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SOAH DOCKET NO. 473-21-2606
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APPLICATION OF EL PASO	§	BEFORE THE STATE OFFICE
ELECTRIC COMPANY TO CHANGE	§	OF
RATES	§	ADMINISTRATIVE HEARINGS
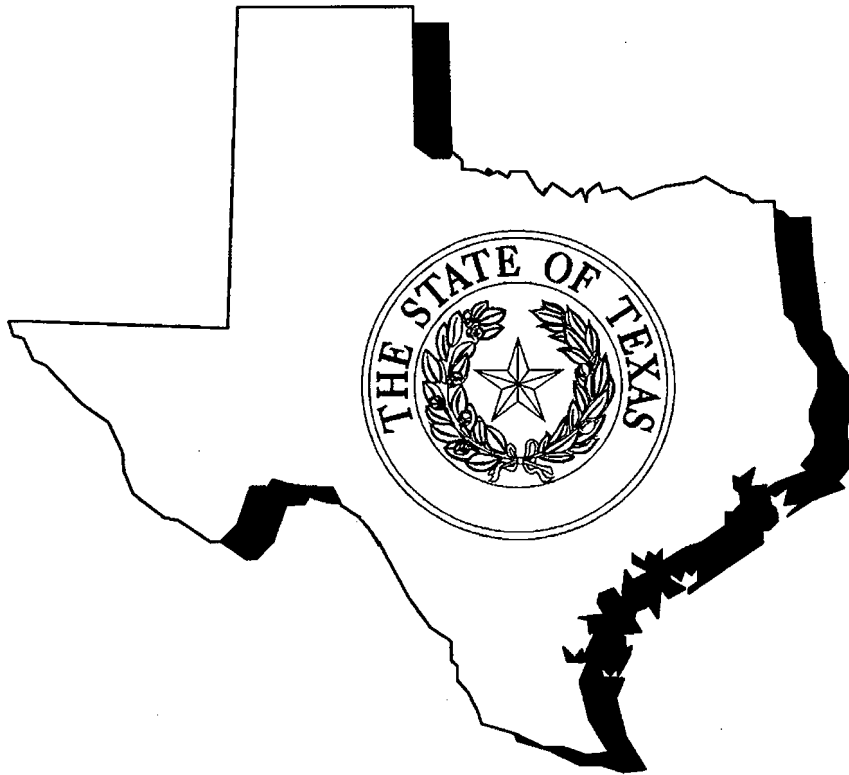
DIRECT TESTIMONY OF EMILY SEARS
RATE REGULATION DIVISION
PUBLIC UTILITY COMMISSION OF TEXAS
OCTOBER 29, 2021

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ATTACHMENTS

1   I.   **INTRODUCTION OF WITNESS**

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

3   A.   Ms. Emily Sears, Public Utility Commission of Texas, 1701 N. Congress Avenue, Austin,

4   Texas 78711-3326.

5

6   Q.   **By whom are you currently employed and in what capacity?**

7   A.   I have been employed by the Public Utility Commission of Texas (Commission) since

8   January 1, 2015.   I am a Financial Analyst in the Rate Regulation Division.

9

10   Q.   **What are your principal responsibilities at the Commission?**

11   A.   My principal responsibilities at the Commission include reviewing tariff and rate change

12   applications and appeals.   I am also responsible for preparing testimony and exhibits for

13   contested case matters involving investor-owned, non-profit, and governmental retail public

14   utilities and wholesale matters as well as participating in settlement negotiations.   I also

15   participate in Commission rulemakings.

16

17   Q.   **Please state your educational background and professional experience.**

18   A.   I have provided a summary of my educational background and professional experience in

19   Attachment ES-1 to my direct testimony.

20

21   Q.   **Have you previously testified before this Commission or the State Office of**

22   **Administrative Hearings (SOAH)?**

23   A.   Yes.   I have also testified before the Pennsylvania Public Utility Commission.

24   Attachment ES-2 provides a summary of the cases in which I have testified at hearing or

25   filed testimony.

1 **II. PURPOSE AND SCOPE OF TESTIMONY**

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

3 A. The purpose of my testimony is to present a recommendation on the overall rate of return

4 (ROR) for El Paso Electric Company (EPE) in this proceeding. More specifically, I address

5 the issues of EPE's capital structure, cost of debt, cost of equity, and overall rate of return.

6 I also present a recommendation on necessary financial protections (commonly called "ring-

7 fencing" provisions) to protect the utility's financial integrity and ability to provide reliable

8 service at just and reasonable rates.

9

10 **Q. What is the scope of your review?**

11 A. I reviewed EPE's application including direct testimony, supplements, and its responses to

12 requests for information (RFI). I also considered and analyzed data from financial

13 resources such as Standard and Poor's (S&P), Value Line Investment Survey (Value Line),

14 Zacks Investment Service (Zacks), and S&P Global Market Intelligence (S&P Global,

15 formerly SNL Financial).

16

17 **Q. What issues identified in the Commission's Preliminary Order for this docket, adopted**

18 **on June 28, 2021, will you address?**

19

20 A. 7. What is the appropriate debt-to-equity capital structure for El Paso Electric?

21

22 8. What is the appropriate overall rate of return, return on equity, and cost of

23 debt for El Paso Electric? When answering this issue, please address how

24 the factors specified in PURA § 36.052 and 16 TAC § 25.231(c)(1) should

25 affect El Paso Electric's rate of return.

26

27 9. Are any protections, such as financial protections, appropriate to protect the

28 utility's financial integrity and ability to provide reliable service at just and

29 reasonable rates?

