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SOAH DOCKET NO. 473-24-12812
PUC DOCKET NO. 56165

APPLICATION OF AEP TEXAS INC. FOR AUTHORITY TO CHANGE RATES	)))))
	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

Direct Testimony and Exhibits of

Michael P. Gorman

On behalf of

Texas Industrial Energy Consumers

May 16, 2024

BAI

BRUBAKER & ASSOCIATES, INC.

#11631

SOAH DOCKET NO. 473-24-12812
PUC DOCKET NO. 56165

APPLICATION OF AEP TEXAS INC. FOR AUTHORITY TO CHANGE RATES	)))))	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

Filename: MPG_DT

Exhibit MPG-1:   Rate of Return

Exhibit MPG-2:   Valuation Metrics

Exhibit MPG-3:   Revenue Impact

Exhibit MPG-4:   Proxy Group

Exhibit MPG-5:   Consensus Analysts' Growth Rates

Exhibit MPG-6:   Constant Growth DCF Model (Consensus Analysts' Growth Rates)

Exhibit MPG-7:   Payout Ratios

Exhibit MPG-8:   Sustainable Growth Rate

Exhibit MPG-9:   Constant Growth DCF Model (Sustainable Growth Rate)

Exhibit MPG-10: Electricity Sales Are Linked to U.S. Economic Growth

Exhibit MPG-11: Multi-Stage Growth DCF Model

Exhibit MPG-12: Common Stock Market/Book Ratio

Exhibit MPG-13: Equity Risk Premium - Treasury Bond

Exhibit MPG-14: Equity Risk Premium - Utility Bond

Exhibit MPG-15: Bond Yield Spreads

Exhibit MPG-16: Treasury and Utility Bond Yields

Exhibit MPG-17: Betas

Exhibit MPG-18   CAPM Return

Exhibit MPG-19: Standard & Poor's Credit Metrics

Exhibit MPG-20: Revised Bulkley Multi-Stage Growth DCF Model

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APPLICATION OF AEP TEXAS INC. FOR AUTHORITY TO CHANGE RATES	)))))	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

Affidavit of Michael P. Gorman

State of Missouri	))	**SS**
County of Saint Louis	)	
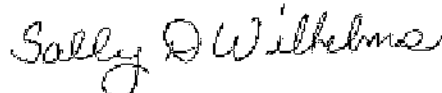
Michael P. Gorman, being first duly sworn, on his oath states:

1.   My name is Michael P. Gorman. I am a Managing Principal with Brubaker & Associates, Inc., 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017. We have been retained by Texas Industrial Energy Consumers to testify in this proceeding on their behalf.

2.   Attached hereto and made a part hereof for all purposes are my direct testimony and exhibits which were prepared in written form for introduction into evidence in SOAH Docket No. 473-24-12812, Public Utility Commission of Texas Docket No. 56165.

3.   I hereby swear and affirm that the testimony and exhibits are true and correct and that they show the matters and things that they purport to show.

_____
Michael P. Gorman

Subscribed and sworn to before me this 16th day of May, 2024.

_____
Notary Public
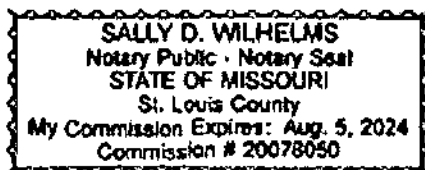
BRUBAKER & ASSOCIATES, INC.

SOAH DOCKET NO. 473-24-12812
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APPLICATION OF AEP TEXAS INC. FOR AUTHORITY TO CHANGE RATES	)))))

BEFORE THE STATE OFFICE
OF
ADMINISTRATIVE HEARINGS

Direct Testimony of Michael P. Gorman

1   ## I. INTRODUCTION AND SUMMARY

2   Q   PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3   A   Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,

4   Chesterfield, MO 63017.

5   Q   WHAT IS YOUR OCCUPATION?

6   A   I am a consultant in the field of public utility regulation and a Managing Principal of

7   Brubaker & Associates, Inc., energy, economic and regulatory consultants.

8   Q   PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

9   A   This information is included in Appendix A to this testimony.

10   Q   WHAT IS THE PURPOSE OF YOUR TESTIMONY?

11   A   My testimony will address AEP Texas Inc.'s ("AEP Texas" or "Company") overall rate

12   of return including return on equity, embedded debt cost, and ratemaking capital

13   structure.

1   **Q**   **DOES THE FACT THAT YOU DID NOT ADDRESS EVERY ISSUE RAISED IN AEP**

2   **TEXAS' TESTIMONY MEAN THAT YOU AGREE WITH AEP TEXAS' TESTIMONY**

3   **ON THOSE ISSUES?**

4   **A**   No. It merely reflects that I chose not to address all those issues in my testimony. It

5   should not be read as an endorsement of, or agreement with, AEP Texas' position on

6   such issues.

7   **Q**   **PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND CONCLUSIONS.**

8   **A**   I recommend the Public Utility Commission of Texas ("PUCT" or "Commission")

9   approve an overall rate of return of 6.55% as developed on Exhibit MPG-1. This overall

10   rate of return reflects the following components:

             1. A return on common equity within my recommended range of 9.30% to
               9.70%, with a midpoint of 9.50%.

             2. A ratemaking capital structure with a common equity ratio of 42.5%. The
               Company's proposal to increase its ratemaking common equity ratio from
               42.50% to 45.00% is not cost justified and should be rejected. The currently
               authorized common equity ratio of 42.5% has allowed AEP Texas to
               maintain its credit rating and financial integrity at reasonable costs to
               customers and therefore it fairly balances the interests of all stakeholders.

19   My recommended rate of return will fairly compensate the Company for its

20   current market cost of common equity and preserve its credit rating as well as its access

21   to capital at reasonable terms. My recommended rate of return will also mitigate the

22   Company's claimed revenue deficiency in this proceeding while providing a return that

23   fairly balances the interests of customers and shareholders.

