$3.79	$9.16	$5.76	$3.83
2036	$5.67	$3.57	$5.10	$6.67	$3.34	$4.97	$5.69	$5.39	$7.97	$6.79	$4.84	$5.31	$4.35	$2.55	$5.54	$4.09	$4.46	$3.30	$3.20	$5.48	$3.39	$3.98	$9.64	$6.06	$4.03
2037	$5.96	$3.75	$5.36	$7.02	$3.51	$5.23	$5.98	$5.67	$8.38	$7.14	$5.09	$5.58	$4.57	$2.68	$5.83	$4.30	$4.69	$3.47	$3.37	$5.77	$3.56	$4.19	$10.13	$6.37	$4.24
2038	$6.27	$3.95	$5.64	$7.38	$3.69	$5.50	$6.29	$5.97	$8.81	$7.51	$5.35	$5.87	$4.81	$2.82	$6.13	$4.52	$4.94	$3.65	$3.55	$6.07	$3.75	$4.41	$10.66	$6.70	$4.46
2039	$6.60	$4.15	$5.93	$7.76	$3.88	$5.78	$6.62	$6.28	$9.27	$7.90	$5.63	$6.18	$5.06	$2.97	$6.45	$4.76	$5.19	$3.83	$3.73	$6.38	$3.94	$4.63	$11.21	$7.05	$4.69
2040	$6.94	$4.37	$6.24	$8.17	$4.08	$6.08	$6.96	$6.60	$9.75	$8.31	$5.92	$6.50	$5.32	$3.12	$6.78	$5.00	$5.46	$4.03	$3.92	$6.71	$4.14	$4.87	$11.79	$7.42	$4.93
2041	$7.30	$4.59	$6.56	$8.59	$4.29	$6.40	$7.32	$6.94	$10.26	$8.74	$6.23	$6.83	$5.60	$3.28	$7.14	$5.26	$5.75	$4.24	$4.13	$7.06	$4.36	$5.13	$12.40	$7.80	$5.19
2042	$7.68	$4.83	$6.90	$9.03	$4.52	$6.73	$7.70	$7.30	$10.79	$9.19	$6.55	$7.19	$5.89	$3.45	$7.50	$5.54	$6.04	$4.46	$4.34	$7.43	$4.58	$5.39	$13.05	$8.20	$5.46
2043	$8.07	$5.08	$7.26	$9.50	$4.75	$7.08	$8.10	$7.68	$11.35	$9.67	$6.89	$7.56	$6.19	$3.63	$7.89	$5.82	$6.36	$4.69	$4.56	$7.81	$4.82	$5.67	$13.72	$8.63	$5.74
*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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2167	$4,234.70	$2,664.03	$3,805.49	$4,983.87	$2,491.52	$3,711.99	$4,247.62	$4,028.98	$5,951.13	$5,070.67	$3,614.29	$3,965.16	$3,246.72	$1,905.44	$4,139.83	$3,053.61	$3,333.58	$2,461.07	$2,393.36	$4,096.49	$2,528.77	$2,974.63	$7,196.11	$4,525.39	$3,011.01
2168	$4,454.06	$2,802.03	$4,002.62	$5,242.03	$2,620.58	$3,904.27	$4,467.64	$4,237.68	$6,259.39	$5,333.33	$3,801.51	$4,170.56	$3,414.90	$2,004.14	$4,354.27	$3,211.79	$3,506.25	$2,588.55	$2,517.34	$4,308.69	$2,659.76	$3,128.72	$7,568.87	$4,759.81	$3,166.98
2169	$4,684.78	$2,947.17	$4,209.95	$5,513.57	$2,756.33	$4,106.52	$4,699.07	$4,457.19	$6,583.63	$5,609.59	$3,998.43	$4,386.59	$3,591.80	$2,107.96	$4,579.82	$3,378.16	$3,687.88	$2,722.64	$2,647.73	$4,531.88	$2,797.53	$3,290.78	$7,960.94	$5,006.36	$3,331.03
2170	$4,927.45	$3,099.83	$4,428.03	$5,799.17	$2,899.11	$4,319.23	$4,942.48	$4,688.08	$6,924.66	$5,900.17	$4,205.55	$4,613.82	$3,777.85	$2,217.15	$4,817.06	$3,553.15	$3,878.91	$2,863.67	$2,784.89	$4,766.63	$2,942.45	$3,461.25	$8,373.31	$5,265.69	$3,503.57
2171	$5,182.70	$3,260.41	$4,657.40	$6,099.57	$3,049.28	$4,542.97	$5,198.50	$4,930.92	$7,283.36	$6,205.80	$4,423.40	$4,852.81	$3,973.54	$2,332.00	$5,066.58	$3,737.20	$4,079.84	$3,012.01	$2,929.14	$5,013.54	$3,094.86	$3,640.54	$8,807.05	$5,538.46	$3,685.06
2172	$5,451.16	$3,429.30	$4,898.66	$6,415.52	$3,207.23	$4,778.29	$5,467.78	$5,186.34	$7,660.64	$6,527.26	$4,652.53	$5,104.19	$4,179.37	$2,452.80	$5,329.03	$3,930.79	$4,291.17	$3,168.03	$3,080.87	$5,273.24	$3,255.18	$3,829.12	$9,263.26	$5,825.35	$3,875.94