30

31

1   Q.   **If you do not address an issue or position in your testimony, should that be interpreted**

2   **as you agreeing with or supporting EPE's position on that issue?**

3   A.   No.

4

5   **III.   BACKGROUND**

6   Q.   **Please briefly describe EPE.**

7   A.   EPE is a vertically integrated electric utility, which means that it engages in the generation,

8   transmission, and distribution of electrical service in its business.   EPE provides bundled

9   service to approximately 441,000 retail customers in west Texas and southern New Mexico.[1]

10   EPE is a wholly owned subsidiary of Sun Jupiter Holdings, LLC (SJH), which is a wholly

11   owned subsidiary of IIF US Holding 2, LP (IIF).[2]

12

13   **IV.   SUMMARY OF RECOMMENDATION ON RATE OF RETURN**

14   Q.   **Please summarize your recommendations in this docket with respect to the rate of**

15   **return on invested capital.**

16   A.   The conclusions I have reached and the recommendations in this docket are as follows:

17

18   • The cost of equity for EPE is in the range of 8.87% - 9.16%, as calculated using
19   discounted cash flow (DCF) analyses and equity risk premium models.   The
20   point estimate for my recommended return on equity (ROE) for EPE is 9.2%.

21

22   • EPE's actual cost of debt in the test year was 5.58%, and I recommend that the
23   Commission approve 5.58% as the cost of debt for EPE.

24

25   • EPE requests a capital structure for rate-setting purposes that consists of 49%
26   long-term debt and 51% equity.   The requested capital structure is close to EPE's
27   actual capital structure at the end of the test year of 47.5% long-term debt and
28   52.5% equity, which adjusts for future debt issuances to fund capital investment

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[1]   Direct Testimony of James Schichtl at 10 (June 1, 2021).

[2]   *Id.* at 23.

1   over the next five years. I recommend that the Commission adopt EPE's
2   requested regulatory capital structure for rate-setting purposes.

3

4   • The weighted-average cost of capital and recommended overall rate of return for
5   EPE is 7.42%. Attachment ES-3 presents the calculation of this value from the
6   recommended capital structure and the component costs of capital.

7

8   • To protect EPE's financial integrity, the Commission should maintain the set of
9   protective measures ordered in Docket No. 49849.[3] I recommend that the
10   Commission require EPE to maintain these policies and requirements that are
11   designed to create an effective degree of insulation between EPE and its parent
12   companies, SJH and IIF, and I further recommend three additional provisions.
13   These measures will provide EPE with meaningful protections against financial
14   distress experienced by non-EPE entities that are part of the SJH and IIF
15   organizations. In section X, I discuss these issues in more detail.

16

17 **V.   RATE OF RETURN**

18   **A. PRINCIPLES UNDERLYING THE COST OF EQUITY**

19 **Q.   Please provide your understanding of the legal guidelines for the determination of the**

20 **cost of equity.**

21 A.   The general framework for evaluating the cost of equity for regulated utilities is based on

22   two decisions of the U.S. Supreme Court. In the decision for *Bluefield Water Works &*

23   *Improvement Co. v. Public Service Commission of West Virginia* (*Bluefield*),[4] the Court

24   stated:

25

26   The return should be reasonably sufficient to assure confidence in the
27   financial soundness of the utility and should be adequate, under efficient
28   and economical management, to maintain and support its credit and enable

---

[3] *Joint Report and Application of El Paso Electric Company, Sun Jupiter Holdings LLC, and IIF US Holding 2 LP for Regulatory Approvals Under PURA §§ 14.101, 39.262, and 39.915,* Docket No. 49849, Order at Findings of Fact Nos. 60-61 (Jan. 28, 2020).

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

1   it to raise the money necessary for the proper discharge of its public
2   duties.[5]

3   This decision established financial integrity and capital attraction as standards to be met in

4   setting the rate of return.   In the decision for *Federal Power Commission v. Hope Natural*

5   *Gas Co.* (*Hope*),[6] the Court stated:

6
7   . . . [T]he return to the equity owner should be commensurate with returns
8   on investments in other enterprises having corresponding risks. That
9   return, moreover, should be sufficient to assure confidence in the financial
10   integrity of the enterprise so as to maintain its credit and to attract capital.[7]

11   This decision reinforced the standards of financial integrity and capital attraction, and it

12   further established the standard of setting a return on equity that is commensurate with the

13   risks faced by the equity investor.   From a financial perspective, investors in a utility must

14   be given the opportunity to recover their reasonable capital costs, including a reasonable

15   return on equity.
16

17   **Q.   Did these court decisions address the specific methods by which the ROE should be**

18   **determined?**

19   A.   No.   Although the court decisions were helpful in establishing a general framework for the

20   evaluation, they did not specify any particular methods to achieve this objective.

21   Consequently, analysts use various techniques in determining the cost of equity.   These

22   techniques continue to evolve as new financial theories are advanced and the understanding

23   of capital markets improves.
24

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[5] *Id.* at 693.

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

[7]   *Id.* at 603.

1 **Q.   What ultimately determines required ROEs?**

2 A.   Ultimately, capital markets determine the required return on equity for an electric utility or

3   any publicly traded company.   Through the interaction of the buyers and sellers of a

4   company's common stock, the company's equity cost, i.e., the required ROE, is established.

5   Given the market price for a share of common stock, a financial analyst desiring to measure

6   the cost of equity must accurately assess the sum of all investor expectations for the company

7   in question, or for a group of comparable companies, or for both.   Data generated by stock

8   exchanges and opinions of investment advisors are important considerations in making these

9   assessments.
10

11 **Q.   Should variation be expected among analysts in their estimates of the cost of equity?**

12 A.   Yes.   Because estimating the cost of equity involves subjective opinion at various stages of

13   the analysis, there is no single infallible approach that is appropriate in all circumstances.

14   The opinions of experts can differ widely on many factors relevant to the cost of equity, such

15   as basic assumptions about risk, economic conditions, and investor expectations.