24   Finally, I also respond to AEP Texas witness Ms. Ann E. Bulkley's return on

25   equity recommendation. Ms. Bulkley recommends an equity return in the range of

26   10.00% to 11.00%, with a point estimate of 10.60%[1] Ms. Bulkley's recommended

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[1] Bulkley Direct Testimony at 9.

1   return on equity of 10.60% is excessive and would result in unjust and unreasonable

2   rates being imposed on AEP Texas' customers.

3   ## II. RATE OF RETURN MARKET EVIDENCE

4   Q   PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.

5   A   In this section, I will provide observable market evidence, credit metrics to assess the

6   reasonableness of rate of return positions, and a detailed analysis to demonstrate that

7   my recommended rate of return will support AEP Texas' financial integrity and access

8   to capital. I also comment on market-based models to estimate the current market-

9   required rate of return investors demand to assume the risk of an investment similar to

10   AEP Texas'.

11   **II.A.   Utility Industry Authorized Returns on Equity,**
12   **   Access to Capital, and Credit Strength**

13   Q   PLEASE   DESCRIBE   THE   OBSERVABLE   EVIDENCE   ON   TRENDS   IN

14   AUTHORIZED RETURNS ON EQUITY FOR REGULATED UTILITIES.

15   A   Authorized returns on equity are an important part of how utilities produce revenues

16   and cash flows adequate to support their credit standing and maintain their financial

17   integrity, which supports their access to capital under reasonable terms and prices.

18   Observable data, including data on industry authorized returns on equity, trends and

19   outlooks on credit standing, and the ability of utilities to attract capital to fund large

20   investments, provides clear evidence that industry authorized returns on equity have

21   been judged by market participants to be fair and reasonable. With this as background,

22   it is significant to observe that average industry authorized returns on equity for

23   regulated utilities have ranged from 9.39% to 9.78% for the period from 2014 through

1   2023 and, that between 2020 and 2023, authorized returns on equity have averaged

2   around 9.50%. These returns are summarized in Figure 1 below.

FIGURE 1

Authorized Returns on Equity*
(Exclude Limited Issue Riders)

ROE Distributions[1][2]

Electric Utilities	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<= Average	51.7%	55.0%	51.0%	50.0%	56.3%	56.5%	53.1%	59.5%	47.4%	45.5%	33.3%	31.4%	53.1%	58.3%	37.5%
> Average	48.3%	45.0%	49.0%	50.0%	43.8%	43.5%	46.9%	40.5%	52.6%	54.5%	66.7%	68.6%	46.9%	41.7%	62.5%
Gas Utilities															
<= Average	56.4%	31.3%	45.7%	47.6%	50.0%	43.8%	53.8%	70.8%	47.5%	51.5%	51.4%	46.5%	48.5%	48.8%	33.3%
> Average	43.6%	68.8%	54.3%	52.4%	50.0%	56.3%	46.2%	29.2%	52.5%	48.5%	48.6%	53.5%	51.5%	51.2%	66.7%

Source and Notes:
[1] *S&P Global Market Intelligence*, RRA Regulatory Focus, Major Rate Case Decisions -- January - March 2024, April 19, 2024, p. 3.
[2] Download from S&P Global Market Intelligence, April 29, 2024.
* Returns exclude Limited Issue Rider Decisions.
* RRA excludes the 2017 Alaska ENSTAR decision from its Industry Average.

3 **Q   HAVE UTILITIES BEEN ABLE TO ACCESS EXTERNAL CAPITAL TO SUPPORT**
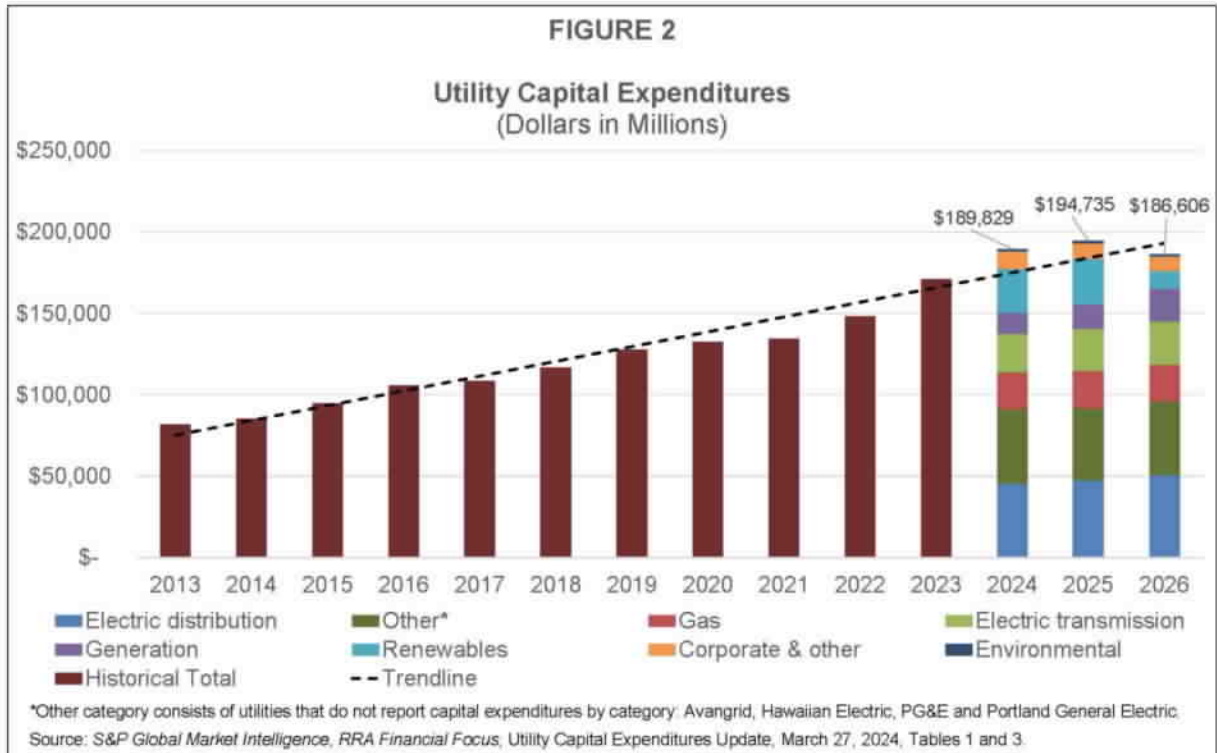
4   **CAPITAL EXPENDITURE PROGRAMS?**