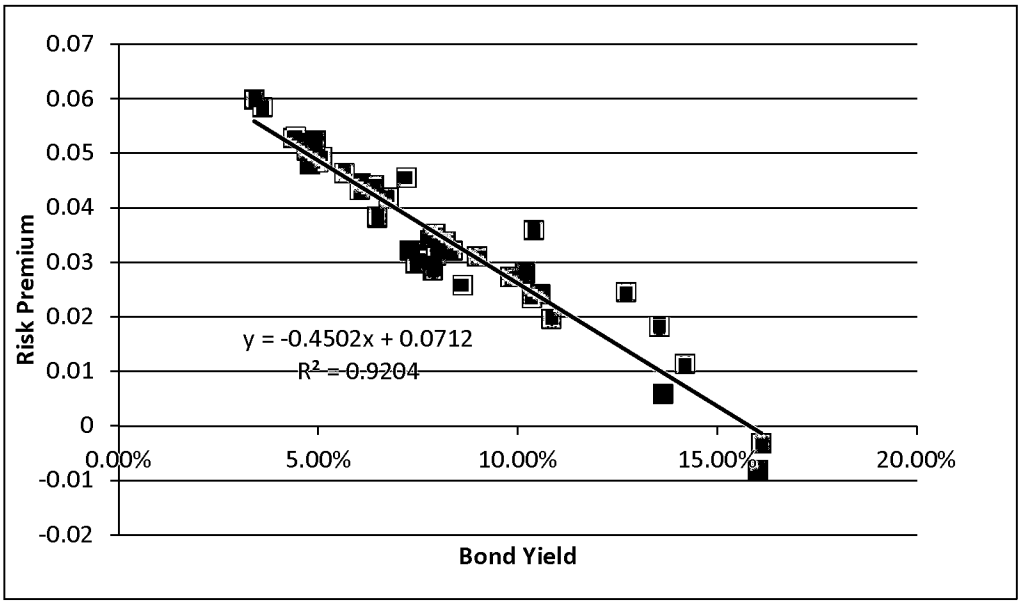
CONVENTIONAL RISK-PREMIUM ANALYSIS OF ELECTRIC UTILITIES' AUTHORIZED RATES OF RETURN ON EQUITY AND CONCURRENT CORPORATE BOND YIELDS

Year	*Allowed ROE* [1]	*Avg Baa Bond Yield* [2]	*Risk Premium*
2021	9.38%	3.40%	5.98%
2020	9.44%	3.60%	5.84%
2019	9.66%	4.38%	5.28%
2018	9.60%	4.80%	4.80%
2017	9.74%	4.44%	5.30%
2016	9.77%	4.72%	5.05%
2015	9.84%	5.00%	4.84%
2014	9.91%	4.85%	5.06%
2013	10.03%	5.10%	4.93%
2012	10.17%	4.94%	5.23%
2011	10.29%	5.66%	4.63%
2010	10.37%	6.04%	4.33%
2009	10.52%	7.30%	3.22%
2008	10.41%	7.43%	2.98%
2007	10.30%	6.48%	3.82%
2006	10.32%	6.48%	3.84%
2005	10.51%	6.06%	4.45%
2004	10.81%	6.40%	4.41%
2003	10.96%	6.77%	4.19%
2002	11.21%	7.81%	3.40%
2001	11.07%	7.95%	3.12%
2000	11.58%	8.37%	3.21%
1999	10.72%	7.87%	2.85%
1998	11.77%	7.22%	4.55%
1997	11.33%	7.87%	3.46%
1996	11.40%	8.05%	3.35%
1995	11.58%	8.20%	3.38%
1994	11.21%	8.63%	2.58%
1993	11.46%	7.94%	3.52%
1992	12.09%	8.98%	3.11%
1991	12.54%	9.81%	2.73%
1990	12.70%	10.35%	2.35%
1989	12.97%	10.18%	2.79%
1988	12.80%	10.84%	1.96%
1987	12.98%	10.57%	2.41%
1986	13.99%	10.40%	3.59%
1985	15.18%	12.72%	2.46%
1984	15.34%	14.20%	1.14%
1983	15.37%	13.55%	1.82%
1982	15.79%	16.11%	-0.32%
1981	15.22%	16.03%	-0.81%
1980	14.23%	13.64%	0.59%
Averages [3]	*11.58%*	*8.12%*	*3.46%*

[1] *S&P Global (https://platform.mi.spglobal.com/web/client?auth=inherit#industry/statisticsAndGraphs; available at www.snl.com)*

[2] *Mergent Bond Record, September 2022, pg. 19,* and earlier editions.