16   Variations in the chosen approaches, and even in the application of the same approach by

17   different analysts, are commonplace and can be expected.   The results of various methods,

18   however, should generally be close to each other or their estimates should have overlapping

19   ranges.
20

21 **Q.   Should variation be expected among models and the inputs used in those models?**

22 A.   Yes.   Certain financial models have a long tenure with regard to utility financial analysis.

23   It is common, however, for rate-of-return witnesses to employ different specific models, and

24   it is even more common for inputs used in the models to vary between rate-of-return

25   witnesses.

1   As a general matter, an input to a financial model should be judged on how it functions

2   within the operations of the overall model, and not on its own outside the context of the

3   model in which it is used.   A model, moreover, should be judged by its holistic mechanics

4   and the reasonableness of the results that it yields, not by any individual inputs.

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

6   **Company?**

7 A.   I used three approaches to estimate a cost of equity for EPE.   Two are DCF approaches, and

8   one is a risk-premium approach.

9   The DCF methodology determines the price of a stock by estimating the value of

10   future cash flows that the stock will produce for its owners.   I discuss this method and its

11   application in the analysis in Part C of this section of my testimony.

12   The conventional risk premium approach that I use in my testimony relies on the

13   historical relationship between two indices.   A value, which is unknown in a particular

14   period, for one of the indices is forecasted using its historical relationship to the other index,

15   where the value for that same period is known.   I discuss this approach in Part D of this

16   section of my testimony.

17   Use of the DCF methods and risk-premium methods is well-established at this

18   Commission, and these methods have been relied upon in rate-case decisions for at least the

19   last three decades.

20

21 **B.   COMPARABLE COMPANY ANALYSIS**

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

23 A.   The objective of a comparable company analysis is to estimate the cost of equity for a target

24   company by estimating the costs of equity for companies with similar risk characteristics.

25   Cash flows are subject to the influence of many factors, not all of which may be identified.

1 The use of multiple proxy companies in determining the target company's cost of equity

2 mitigates the influence of unknown factors by spreading them over the several companies in

3 the comparable company analysis.

4

5

6 **Q.** **Please describe the group of comparable companies you used to perform your cost of**

7 **equity analysis.**

8 A. I selected comparable companies for my analysis by starting with all the electric utility

9 companies on which Value Line reports in its *Ratings and Reports* publication and selecting

10 those companies as much like EPE as possible without unreasonably restricting their number.

11 The more companies there are in the analysis, the more effects of an unexpected anomaly in

12 one will be diluted by the rest; and, therefore, the better the comparison to the target company

13 will be.   On the other hand, choosing less stringent criteria to increase the number of

14 comparable companies may result in the selection of companies with characteristics unlike

15 those of EPE.

16

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

18 A. In selecting a group of companies that I think are appropriately comparable to EPE, I selected

19 those electric utilities that:

20   • are followed by Value Line;

21   • have a current capital structure with a long-term debt proportion between 40% and 60%;

22   • have a positive (greater than 0%) long-term forecast of earnings growth rate from Value

23   Line and, if Zacks provides an estimate for long-term earnings growth rate, have a

24   positive (greater than 0%) long-term forecast of earnings growth rate from Zacks;

1   • are covered by S&P; have an investment-grade credit rating; and, if the outlook is

2   negative or if the utility has a negative credit watch, would not lose an investment-grade

3   rating if downgraded one notch in credit rating;

4   • have not had recent and do not have planned or expected potential merger activities or

5   other major capital expansion or construction, and have not had any major, recent

6   extraordinary events that would affect overall financial condition;

7   • have not had recent dividend omissions or cuts; and

8   • are not otherwise considered inappropriate for being a proxy to target the cost of equity

9   for EPE.

10

11 **Q.   Please list the companies that met the criteria.**

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

Ticker Symbol	Company Name
ALE	ALLETE, Inc.
LNT	Alliant Energy Corporation
AEE	Ameren Corporation
AVA	Avista Corporation
BKH	Black Hills Corporation
ED	Consolidated Edison, Inc.
EVRG	Evergy, Inc.
ES	Eversource Energy
FTS	Fortis, Inc.
HE	Hawaiian Electric Industries, Inc.
IDA	IDACORP, Inc.
NEE	NextEra Energy, Inc.

NWE	NorthWestern Corporation
OTTR	Otter Tail Corporation
PNW	Pinnacle West Capital Corporation
POR	Portland General
WEC	WEC Energy Group
XEL	Xcel Energy

1

2   **Q.**   **Are these the same companies that constitute the comparable group that EPE's witness**

3   **Jennifer Nelson used for her analysis?**

4   A.   No. The group of companies that I believe are comparable to EPE is not the same as Ms.

5   Nelson's group of comparable companies, although they are similar.

6

7   **Q.**   **Would you expect that the compositions of comparable groups would be the same for**

8   **every rate-of-return witness in a utility rate case?**

9   A.   No. Differences in selection criteria will lead to different compositions of comparable

10   groups. It is common in utility rate cases for the compositions of rate-of-return witnesses'

11   comparable groups to differ.

12

13   **C. DISCOUNTED CASH FLOW**

14   **Q.**   **Please explain the DCF methodology.**

15   A.   The DCF methodology derives from the Gordon dividend constant-growth model. In its

16   original form, the Gordon dividend growth model is a tool used for determining the value of

17   a share of common stock. The theory underlying the model holds that the price of a share

18   is equal to the present value of all future dividends. It is expressed mathematically as

19   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:

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

1   or more simply:

2
3    $$k = \frac{D_1}{P_0} + g$$
4

5   The constant-growth DCF model recognizes that the return to the stockholder consists of two

6   parts: dividend yield and growth.   Equity investors expect to receive a portion of their total

7   required return in the form of current dividends and the remainder through price appreciation.
8

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

10   A.   Yes.   For conditions in which different growth rates are expected over different periods of

11   time, analysts often employ a multistage version of the DCF model.   For example, the

12   expected near-term growth of a given company may be higher or lower than the expected

13   sustainable growth rate.   In these situations, it is appropriate to apply a multistage DCF

14   model that incorporates the various growth rates expected over time.