5 A   Yes. In Regulatory Research Associates' ("RRA") April 2, 2024 Utility Capital

6   Expenditures report, *RRA Financial Focus*, a division of S&P Global Market

7   Intelligence, made several relevant comments about utility investments generally:

1 • Projected 2024 capital expenditure [("capex")] for the 45 energy utilities
2 included in the RRA representative sample of publicly traded, US-
3 based utilities is $184 billion — an upswell of nearly 11% from the
4 group's $166 billion of actual spending in 2023. The increase is largely
5 driven by federal legislation enacted in 2021 and 2022 supporting
6 infrastructure investment.

7 • Across the small investor-owned water utility industry, total capex is
8 forecast to increase by more than 13% in 2024 to roughly $5.5 billion.
9 This follows a growth surge of more than 13% in 2023.

10 • Energy utility capex in 2023 marked a record high, about 15.5% above the
11 $144 billion invested in 2022. Investment in 2021 was likely negatively
12 impacted by multiple supply chain issues associated with the COVID-19
13 pandemic; the $131 billion spent that year was only incrementally higher
14 than the 2020 investment level of $129 billion.

15 • Aggregated energy utility capex estimates for both 2024 and 2025 indicate
16 successively higher spending levels, reaching $184 billion and $191 billion,
17 respectively. Spending expectations for 2024 and beyond are likely to
18 increase as the companies' plans for future projects continue to solidify
19 around the new federal legislation supporting infrastructure investment. [2]

20 As shown in Figure 2 below, capital expenditures for the regulated utilities have

21 increased considerably over the period 2023 into 2024, and the forecasted capital

22 expenditures remain elevated through the end of 2026.

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[2] *S&P Global Market Intelligence, RRA Financial Focus*: "Utility capex primed for profusion in 2024 and beyond," April 2, 2024, at 1.

FIGURE 2

Utility Capital Expenditures
(Dollars in Millions)

*Other category consists of utilities that do not report capital expenditures by category: Avangrid, Hawaiian Electric, PG&E and Portland General Electric.

Source: *S&P Global Market Intelligence, RRA Financial Focus,* Utility Capital Expenditures Update, March 27, 2024, Tables 1 and 3.

1   As outlined in Figure 2 above, and in the comments made by *RRA S&P Global*

2   *Market Intelligence*, capital investments for the utility industry continue to stay at

3   elevated levels, and these capital expenditures are expected to fuel utilities' profit

4   growth into the foreseeable future. This is clear evidence that the capital investments

5   are enhancing shareholder value and are attracting both equity and debt capital to the

6   utility industry in a manner that allows for funding these elevated capital investments.

7   While capital markets embrace these profit-driven capital investments, regulatory

8   commissions also must be careful to maintain reasonable prices and tariff terms and

9   conditions to protect customers' need for reliable utility service at reasonable rates. If

10   this is not done, utility rates will expand beyond the ability of customers to pay, resulting

11   in revenue constraints for utilities, which will impact their financial integrity.

1   Q   HAVE REGULATED UTILITY EQUITY SECURITIES' VALUATIONS SUPPORTED

2   ACCESS TO EQUITY CAPITAL?

3   A   Yes. Utility valuation metrics continue to demonstrate that utilities can sell new stock

4   at robust market prices, which illustrates that utilities can access equity capital under

5   reasonable terms and conditions, and at relatively low cost.
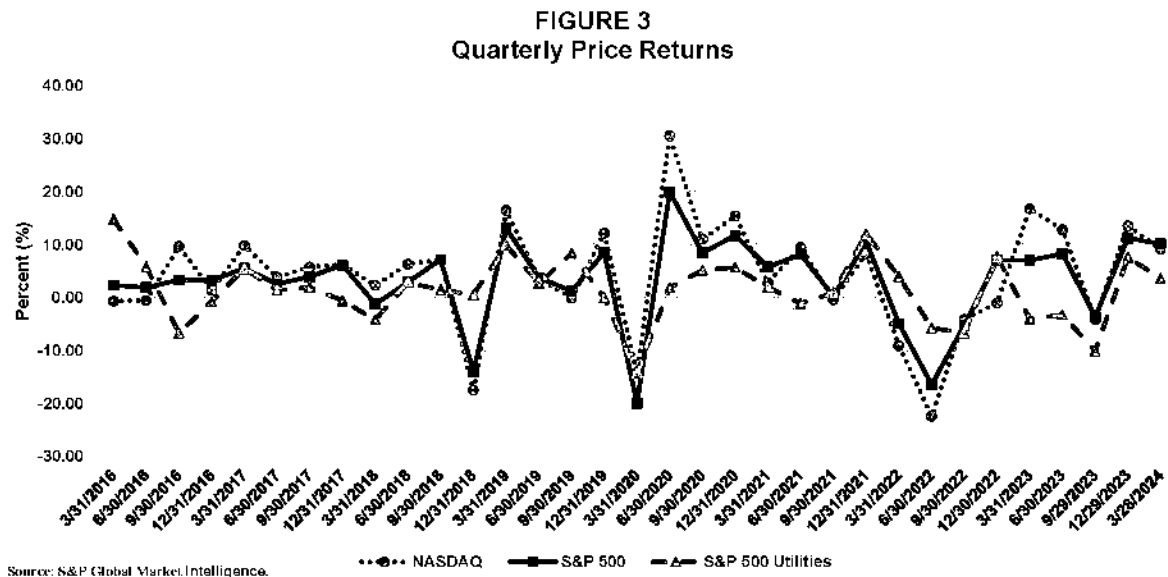
6   As shown on my Exhibit MPG-2, utility valuation metrics show robust valuation

7   of utility securities more recently compared to the historical period stretching back to

8   2002. Specifically, The Value Line Investment Survey ("Value Line") tracks and

9   projects various valuation metrics related to regulated utility securities, as well as

10   certain non-regulated companies followed by Value Line. These valuation metrics are

11   considered by market participants in assessing the investment risk characteristics of

12   individual company stocks and industries and are used by market participants to derive

13   their required rates of return for making investments. All of these valuation metrics for

14   utility stocks indicate robust valuations of utility stocks, which in turn support my finding

15   that utilities' cost of capital is low by historical comparison and utilities are producing

16   competitive returns.