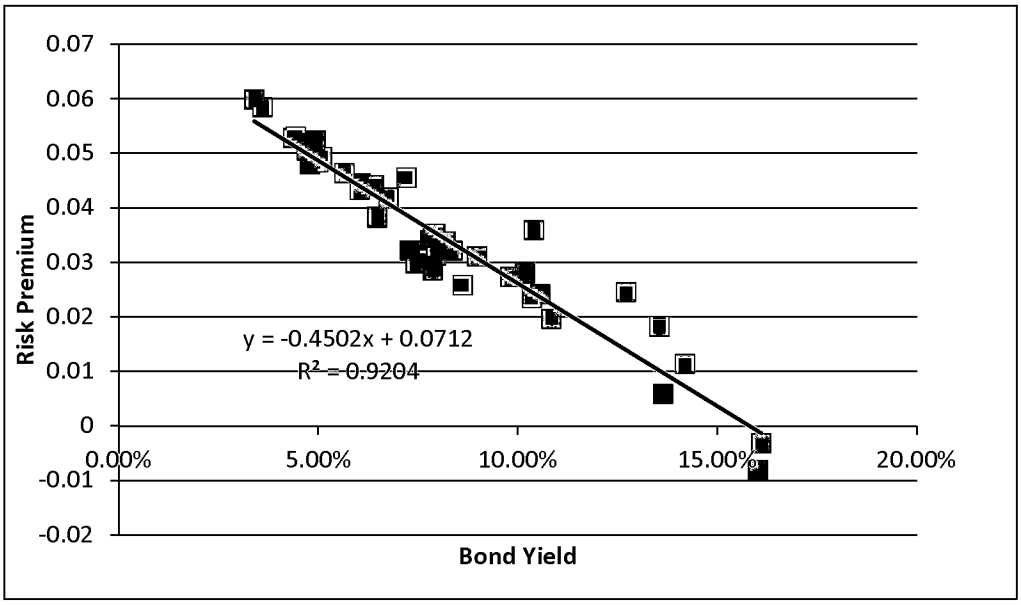
CONVENTIONAL RISK-PREMIUM ANALYSIS OF ELECTRIC UTILITIES' AUTHORIZED RATES OF RETURN ON EQUITY AND CONCURRENT CORPORATE BOND YIELDS



Computation of ROE

Avg Seasoned Baa Bond Yield, June - Aug. 2022:		5.21%
Average bond yield over study period:	-	8.12%
Change in bond yield:		-2.91%
Risk Premium/Interest Rate Relationship:	x	-0.4503
Adjustment to average risk premium:		1.31%
Average Risk Premium over Study Period:	+	3.46%
Adjusted Risk Premium:		4.77%
Avg Seasoned Baa Bond Yield:	+	5.21%
Implied Cost of Equity:		***9.98%***

CONVENTIONAL RISK-PREMIUM ANALYSIS OF ELECTRIC UTILITIES' AUTHORIZED RATES OF RETURN ON EQUITY AND CONCURRENT CORPORATE BOND YIELDS



Computation of ROE

Avg Seasoned Baa Bond Yield, Sept. 2021 - Aug. 2022:		4.22%
Average bond yield over study period:	-	8.12%
Change in bond yield:		-3.90%
Risk Premium/Interest Rate Relationship:	x	-0.4503
Adjustment to average risk premium:		1.76%
Average Risk Premium over Study Period:	+	3.46%
Adjusted Risk Premium:		5.22%
Avg Seasoned Baa Bond Yield:	+	4.22%