15   Under the multistage DCF, the equation for the constant growth DCF is simply

16   expanded to incorporate two or more growth-rate periods, with the assumption that a

17   permanent constant growth rate can be estimated for some point in the future:

18
19   $$P_0 = \frac{D_0(1+g_1)}{(1+k)^1} + \frac{D_1(1+g_2)}{(1+k)^2} + \ldots + \frac{D_{(n-1)}(1+g_n)}{(1+k)^n}$$
20

21   where the variables are the same as in the equation in the previous question-and-answer, but

22   there are more subscripts to indicate the different time periods to which the variables apply—

23   e.g., g_1 represents the growth rate for the first period; D_2, the dividend rate for the second

24   period; g_2 the growth rate for the second period; and so on.   The "n" subscript represents

25   however many periods are to be included (up to infinity).
26

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

2   A.   As shown on Attachment ES-5, I used stock prices that are an average of weekly prices over

3   a recent 12-week period. The 12-week period is both long enough to smooth out stock

4   market fluctuations and provide an assessment of long-term expectations, and short enough

5   to capture the impact of current information on market perceptions of risk, earnings growth,

6   and dividend growth. Twelve weeks is a reasonable period of time to balance capturing the

7   benefits of both these goals.

8

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

10   A.   I used both a single-stage version and a multistage version of the DCF model. In the single-

11   stage version, the stock's dividend growth is based on analysts' estimates of the utility's

12   earnings growth over the next five years. In the multistage version of the DCF model, I

13   used a two-stage growth approach. The first stage in this version covers five years and uses

14   the same analysts' estimates that I used in the single-stage version. The second stage, which

15   covers years six through 150, is based on a 5.13% projected long-term growth in Gross

16   Domestic Product (GDP), as discussed below.

17

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

19   A.   I used two versions of the DCF model because each model is reasonable in its own right and

20   therefore likely to be used by investors. By blending the two, I more closely approximate

21   the expectations of investors on average than if I were to use either one alone.

22

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

24   A.   The model rests on three principal assumptions. First, investors evaluate the expected risk

25   and expected cash flows of all securities in the capital markets and, through the trading

26   process, adjust the price of each security so that the expected return is commensurate with

1   the expected risk.   Second, investors discount the expected cash flows at the same rate—

2   *k*—in every future period.   Third, dividends, rather than earnings *per se*, constitute the

3   source of value for a share of stock.   Absent a sale of the stock, dividends are the only cash

4   flows received by investors.   The earnings of the company that issued the stock, however,

5   are critical because they make it possible to pay dividends, and the level of earnings

6   ultimately determines the level of growth in the company and the growth in dividends over

7   time.

8

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

10   A.   Because of the relationship between sustainable earnings growth and dividend growth, the

11   growth rate commonly used in the DCF is the earnings growth of the company whose cost

12   of equity is being estimated.   Estimates of earnings growth are appropriate because the issue

13   is not the rate at which the firm will actually grow (which is primarily a function of economic

14   conditions, management ability, regulatory environment, etc.), but rather the growth

15   expectation that investors have embodied in the current price of the stock.

16

17   **Q.   Is it possible to know what expected earnings growth rate is actually embodied in the**

18   **price of a stock?**

19   A.   No.   There is no objective way to precisely determine the growth rate expected by a

20   consensus of investors.   No matter what technique is used, the best that can be said of any

21   estimate developed by a rate-of-return analyst is that it is a reasonable proxy for investors'

22   consensus expectations about growth.

23

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

2   **analyses?**

3   A.   I relied upon Value Line and Zacks for the earnings growth rates in the single-stage DCF

4   model and the first stage of the multistage DCF model.   I used Value Line because it is one

5   of the nation's largest independent investment research services, as well as a major money

6   management institution,[8] and I included Zacks because it compiles consensus earnings

7   forecasts from groups of professional security analysts.

8   For the second stage of the multistage DCF model, I used an expected long-run

9   nominal growth rate of 5.13%, consisting of the 3.13% per year average real growth-rate of

10   GDP for the period 1951 through 2020 as calculated from data reported by the U.S. Bureau

11   of Economic Analysis,[9] and the 2.00% rate of inflation forecast by the Board of Governors

12   of the Federal Reserve System in its most recent estimate.[10]   These are widely disseminated

13   data that are generally considered credible by investors.
14

15   Q.   **Why do you use a consensus forecast from professional security analysts rather than**

16   **historical data as a proxy for investor expectations of growth?**

17   A.   There are several reasons why I use professional security analysts' forecasts instead of

18   historical data.   First, the cost of equity is a forward-looking concept, and security analysts

19   use extensive and sophisticated financial models to forecast growth rates.   To the extent that

20   historical growth rates for dividends, earnings, and book values are relevant to future growth,

21   they are already incorporated into these forecasts.   In addition, other pertinent information—

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[8] About Value Line *accessible at* www.valueline.com/about/aboutvalueline.aspx (accessed Oct 5, 2021).

[9] 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, 2021).

[10] Monetary Policy Report to the Congress, Board of Governors of the Federal Reserve System at 54 (Jul. 9, 2021).

1   such as general economic projections and the impact of new legislation, regulatory actions,

2   and technological advancements—is factored into the projections made by investment

3   advisory firms, providing a more comprehensive estimate and reflecting a broader base of

4   relevant information.