17   For example, I show a Value Line electric utility industry price-to-earnings ratio

18   of 14.98x aligns with the 22-year average price-to-earnings ratio. (Exhibit MPG-2,

19   page.1). A consistently strong price-to-earnings ratio indicates stock price valuations

20   are stable, which supports utilities' access to external equity markets.

21   The market price-to-cash flow for electric utilities is currently 7.93x and the

22   market-to-book ratio is 1.72x. These valuation metrics align with the 22-year average

23   valuation metrics, and indicate utilities continue to have access to equity capital

24   markets.

1 Q PLEASE DESCRIBE GENERALLY UTILITY STOCK PRICE PERFORMANCE OVER

2 THE LAST SEVERAL YEARS.

3 A Figure 3 below shows the utility stock price performance compared to the overall

4 market.

FIGURE 3
Quarterly Price Returns

Source: S&P Global Market Intelligence.

••●•• NASDAQ ━■━ S&P 500 ━▲━ S&P 500 Utilities

5 Utility stocks have not exhibited the higher volatility of the S&P 500 and have

6 maintained strong valuation relative to overall market performance.

7 Q HAVE REGULATED UTILITIES MAINTAINED INVESTMENT GRADE CREDIT

8 STRENGTH AND FINANCIAL INTEGRITY?

9 A Yes. Credit ratings are reasonable assessments of the utility industry's financial

10 integrity, because they indicate the utility's credit strength, which, in turn provides

11 strong evidence of the utility's ability to attract capital necessary to make infrastructure

12 investments under reasonable terms and prices. Trends in credit ratings are an

13 indication of whether the regulatory decisions have supported the utilities' ability to

14 generate adequate revenue to recover their costs, produce adequate cash flows, and

1 maintain strong credit strength. The primary drivers in these regulatory decisions are

2 the commissions' awarded returns on equity and development of depreciation rates.

3 As shown in Table 1 below, electric utilities' credit standing has remained very

4 robust through the Tax Cuts and Jobs Act (2017) changes and impacts on cash flow

5 starting around 2018, through the COVID-19 pandemic, and into the present. As shown

6 below in Table 1, from approximately 2016 through the latest data for 2024, over 80%

7 of the regulated electric utility industry has a bond rating of BBB+ or stronger. The

8 distribution in 2009 is also shown for reference to earlier periods.

TABLE 1

S&P Ratings by Category
Electric Utility Subsidiaries

Description	2009	2016	2017	2018	2019	2020	2021	2022	2023	2024
A or higher	12%	10%	10%	8%	14%	14%	10%	10%	11%	11%
A-	18%	43%	52%	54%	54%	53%	37%	37%	37%	32%
BBB+	23%	32%	21%	22%	18%	19%	35%	36%	37%	44%
BBB	36%	4%	7%	13%	12%	3%	16%	16%	15%	13%
BBB-	9%	11%	11%	2%	1%	1%	0%	0%	0%	0%
Below BBB-	2%	0%	0%	0%	0%	10%	1%	1%	1%	1%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: S&P CAPITAL IQ and Market Intelligence, downloaded 4/19/24.
Note: Subsidiary ratings used.

9 Q HOW SHOULD THE COMMISSION USE THIS MARKET INFORMATION IN

10 ASSESSING A FAIR RETURN FOR AEP TEXAS?

11 A Observable market evidence is quite clear that capital market costs are near historically

12 low levels. Even as authorized returns on equity have fallen into the mid-9% range,

13 utilities continue to have access to large amounts of external capital while still funding

14 large capital programs. Furthermore, utilities' investment-grade credit ratings are

15 stable and have improved due, in part, to supportive regulatory treatment. The

1   Commission should carefully weigh all this important observable market evidence in

2   assessing a fair return on equity for AEP Texas.

3   **II.B. Federal Reserve's Impact on Cost of Capital**

4   Q   ARE THE MONETARY POLICY DECISIONS AND ACTIONS OF THE FEDERAL

5   RESERVE, AND OF THE FEDERAL RESERVE SYSTEM'S FEDERAL OPEN

6   MARKET COMMITTEE ("FOMC"), KNOWN TO MARKET PARTICIPANTS, AND IS

7   IT REASONABLE TO BELIEVE THOSE DECISIONS AND ACTIONS ARE

8   REFLECTED IN THE MARKET'S VALUATION OF BOTH DEBT AND EQUITY

9   SECURITIES?

10 A   Yes. The Federal Reserve has been transparent on its efforts to support the economy

11   to achieve maximum employment, and to manage long-term inflation to around a 2%

12   level. The Federal Reserve, in a March 20, 2024 press release, noted that economic

13   activity has been expanding at a solid pace, while job gains have remained strong and

14   the unemployment rate has remained low. Meanwhile, inflation has eased over the

15   past year but remains elevated. The Federal Reserve noted that it is highly attentive