Implied Cost of Equity Using 12-month Bond Data: ***9.44%***

CAPITAL ASSET PRICING MODEL

Estimated Cost of Equity

Ticker Symbol	Company	Risk-Free Rate[1]	Value Line Beta[2]	Market Risk Premium[3]	CAPM Cost of Equity
ALE	ALLETE, INC.	3.50%	0.90	6.36%	9.22%
LNT	Alliant Energy	3.50%	0.85	6.36%	8.91%
AEE	Ameren Corporation	3.50%	0.85	6.36%	8.91%
AEP	American Electric Power Compa	3.50%	0.75	6.36%	8.27%
AVA	Avista Corporation	3.50%	0.90	6.36%	9.22%
BKH	Black Hills Corporation	3.50%	0.95	6.36%	9.54%
ED	Consolidated Edison, Inc.	3.50%	0.75	6.36%	8.27%
D	Dominion Resources, Inc.	3.50%	0.80	6.36%	8.59%
DUK	Duke Energy Corporation	3.50%	0.85	6.36%	8.91%
EIX	Edison International	3.50%	0.95	6.36%	9.54%
EVRG	Evergy, Inc.	3.50%	0.90	6.36%	9.22%
ES	Eversource Energy	3.50%	0.90	6.36%	9.22%
FTS	Fortis Inc.	3.50%	0.70	6.36%	7.95%
HE	Hawaiian Electric Industries, Inc	3.50%	0.80	6.36%	8.59%
IDA	IDACORP, Inc.	3.50%	0.80	6.36%	8.59%
NEE	NextEra Energy, Inc.	3.50%	0.95	6.36%	9.54%
NWE	NorthWestern Corporation	3.50%	0.95	6.36%	9.54%
OGE	OGE Energy	3.50%	1.05	6.36%	10.18%
OTTR	Otter Tail Corporation	3.50%	0.85	6.36%	8.91%
PNW	Pinnacle West	3.50%	0.90	6.36%	9.22%
POR	Portland General	3.50%	0.85	6.36%	8.91%
PEG	Public Service Enterprise Group	3.50%	0.90	6.36%	9.22%
SRE	Sempra Energy	3.50%	0.95	6.36%	9.54%
WEC	WEC Energy	3.50%	0.80	6.36%	8.59%
XEL	Xcel Energy	3.50%	0.80	6.36%	8.59%
				Average	***9.01%***

Sources: [1]U.S. Treasury (http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=longtermrateYear&year=2022); data for treasury 20-year constant maturity rates from July 1 through September 30, 2022.

[2] *Value Line Investment Report*, July 22, August 12, and September 9, 2022.

[3]Data from Duff and Phelps, 2022, which was formerly included in annual publication of Valuation Handbook - U.S. Guide to Cost of Capital (Duff & Phelps); arithmetic mean of large-company stocks from 1926 to 2021 minus the arithmetic mean of long-term government bonds for the same time period.

RETURN ON EQUITY

Summary

Single-stage DCF	
Range	Point Estm.
5.11%-13.95%	8.81%
Multistage DCF	
Range	Point Estm.
7.36%-10.34%	8.61%
Single-stage DCF - 75th Percentile	
Range	Point Estm.
N/A	9.52%
Multistage DCF - 75th Percentile	
Range	Point Estm.
N/A	8.99%
Combined DCF - 75th Percentile	
Range	Point Estm.
5.11%-13.95%	**9.26%**

Risk Premium - 12-month Avg	
Range	Point Estm.
N/A	9.44%

Risk Premium - 3-month Avg	
Range	Point Estm.
N/A	**9.98%**

CAPM	
Range	Point Estm.
N/A	**9.01%**

Average of DCF, ERP, & CAPM	
Range	Point Estm.
N/A	**9.42%**

Final Estimate

Range	8.61%-9.98%
Point Estimate	***9.45%***

Mark Filarowicz, CFA, CPA
Public Utility Commission of Texas
List of Previous Testimony

Docket No. 53601
Application of Oncor Electric Delivery Company LLC for Authority to Change Rates
Testimony on Accounting Position and Revenue Requirement Model filed September 2, 2022

Docket No. 53442
Application of CenterPoint Energy Houston Electric, LLC for Approval to Amend Its Distribution Cost Recovery Factor
Testimony in Support of Stipulation filed July 12, 2022

Docket No. 52354
Application of Entergy Texas, Inc. to Update Its Generation Cost Recovery Rider to Reflect the Acquisition of the Hardin County Peaking Facility
Testimony in Support of Stipulation filed April 25, 2022

Docket No. 52389
Application of Southwestern Electric Power Company for Advanced Metering System (AMS) Deployment Plan, AMS Surcharge, and Non-Standard Metering Service Fees
Testimony on Accounting Position and Rate-Case Expenses filed December 8, 2021

Docket No. 52067
Application of Entergy Texas, Inc. to Adjust its Energy Efficiency Cost Recovery Factor and Request to Establish Revised Cost Caps
Testimony in Support of Stipulation filed November 1, 2021