5   Second, it is not plausible to assume that the large institutional investors who

6   dominate stock trading use valuation techniques based on the assumption that historical

7   trends in earnings and dividends will simply be repeated.   These institutions pay substantial

8   amounts of money to investment services such as Value Line for information that includes

9   earnings forecasts.   The substantial payment suggests that these investors consider the

10   information valuable and actually use it when making investment decisions.

11   Third, empirical academic research by authorities such as Dr. Myron Gordon, the

12   originator of the Gordon dividend growth model described earlier, has shown that consensus

13   forecasts from professional security analysts do a better job of predicting the valuation of

14   common stocks than mechanically derived forecasts from historical data.

15

16   **Q.   What are the results of your DCF analyses?**

17   A.   Attachment ES-6 shows recent stock price averages and forecasted dividends for companies

18   in the comparable group; these data feed into the single-stage DCF and multistage DCF

19   calculations in Attachment ES-7 and Attachment ES-8, respectively.   Attachment ES-7

20   includes a summary of the results of my single-stage DCF analysis.   Using the average of

21   earnings growth rates projected by Value Line and, where applicable, those projected by

22   Zacks, the estimates for the unadjusted comparable companies yield an average cost of equity

23   of 9.16%, as shown on Attachment ES-7.   The multistage DCF yields a cost-of-equity

24   estimate with an average of 8.62%, as shown on Attachment ES-8.

25

26

1   **D. CONVENTIONAL RISK-PREMIUM**

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

3 A.   Because the cost of equity is not directly observable, estimates for it may be derived by

4   examining bond yields, which are readily observable, and adding a premium to compensate

5   for the additional risk assumed to exist in equity investments. Equity investments have

6   traditionally been viewed as being riskier than debt investments because stockholder

7   payments are not contractually defined and because debt holders generally have a senior

8   claim on the assets of a firm if it declares bankruptcy. The yields on long-term bonds are

9   typically used in risk-premium analyses because equity investments are usually thought of

10   as long-term investments. Because the holding periods for these investments are assumed

11   to be similar, the inflation expectations built into long-term bond yields should also be

12   applicable to equity investments.
13

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

15   **conditions?**

16 A.   Several empirical studies have demonstrated that equity risk premiums vary over time as

17   changes occur in the capital markets. In addition, it is reasonable to expect the equity risk

18   premium for a particular company to change as the specific risks facing a company change

19   over time. With regard to the influence of capital market conditions, several studies have

20   identified an inverse relationship between the level of interest rates and the size of equity

21   risk premiums. One explanation for this phenomenon is the differential impact of inflation

22   on debt and equity investments. Because bond interest payments are fixed upon issuance,

23   there is no mechanism for adjusting returns for changes in inflation and purchasing power.

24   Therefore, when inflationary fears rise, the perceived risk associated with bond investments

25   increases, and interest rates rise. On the other hand, equity investors may be shielded

1   somewhat from inflation by the company's ability to raise dividend payouts during

2   inflationary periods. Because stocks may be viewed as a better hedge against inflation, the

3   cost of equity will tend to rise less than the cost of debt. Consequently, the equity risk

4   premium can be expected to fall as interest rates rise.

5   In addition to the influence of inflation, changes in investor risk preferences can

6   significantly affect equity risk premiums. For example, if a major economic disruption or a

7   recession were anticipated, a move to higher quality investments would likely occur. This

8   would have the probable effect of decreasing the returns that investors require they be paid

9   for investing in U.S. Treasury bonds and high-grade corporate bonds. If the returns on these

10   securities were used to measure risk premiums, the observed equity risk premiums would

11   likely be higher. Conversely, if the demand for higher quality investments were to fall,

12   thereby pushing up the required returns, the observed equity risk premiums would likely be

13   lower.

14

15   **Q.   Please describe the "conventional" risk-premium approach that you used in your**

16   **estimate of cost of equity for EPE.**

17   A.   I refer to the risk-premium approach I use in the quantitative part of my testimony as the

18   "conventional" risk premium to distinguish it from the concept of risk premiums in general

19   and to denote that it is the primary risk-premium method on which Staff has relied for many

20   years. The conventional risk premium is a risk premium that estimates the cost of equity

21   for a company by comparing the costs of equity authorized for utilities across the United

22   States to the yields of large-company corporate bonds that are rated Baa by Mergent Bond

23   Data. The timeframe I have used for this purpose is 1980 through 2020. I did not use data

24   from earlier than 1980 because of a sharp reduction in the money supply at that time.

25

1   Q.   **How did you use the relationship between the authorized costs of equity and the bond**

2   **yields to quantify the cost of equity for EPE?**

3   A.   I quantified the relationship by subtracting the bond yields from the authorized costs of

4   equity to determine a risk premium for the riskier equity.

5

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

7   **D?**

8   A.   Yes.   I performed a regression analysis to analyze the relationship between the risk premium

9   and the bond yields in the corresponding period.   The regression analysis showed, with high

10   confidence, that there is a trend in the relationship.   It is an inverse trend, in which the risk

11   premiums increase as bond yields decrease.   On average, during 1980 through 2020, risk

12   premiums increased 0.4457% for every 1.00% that bond yields decreased.

13

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

15 A.   Yes.   The calculation of the adjustment to the risk premium that the regression analysis

16   indicated is shown on Page 2 of Attachment ES-9.

17

18 Q.   **What are the results of your risk-premium analysis?**

19 A.   As shown on Page 2 of Attachment ES-9, the conventional risk-premium analysis implies a

20   cost of equity of 8.97%.