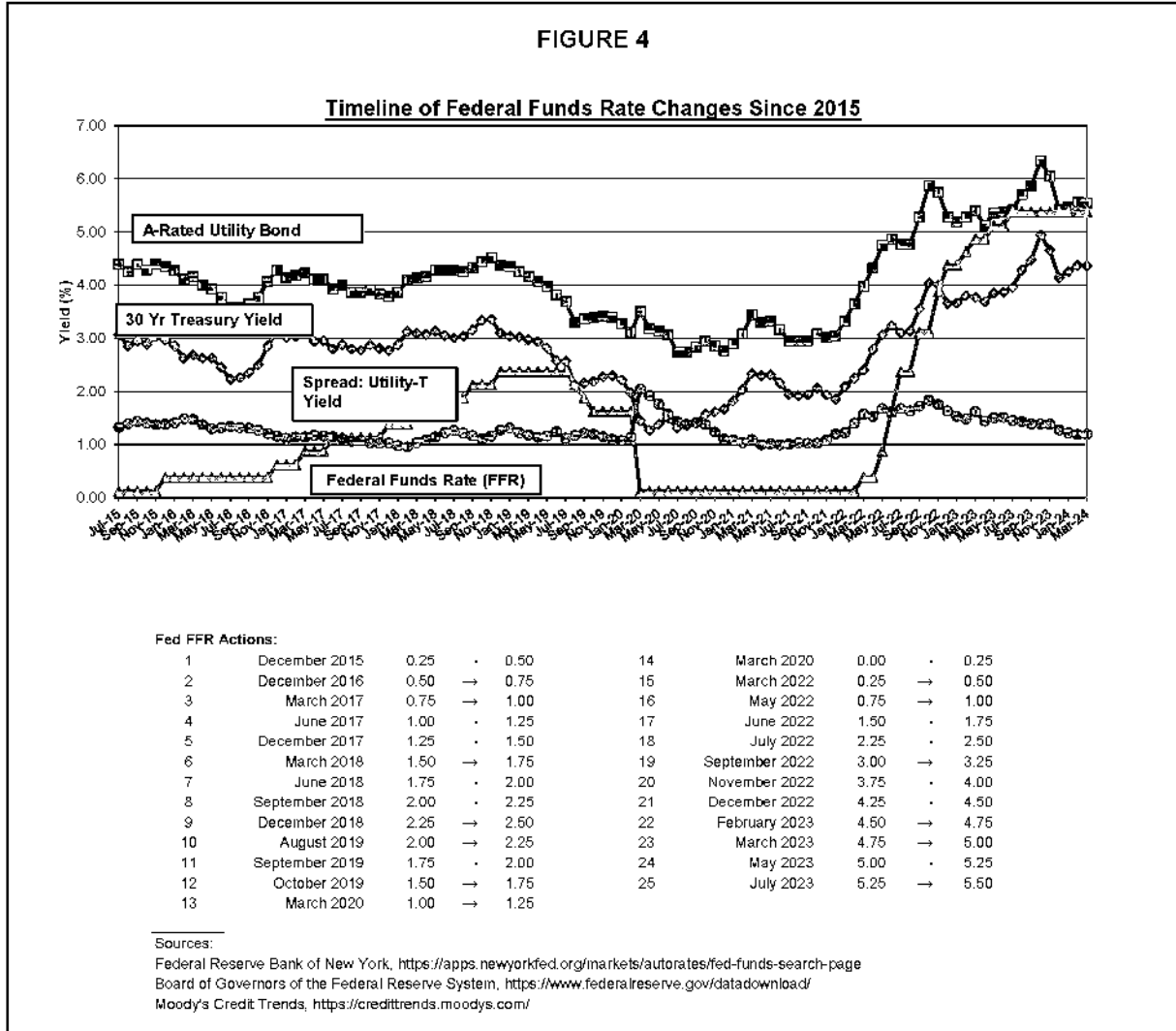16   to inflation risks.[3]

17   With this as a backdrop, the Federal Reserve announced it decided to maintain

18   the target range of the Federal Funds Rate to 5.25% to 5.50%, and that it will continue

19   to closely monitor the economic activity before making any adjustments needed to

20   achieve the target 2% inflation rate. The Federal Reserve also stated that it will

21   continue to reduce its holdings of Treasury securities, agency debt securities and

22   agency mortgage-backed securities, as outlined in previously released plans. In its

---

[3]Federal Reserve Press Release, March 20, 2024.

1   March 20, 2024 press release, the Federal Reserve reiterated its strong commitment

2   to returning inflation to 2%.[4]

3   The trend in the Federal Reserve's monetary actions on the Federal Funds Rate

4   is shown below in Figure 4.

FIGURE 4

Timeline of Federal Funds Rate Changes Since 2015

Fed FFR Actions:

#	Date	From		To		#	Date	From		To
1	December 2015	0.25	·	0.50		14	March 2020	0.00	·	0.25
2	December 2016	0.50	→	0.75		15	March 2022	0.25	→	0.50
3	March 2017	0.75	→	1.00		16	May 2022	0.75	→	1.00
4	June 2017	1.00	·	1.25		17	June 2022	1.50	·	1.75
5	December 2017	1.25	·	1.50		18	July 2022	2.25	·	2.50
6	March 2018	1.50	→	1.75		19	September 2022	3.00	→	3.25
7	June 2018	1.75	·	2.00		20	November 2022	3.75	·	4.00
8	September 2018	2.00	·	2.25		21	December 2022	4.25	·	4.50
9	December 2018	2.25	→	2.50		22	February 2023	4.50	→	4.75
10	August 2019	2.00	→	2.25		23	March 2023	4.75	→	5.00
11	September 2019	1.75	·	2.00		24	May 2023	5.00	·	5.25
12	October 2019	1.50	→	1.75		25	July 2023	5.25	→	5.50
13	March 2020	1.00	→	1.25						

Sources:
Federal Reserve Bank of New York, https://apps.newyorkfed.org/markets/autorates/fed-funds-search-page
Board of Governors of the Federal Reserve System, https://www.federalreserve.gov/datadownload/
Moody's Credit Trends, https://credittrends.moodys.com/

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5   As shown in Figure 4, the Federal Funds Rate, currently at a 5.25% to 5.50%

6   range, resulted in a higher Federal Funds Rate than the rate prior to the economic

7   effects of the worldwide pandemic starting around March/April of 2020.