Docket No. 52397
Application of Southwestern Electric Power Company to Implement a Net Interim Fuel Surcharge
Testimony on Interest Rate and Calculation filed October 13, 2021

Docket No. 51381
Application of Entergy Texas, Inc. to Establish a Generation Cost Recovery Rider Related to the Montgomery County Power Station
Testimony in Support of Stipulation filed October 13, 2021

Docket No. 51802
Application of Southwestern Public Service Company for Authority to Change Rates
Testimony on Accounting Position and Revenue Requirement Model filed August 20, 2021
Errata filed October 12, 2021

Docket No. 51556
Application of GEUS to Change Rates for Wholesale Transmission Service
Testimony in Support of Stipulation filed July 13, 2021

Docket No. 51996
Application of Oncor Electric Delivery Company LLC for Approval to Amend Its Distribution Cost Recovery Factor
Testimony in Support of Stipulation filed June 18, 2021

Docket No. 51415
Application of Southwestern Electric Power Company L.L.C. for Authority to Change Rates
Testimony on Rate of Return filed April 7, 2021

Docket No. 51611
Application of Sharyland Utilities, L.L.C. for Authority to Change Rates
Testimony on Rate of Return filed March 12, 2021

Docket No. 50734
Application of Oncor Electric Delivery Company LLC for Approval to Amend Its Distribution Cost Recovery Factor
Testimony in Support of Stipulation filed June 24, 2020

Docket No. 49421
Application of CenterPoint Energy Houston Electric, LLC for Authority to Change Rates
Testimony on Accounting Position and Revenue Requirement Model filed June 12, 2019

Docket No. 47588
Review of Rate Case Expenses Incurred by Southwestern Public Service Company in Docket No. 47527
Testimony on Rate-Case Expenses and in Support of Stipulation filed May 23, 2019

Docket No. 49057
Application of Entergy Texas, Inc. To Set a Transmission Cost Recovery Factor
Testimony on Accounting Position and Revenue Requirement Model filed March 25, 2019

Docket No. 48371
Entergy Texas, Inc.'s Statement of Intent and Application for Authority to Change Rates
Testimony on Rate of Return filed August 8, 2018

Docket No. 48325
Application of Oncor Electric Delivery Company LLC for Authority to Decrease Rates
Testimony on Accounting Position and Effects of the Tax Cuts and Jobs Act of 2017 filed August 8, 2018
Testimony in Support of Stipulation filed September 11, 2018
Errata filed September 13, 2018

Docket No. 47527
Application of Southwestern Public Service Company for Authority to Change Rates
Testimony on Rate of Return filed May 2, 2018

Docket No. 46328
Review of Rate Case Expenses Incurred by Southwestern Public Service Company and Municipalities in Docket No. 45524
Testimony on Rate-Case Expenses and in Support of Stipulation filed November 30, 2017

Docket No. 46831
Application of El Paso Electric Company to Change Rates
Testimony on Rate of Return filed June 30, 2017

Docket No. 47032
Application of CenterPoint Houston Electric, LLC for Approval to Amend Its Distribution Cost Recovery Factor
Testimony on Accounting Position, DCRF Revenue Requirement, and Rate-Case Expenses filed June 7, 2017

Docket No. 45524
Application of Southwestern Public Service Company for Authority to Change Rates
Testimony on Accounting Position and Cost of Service filed August 23, 2016
Testimony in Support of Stipulation filed December 8, 2016

Docket No. 46014
Application of CenterPoint Energy Houston Electric, LLC for Approval of an Adjustment to Its Energy Efficiency Cost Recovery Factor
Testimony on Accounting Position filed August 8, 2016

Docket No. 45475
Review of Rate Case Expenses Incurred by El Paso Electric Company and Municipalities in Docket No. 44941
Testimony on Rate-Case Expenses and in Support of Stipulation filed July 21, 2016

Docket No. 44941
Application of El Paso Electric Company to Change Rates
Testimony on Rate-Case Expenses and in Support of Stipulation filed July 21, 2016

Docket No. 45084
Application of Entergy Texas, Inc. for Approval of a Transmission Cost Recovery Factor
Testimony on Accounting Position and TCRF Revenue Requirement filed November 24, 2015
Errata filed December 10, 2015

Docket No. 45083

Application of Entergy Texas, Inc. for Approval to Amend Its Distribution Cost Recovery Factor

Testimony on Accounting Position and DCRF Revenue Requirement filed October 23, 2015

The following files are not convertible:

53719 - Staff Rate-of-Return Model.xlsx

Please see the ZIP file for this Filing on the PUC Interchange in order to access these files.

Contact centralrecords@puc.texas.gov if you have any questions.