21

22   **E.   SUMMARY OF COST-OF-EQUITY ANALYSES**

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

24 A.   The results from the analyses appear on Attachment ES-11 and in the following table:

Methodology	Point Estimate	Range
Single-stage DCF Analyses	9.16%	6.75% - 12.12%

Multi-stage DCF Analyses	8.62%	7.62%-9.77%
Conventional Risk Premium	8.97%	N/A
Unadjusted ROE Estimate	*9.16% (rounded to 9.2%)*	8.62% - 9.16%

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

A. Considering the DCF analyses of companies that are comparable to the Company and the conventional risk-premium analysis described previously in my testimony, I recommend an unadjusted ROE for EPE of 9.2%.

Based on my analyses and the foregoing considerations, my overall recommendation of 9.2% is a reasonable estimate of the ROE for EPE 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 EPE request in its Application?**

A. In its Application, EPE requested a cost of debt of 5.58%, which was its cost of debt for the test year.[11]

Q. **Have you used this EPE-requested cost of debt to estimate your proposed overall rate of return?**

A. Yes. I have used the EPE-requested cost of debt of 5.58% in my proposed overall rate of return. I describe the proposed rate of return in Section VII of my testimony.

VII. **CAPITAL STRUCTURE**

Q. **What capital structure did EPE propose in its Application?**

A. In its Application, EPE requested a capital structure consisting of 49% long-term debt and

---

[11] Direct Testimony of Lisa D. Budtke at 8 (Jun. 1, 2021). (Budtke Direct).; Application, Schedule K-3 at 1.

1   51% common equity for rate-setting purposes.[12]
2
3
4

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

7   A.   Yes.   The requested capital structure approximates EPE's current actual capital structure of

8   47.5% long-term debt and 52.5% equity.   EPE is requesting a capital structure more

9   reflective of its projected capital structure over the next few years, including impacts of

10   anticipated future debt issuances, along with dividend distributions to and equity infusions

11   from SJH.   EPE is also requesting an equity ratio that is lower than its actual equity ratio,

12   but is still credit supportive, and is the minimum level of equity it expects to maintain. [13]   I

13   recommend the Commission approve EPE's requested regulatory capital structure consisting

14   of 49% long-term debt and 51% equity for rate-setting purposes.
15

16   **VIII. OVERALL RATE OF RETURN**

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

18   A.   To calculate the recommended overall rate of return for EPE, I employed the weighted

19   average cost-of-capital methodology, the use of which involves three steps in a regulatory

20   setting.

21   First, the analyst must identify the sources of capital and estimate the component cost

22   of each source of capital in the target company's capital structure.   Sources of capital

23   generally consist of long-term debt and common equity in the electric utility regulatory

24   setting.   The determination of cost for long-term debt is relatively straightforward because

---

[12]   Budtke Direct at 7; Application, Schedule K-1.

[13]   Budtke Direct at 8.

1   the costs of this capital source are embedded—i.e., they are set by contractual obligation and

2   are therefore directly observable.   In contrast, the cost of equity is not directly observable

3   and must be estimated using analytical models, as I have done earlier in Parts A through E

4   of Section V of my testimony.

5   Second, the analyst must recommend an appropriate capital structure for regulatory

6   purposes.   For each source of capital identified, the analyst must recommend an appropriate

7   weight.   I do this in Section VII of my testimony.

8   Third, the cost of each capital source is weighted by its relative proportion in the

9   recommended capital structure.   The sum of these weighted component costs represents the

10   weighted-average cost of capital—i.e., the overall rate of return.   For ratemaking purposes

11   for an electric utility, this overall rate of return is multiplied by the utility's invested capital

12   (the rate base) in order to calculate the return component of the cost of service.
13

14   **Q.   What overall rate of return are you proposing for EPE in this proceeding?**

15   A.   As shown on Attachment ES-3, EPE's requested capital structure and cost of debt, when

16   combined with my recommended cost of equity, results in a weighted-average cost of capital

17   of 7.42%.
18

19   **IX.   OTHER CONSIDERATIONS OF RATE OF RETURN**

20   **Q.   Please describe EPE's requested size premium.**

21   A.   In her direct testimony, Ms. Nelson includes the small-size effect when determining where

22   in her range of results EPE's required ROE approximately falls. [14]
23

24   **Q.   Do you agree that the Commission should factor in size when setting EPE's authorized**

---

[14]   Direct Testimony of Jennifer Nelson at 56-61 (Jun. 1, 2021). (Nelson Direct).

1   **ROE?**

2   A.   No.   First, a size adjustment would go against long-standing Commission precedent.   The

3   Commission has not approved the inclusion of a size premium in an investor-owned electric

4   utility's authorized ROE for well over 20 years, going back to at least the "unbundling" rate

5   proceedings that were required by Public Utility Regulatory Act (PURA) §§ 39.051 and

6   39.201 prior to the opening of the Texas competitive electricity market.   There is no

7   compelling evidence in this proceeding that suggests there is any reason to deviate from that

8   long-standing Commission precedent.

9   I would additionally note that, more recently, in Docket No. 46245, the Commission

10   rejected a water utility's requested ROE, which included a small-size risk premium.[15]   The

11   utility in that case operated two water systems serving two different subdivisions for a total

12   of 927 water customers, which is significantly less than the 441,000 customers served by

13   EPE.[16]

14   Second, electric utilities are regulated, and a utility's earnings are set by the

15   ratemaking process.   This is true regardless of the utility's size.   The utilities are also

16   subject to other, general regulatory oversight.

17   Finally, there are articles examining the size premium in the utility industry

18   specifically.   Wallace Davidson states:

19   [O]ur results suggest that neither large nor small utilities merit a premium
20   because of their size.   The implications of our findings for regulatory
21   officials for regulatory accounting standard-setters are straightforward: we
22   find no evidence among the electric utility industry…to suggest that a
23   utility's cost of capital or its allowable ARR should be adjusted to reflect

---

[15] *Application of Double Diamond Utility Co., Inc, for a Rate/Tariff Change*, Docket No. 46245, Order on Rehearing at 0000061 (Dec. 12, 2019).