---

[4] *Id.*

1 Q DO INDEPENDENT ECONOMISTS' OUTLOOKS FOR FUTURE INTEREST RATES

2   REFLECT THE FEDERAL RESERVE'S CURRENT MONETARY POLICY?

3 A Yes. In its most recent report, *Blue Chip Financial Forecasts* ("*BCFF*") outlines

4   consensus economists' projections into 2024 that reflect better than expected economy

5   improvement in 2023. The *BCFF* consensus expects declines in the interest rates

6   across all maturities in 2024, reflecting in part the expected decline in the Federal

7   Funds Rate. *BCFF* anticipates the target rate to be reduced by approximately 90 basis

8   points in 2024, which in fact is slightly above the Federal Reserve's projections of 50 to

9   75 basis points.[5]

10   These consensus economists' outlooks and projections of short-term Federal

11   Funds Rate levels, long-term Treasury bond 30-year maturities, and of the U.S.

12   economic outlook include an expectation that inflation and interest rates will begin to

13   moderate and decline toward mid-2024, as illustrated in Table 2 below.

---

[5]*Blue Chip Financial Forecasts*, April 1, 2024.

TABLE 2

Blue Chip Financial Forecasts
Projected Federal Funds Rate, 30-Year Treasury Bond Yields, and GDP Price Index

Publication Date	4Q 2022	1Q 2023	2Q 2023	3Q 2023	4Q 2023	1Q 2024	2Q 2024	3Q 2024	4Q 2024	1Q 2025	2Q 2025	3Q 2025
Federal Funds Rate												
Mar-23	**3.7**	4.7	5.1	5.1	5.0	4.7	4.2					
Apr-23		4.5	5.0	5.1	4.9	4.6	4.2	3.8				
May-23		4.5	5.0	5.1	5.0	4.7	4.2	3.8				
Jun-23		**4.6**	5.0	5.1	5.0	4.6	4.2	3.9				
Jul-23			5.0	5.3	5.2	5.0	4.6	4.3	3.9			
Aug-23			5.0	5.4	5.4	5.2	4.9	4.4	4.0			
Sep-23			**5.0**	5.3	5.4	5.3	5.0	4.6	4.2			
Oct-23				5.3	5.4	5.4	5.1	4.7	4.3	4.0		
Nov-23				5.3	5.4	5.4	5.2	4.9	4.5	4.1		
Dec-23				**5.3**	5.4	5.4	5.2	4.9	4.6	4.2		
Jan-24					5.3	5.3	5.1	4.8	4.4	4.1	3.8	
Feb-24					5.3	5.3	5.1	4.7	4.4	4.1	3.8	
Mar-24					**5.3**	5.4	5.2	4.9	4.5	4.2	3.8	
Apr-24						5.3	5.2	5.0	4.6	4.2	3.9	3.7
T-Bond, 30 yr.												
Mar-23	**3.9**	3.9	4.0	3.9	3.9	3.8	3.8					
Apr-23		3.8	3.9	3.8	3.8	3.8	3.8	3.7				
May-23		3.7	3.8	3.8	3.8	3.8	3.7	3.7				
Jun-23		**3.7**	3.8	3.8	3.8	3.8	3.8	3.7				
Jul-23			3.8	3.9	3.9	3.9	3.8	3.8	3.8			
Aug-23			3.8	4.0	3.9	4.0	3.9	3.9	3.8			
Sep-23			**3.8**	4.1	4.2	4.1	4.0	4.0	3.9			
Oct-23				4.2	4.4	4.3	4.2	4.2	4.1	4.0		
Nov-23				4.2	4.8	4.7	4.5	4.5	4.3	4.2		
Dec-23				**4.2**	4.8	4.7	4.5	4.5	4.4	4.3		
Jan-24					4.6	4.3	4.3	4.2	4.1	4.0	4.0	
Feb-24					4.6	4.3	4.2	4.2	4.1	4.0	4.0	
Mar-24					**4.6**	4.4	4.3	4.2	4.2	4.1	4.1	
Apr-24						4.3	4.3	4.2	4.2	4.1	4.1	4.0
GDP Price Index												
Mar-23	**3.9**	3.2	2.8	2.6	2.5	2.5	2.3					
Apr-23		3.2	3.2	2.9	2.7	2.5	2.3	2.2				
May-23		4.0	3.2	2.9	2.7	2.5	2.3	2.2				
Jun-23		**4.2**	3.3	2.8	2.7	2.5	2.5	2.2				
Jul-23			3.3	2.9	2.8	2.5	2.4	2.2	2.2			
Aug-23			2.2	2.7	2.6	2.5	2.3	2.3	2.3			
Sep-23			**2.0**	2.7	2.6	2.4	2.3	2.2	2.2			
Oct-23				2.7	2.7	2.4	2.2	2.2	2.2	2.2		
Nov-23				3.5	2.7	2.4	2.3	2.2	2.2	2.3		
Dec-23				**3.6**	2.7	2.4	2.3	2.2	2.2	2.2		
Jan-24					2.7	2.3	2.3	2.3	2.2	2.2	2.1	
Feb-24					1.5	2.2	2.2	2.3	2.2	2.2	2.1	
Mar-24					**1.6**	2.2	2.3	2.2	2.2	2.1	2.1	
Apr-24						2.2	2.4	2.3	2.2	2.2	2.1	2.2

Source and Note:
Blue Chip Financial Forecasts, Jan 2022 through April 2024.
Actual Yields in Bold.

1   Moreover, the current outlook for long-term interest rates in the intermediate to

2   longer term is also impacted by the current Federal Reserve actions and the

3   expectation that eventually the Federal Reserve's monetary actions will return to more

4   normal levels. Long-term interest rate projections are illustrated in Table 3 below.

TABLE 3

30-Year Treasury Bond Yield Actual Vs. Projection

Description	Actual	2-Year Projected*	5- to 10-Year Projected
2019			
Q1	3.01%	3.50%	
Q2	2.78%	3.17%	3.6% - 3.8%
Q3	2.30%	2.70%	
Q4	2.30%	2.50%	3.2% - 3.7%
2020			
Q1	1.88%	2.57%	
Q2	1.38%	1.90%	3.0% - 3.8%
Q3	1.36%	1.87%	
Q4	1.62%	1.97%	2.8% - 3.6%
2021			
Q1	2.07%	2.23%	
Q2	2.26%	2.77%	3.5% - 3.9%
Q3	1.93%	2.63%	
Q4	1.95%	2.70%	3.4% - 3.8%
2022			
Q1	2.25%	2.87%	
Q2	3.04%	3.47%	3.8% - 3.9%
Q3	3.26%	3.63%	
Q4	3.90%	3.87%	3.9% - 4.0%
2023			
Q1	3.74%	3.77%	
Q2	3.80%	3.70%	3.8% - 3.9%
Q3	4.24%	3.83%	
Q4	4.58%	4.17%	4.1% - 4.2%

Source and Note:

Blue Chip Financial Forecasts, January 2019 through March 2024.

*Average of all 3 reports in Quarter.

1 **II.C. Utility Industry Credit Outlook**

2 Q PLEASE DESCRIBE THE CREDIT RATING OUTLOOK FOR REGULATED

3 UTILITIES.

4 A In Standard & Poor's ("S&P") January 9, 2024 *Industry Credit Outlook 2024* industry

5 credit outlook, it comments that North American regulated utilities' credit quality

6 remains under pressure. In that report, it makes the following points:

7 1. Credit quality remains pressured due to natural disaster risks to
8 infrastructure, and record levels of capital spending;

9 2. S&P's outlook reflects its expectation of continued large capital spending,
10 with consistent access to capital markets supported by continued supportive
11 utility regulatory treatment;

12 3. The expectation that utilities will manage credit metrics by funding large
13 capital spending with balanced amounts of debt and equity funding; and

14 4. Managing regulatory risk is highlighted during the large capital spending
15 period because utilities must prioritize rate affordability and the impacts on
16 customer bills through this period.

17 S&P notes that around 56% of the industry has stable credit rating outlooks,

18 and the industry median credit rating remains in the BBB+ category. S&P projects

19 core industry credit metrics for Debt/EBITDA[6] to remain relatively stable through

20 the forecast period, around 4.5x. FFO/Debt[7] projections trend between 16% and

21 17% through 2025, and S&P expects a recovery of depressed operating cash flow

22 from the 2020-2021 period which will support large capital expenditure programs.

23 S&P emphasizes the importance of effective utility management of

24 regulatory risk and concludes that "To manage regulatory risk, the industry must

25 maintain the affordability of the customer bill."[8] From that standpoint, the credit

26 rating agency provides a clear description of its assessment of regulatory treatment

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[6] Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA").
[7] Funds From Operations ("FFO").
[8] *S&P Global Ratings Industry Credit Outlook 2024*: "North American Regulated Utilities," January 9, 2024, at 8.

1   of utilities across the various jurisdictions. S&P's regulatory risk rating of U.S.

2   jurisdictions is copied below.

FIGURE 5

Regulatory Assessment by State[9]
(as of November 2023)

Source: S&P Global Ratings.
Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.
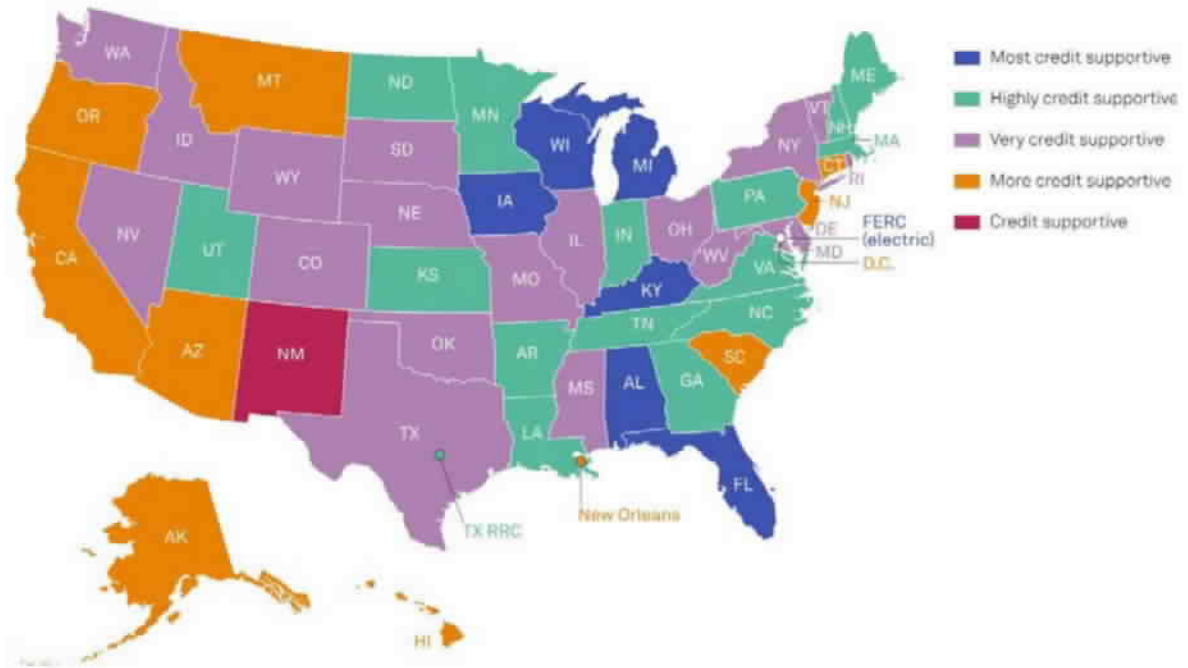
3 **Q**   **PLEASE OUTLINE CREDIT AGENCIES' STATED CONCERN ABOUT RATE**

4   **AFFORDABILITY AS A CREDIT RISK TO UTILITIES.**

5 **A**   Credit rating agencies have been emphasizing rate affordability, maintaining adequate

6   financial coverages of debt obligations, and supporting utilities' overall investment

7   grade bond ratings.