[16] *Id.* at 0000038, Finding of Fact 3.

1   firm size.[17]

2   In research also specific to public utilities, Professor Annie Wong states:

3   [G]iven firm size, utility stocks are consistently less risky than industrial
4   stocks.   Second, industrial betas tend to decrease with firm size, but utility
5   betas do not.   These findings may be attributed to the fact that all public
6   utilities operate in an environment with regional monopolistic power and
7   regulated financial structure.   As a result, the business and financial risks
8   are very similar among the utilities regardless of their size.   Therefore,
9   utility betas would not necessarily be related to firm size.

10   She then concludes:

11   The object of this study is to examine if the size effect exists in the utility
12   industry.   After controlling for equity values, there is some weak evidence
13   that firm size is a missing factor from the CAPM for industrial but not utility
14   stocks.   This implies that although the size phenomenon has been strongly
15   documented for industrials, the findings suggest that there is no need to
16   adjust for the firm size in utility regulation.[18]

17   Ms. Nelson mentions an article by Thomas M. Zepp that "concludes that size premia

18   do exist for smaller utilities."[19]   However, Mr. Zepp did not recreate Dr. Wong's study, but

19   merely speculates on other possible reasons for her results and references the results of two

20   other studies.   The first study, completed by California Public Utilities Commission in

21   1991, is not included in the article, and therefore Mr. Zepp's opinions cannot be properly

22   evaluated.   The second study examines the effects of size on four water utility companies

23   only.   This article does not contain enough credible evidence to refute Dr. Wong's findings.

24   For all of these reasons, I recommend that the Commission not consider the size effect when

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[17]   Wallace Davidson III, Kenneth Ferris, and William Reichenstein, A Note on the Relationship Between Firm Size and Return in the Electric Utility Industry, Journal of Accounting, Auditing, and Finance Vol. 8, Issue 3 (1993).

[18]   Annie Wong, Utility Stocks and the Size Effect: An Empirical Analysis, Journal of the Midwest Finance Association at 98 (1993).

[19]   Nelson Direct at 58.

1   setting the authorized rate of return in this proceeding.

2

3   **Q.   Do you note anything else with regards to the risk of EPE versus the comparable group?**

4   A.   Yes.   Under the provisions of PURA, EPE has the opportunity to file applications for a

5   distribution cost recovery factor, a transmission cost recovery factor, and a generation cost

6   recovery rider.   These cost-recovery mechanisms allow a utility to update its rate base

7   between rate cases and provide for faster implementation of updated rates.   This allows a

8   utility to reduce regulatory lag and start to recover a return on, and of, its rate base items

9   earlier than if it had to wait to file a full rate case.   This helps reduce risk related to

10   regulatory lag and is not available to all utilities to the same extent as it is available to utilities

11   operating in Texas.

12

13 **X.   FINANCIAL PROTECTIVE MEASURES (RING-FENCING)**

14 **Q.   Does EPE have ring-fencing measures currently in place?**

15 A.   Yes.   In Docket 49849, the Commission required certain protective measures be put in

16   place.[20]

17

18 **Q.   Have any recent Commission final orders from rate-related proceedings included ring-**

19 **fencing provisions?**

20 A.   Yes.   The following three recent Commission final orders from rate-related dockets have

21   included ring-fencing provisions to ensure that Texas ratepayers have meaningful financial

22   protections:

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[20]   *Joint Report and Application of El Paso Electric Company, Sun Jupiter Holdings LLC, and IIF US Holding 2 LP for Regulatory Approvals Under PURA §§ 14.101, 39.262, and 39.915,* Docket No. 49849, Order at Findings of Fact Nos. 60-61 (Jan. 28, 2020).

1   • Docket No. 49421, *Application of CenterPoint Energy Houston Electric,*
2   *LLC for Authority to change Rates;*[21]
3
4   • Docket No. 49494, *Application of AEP Texas Inc. for Authority to Change*
5   *Rates;*[22] and
6
7   • Docket No. 49831, *Application of Southwestern Public Service Company for*
8   *Authority to Change Rates.*[23]
9

10   **Q.   Do you recommend that the Commission require the implementation of any additional**

11   **ring-fencing measures for EPE?**

12   A.   Yes.   Below is a listing of three additional financial protection measures the Commission

13   used in the various dockets I cited above, which I recommend that the Commission requires

14   EPE to adopt:

15

16   1.   <u>Regulatory Return on Equity (ROE) Commitment.</u>   If EPE's issuer credit rating
17   is not maintained as investment grade by S&P or Moody's, EPE will not use its
18   below-investment-grade ratings to justify an argument in favor of a higher
19   regulatory ROE.
20

21   2.   <u>No EPE Debt Secured by Non-EPE Assets.</u>   EPE's debt will not be secured by
22   non-EPE assets.
23

24   3.   <u>No Commingling of Assets.</u>   Except for access to the utility money pool and use
25   of shared assets governed by the Commission's affiliate rules, EPE will not
26   commingle its assets with those of SJH or IIF.
27

28   I additionally recommend that the Commission requires EPE to commit to maintaining the

---

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

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

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

1   financial protective policies ordered in Docket 49849.[24]

2

3   **Q.**   **Does this conclude your direct testimony?**

4   A.   Yes.   I reserve the right to supplement this testimony during the course of the proceeding if

5   new evidence becomes available.

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[24] *Joint Report and Application of El Paso Electric Company, Sun Jupiter Holdings LLC, and IIF US Holding 2 LP for Regulatory Approvals Under PURA §§ 14.101, 39.262, and 39.915*, Docket No. 49849, Order at Findings of Fact Nos. 60-61 (Jan. 28, 2020).

Emily Sears

Professional Experience

- **Public Utility Commission of Texas**
  Utility Rates Analyst
  Water Utilities Division
  January 2015 - Present
- **Commonwealth of Pennsylvania, Public Utility Commission**
  Fixed Utility Financial Analyst
  Bureau of Investigation and Enforcement
  May 2009 – December 2014
- **Commonwealth of Pennsylvania, Public Utility Commission**
  Fixed Utility Financial Analyst
  Bureau of Fixed Utility Services
  April 2008 – May 2009
- **Nationwide Insurance Company**
  Personal Lines Underwriting Screener
  October 2004 – May 2007

Education

- **University of Pittsburgh, College of Business Administration**
  Bachelors of Science in Business Administration
  Major – Finance
  August 2004
- **Annual Regulatory Studies Program: Camp NARUC**
  Week 1-Introduction to Regulation
  August 2008
- **Pennsylvania Public Utility Commission Rate Case Training**
  December 2008
- **Society of Utility and Regulatory Financial Analysts**
  Certified Rate of Return Analyst
  June 2010
- **Utility Finance and Accounting for Financial Professionals**
  Seminar June 20-21, 2019
- **Institute of Public Utilities – Advanced Course on Cost Allocation and Rate Design**
  November 2-5, 2020

Presentations

- **Pennsylvania Public Utility Commission Rate Case Training**
  Presented on Rate of Return/Return on Equity
  October 2012, September 2014
- **Public Utility Commission of Texas – Rate of Return Training**
  Presented on Rate of Return/Return on Equity
  August 2017 – August 2019

TESTIMONY SUBMITTED:

I have testified and/or submitted testimony in the following proceedings before the Pennsylvania Public Utility Commission:

- Duquesne Light Company, Docket No. M-2009-2093217
- West Penn Power Company d/b/a Allegheny Power, Docket No. M-2009-2093218
- Duquesne Light Company, Docket No. M-2009-2123948
- West Penn Power Company d/b/a Allegheny Power, Docket No. M-2009-2123951
- Utilities, Inc. – Westgate, Docket No. R-2009-2117389
- Utilities, Inc. of Pennsylvania, Docket No. R-2009-2117402
- PECO Energy Company - Electric Division, Docket No. P-2009-2143607
- PECO Energy Company – Gas Division, Docket No. P-2009-2143588
- Philadelphia Gas Works, Docket No. R-2009-2139884
- York Water Company, Docket No. R-2010-2157140
- City of Lancaster, Docket No. R-2010-2179103
- Columbia Gas of Pennsylvania, Inc., Docket No. R-2010-2215623
- CMV Sewage, Inc., Docket No. R-2011-2218562
- Pennsylvania American Water Company, Docket No. R-2011-2232243
- UGI Penn Natural Gas, Docket No. R-2011-2238943
- Aqua Pennsylvania, Inc., Docket No. R-2011-2267958
- Equitable Gas Company, LLC, Docket No. R-2012-2287044
- Peoples Natural Gas Company, LLC, Docket No. R-2012-2285985
- PPL Electric Utilities Corporation, Docket No. R-2012-2290597
- Columbia Gas of Pennsylvania, Inc., Docket No. R- 2012-2321748
- The City of Lancaster – Sewer Fund, Docket No. R-2012-2310366
- Columbia Gas of Pennsylvania, Inc., Docket No. R-2012-2321748 and M-2012-2323645
- UGI Penn Natural Gas, Docket No. R-2013-2361763
- City of DuBois – Bureau of Water, Docket No. R-2013-2350509
- Pennsylvania-American Water Company, Docket No. R-2013-2355276
- Duquesne Light Company, Docket No. R-2013-2372129
- Pike County Light and Power Company, Gas Division, Docket No. R-2013-2397353
- Pike County Light and Power Company, Electric Division, Docket No. R-2013-2397237
- UGI Penn Natural Gas, Docket No. R-2014-2420273
- Emporium Water Company, Docket No. R-2014-2402324
- City of Lancaster – Water Fund, Docket No. R-2014-2418872
- Peoples TWP, LLC, R-2014-2429613
- Peoples Natural Gas Company, LLC, R-2014-2429606

I have testified and/or submitted testimony in the following proceedings before the Public Utility Commission of Texas and the Texas State Office of Administrative Hearings:

Water and Sewer Cases
- Custom Water Company, LLC., Docket No. 44236
- City of Austin water rate appeal, Docket No. 42857
- City of Austin wastewater rate appeal, Docket No. 42867 (consolidated with Dkt No. 42857)
- Consumers Water, Inc., Docket No. 43076
- Laguna Vista, LTD. and Laguna Tres, Inc., Docket No. 44046
- Quadvest, L.P., Docket No. 44809
- Monarch Utilities I, L.P., Docket No. 45570
- Corix Utilities (Texas), Inc., Docket No. 45418
- Double Diamond Properties Construction Co. dba Rock Creek, Docket No. 46247
- Liberty Utilities Corp., Docket No. 46256
- Double Diamond Utility Company, Inc., Docket No. 46245
- Wolfe Air Park Civic Club, Inc., Docket No. 46923
- City of Forney water rate appeal, Docket No. 47814
- Liberty Utilities, LLC, Docket No. 47976
- W. E. Vlasek, Docket No. 48640
- City of Austin, Docket No. 49189
- Corix Utilities (Texas), Inc, Docket No. 49923
- Ratepayers' Appeal of Bear Creek Special Utility District's Rates, Docket No. 49351
- Monarch Utilities I, L.P., Docket No. 50944
- Corix Utilities (Texas), Inc., Docket No. 50557

Electric Cases
- AEP Texas, Inc., Docket No. 51984

The following files are not convertible:

Attachments ES-3 through ES-10.xlsx

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