---

[9] *Id*. at 9.

1   In a recent industry report, Moody's Investors Service ("Moody's") explained

2   that the regulated electric and gas utilities' outlook remains "Negative" largely due to

3   increased pricing pressures on customers. Moody's stated that it changed its outlook

4   from "Positive" to "Negative" due to the following:

5   > We have revised our outlook on the US regulated utilities sector to
6   > negative from stable. We changed the outlook because of increasingly
7   > challenging business and financial conditions stemming from higher
8   > natural gas prices, inflation and rising interest rates. These
9   > developments raise residential <u>customer affordability issues</u>, increasing
10   > the level of uncertainty with regard to the timely recovery of costs for fuel
11   > and purchased power, as well as for rate cases more broadly.[10]

12   Also, in the January report discussed above, S&P specifically mentioned

13   commodity price volatility, in combination with significant increases in capital

14   investments, driving utility rate increases which may strain affordability concerns.[11]

15   Finally, Fitch Ratings ("Fitch") opined that the regulated electric and gas utilities'

16   outlook is deteriorating due to elevated capex that put pressure on credit metrics. Fitch

17   also notes the bill affordability concerns for ratepayers, and regulators' ability to

18   balance the <u>rate requests with increasing customer bills</u>.

19   Specifically, Fitch states:

20   > Authorized ROEs could prove to be sticky despite an increase in
21   > cost of capital. Higher weather-normalized retail electricity
22   > sales, driven by datacenter growth and onshoring of
23   > manufacturing activities, and tax transferability provisions of the
24   > Inflation Reduction Act could somewhat offset headwinds to
25   > utilities. Ongoing management actions to sell assets and issue
26   > equity, in some cases, is supportive of parent companies'
27   > ratings. <u>Within Fitch's coverage, 90% of ratings hold Stable</u>
28   > <u>Rating Outlooks. We expect limited rating movement in 2024.</u>
29   > <u>The number of upgrades in 2023 so far exceeds the number of</u>

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[10]*Moody's Investors Service Outlook*: "Regulated Electric and Gas Utilities – US 2023 outlook negative due to higher natural gas prices, inflation and rising interest rates," November 10, 2022 at 1. (emphasis added).

[11]*S&P Global Ratings*: "Industry Credit Outlook 2024: North America Regulated Utilities," January 9, 2024, at 8.

1   <u>downgrades, and is driven by positive rating actions on several</u>
2   <u>parent holding companies and their regulated subsidiaries.</u>[12]

3   As outlined by Moody's, S&P and Fitch above, credit analysts are focusing on rate

4   affordability as an important factor needed to support strong credit standing. Customers

5   must be able to afford to pay their utility bills in order for utilities to maintain their financial

6   integrity and strong investment grade credit standing. For this reason, the Commission

7   should carefully assess the reasonableness of cost of service in this proceeding, including

8   an appropriate overall rate of return necessitated by a reasonably cost-effective balanced

9   ratemaking capital structure, and a return on equity that represents fair compensation but

10   also maintains competitive, just and reasonable rates.

11   II.D. AEP Texas' Investment Risk

12 **Q**   **PLEASE DESCRIBE THE MARKET'S ASSESSMENT OF AEP TEXAS'**

13   **INVESTMENT RISK.**

14 **A**   The market's assessment of AEP Texas' investment risk is described by credit rating

15   analysts' reports. AEP Texas witness Ms. Bulkley testified that AEP Texas' credit

16   ratings from S&P and Moody's are A- and Baa2, respectively. The Company has a

17   negative outlook from S&P and Moody's.[13]

18   Specifically, S&P states:

19   **Outlook**

20   The negative outlook on AEP Texas reflects the negative outlook
21   on parent American Electric Power Co. Inc. (AEP). Under our
22   base case, we expect AEP Texas' stand-alone funds from
23   operations (FFO) to debt to reflect 11%-13% through 2026.[14]

---

[12] *Fitch Ratings.* "North American Utilities, Power & Gas Outlook 2024," December 6, 2023 at 1. (emphasis added)
[13] Bulkley Direct Testimony at 32.
[14] *S&P Global Ratings:* "AEP Texas Inc.," December 12, 2023 at 2.

1   S&P notes that potential credit rating downside and upside for AEP Texas are

2   driven by credit rating changes at its parent company, AEP. However, on a stand-

3   alone assessment of AEP Texas' credit rating, S&P notes supportive cost recovery

4   regulatory treatment, and weaker credit metrics due to a period of record capital

5   spending. S&P currently rates AEP Texas' business risk outlook as "Excellent" and its

6   financial risk as "Aggressive."[15] Specifically, S&P states the following:

7   **Business Risk**

8   Our assessment of AEP Texas' business risk reflects its lower
9   risk, fully regulated T&D wires-only electric utility operations and
10   effective management of regulatory risk. Its electric operations
11   provide indispensable and strategically important services and
12   feature high barriers to entry. Our assessment also reflects AEP
13   Texas' stable service territory and strong customer growth,
14   coupled with our expectation for a continued solid operating
15   performance and a credit-supportive regulatory environment.
16   Modestly negative is that the company lacks regulatory diversity
17   because it only operates in a single state.

18   The company operates under a generally constructive regulatory
19   framework under the Public Utilities Commission of Texas
20   (PUCT).   The regulatory jurisdiction provides timely cost
21   recovery of approved invested T&D capital.   The company
22   recovers these costs through TCOS, DCRF, and energy
23   efficiency riders, which help it mitigate its regulatory lag and earn
24   close to its authorized return.

25   The company also benefits from a diverse customer base, which
26   provides some stability to its cash flow by reducing its reliance
27   on any particular customer class.   Specifically, AEP Texas
28   generates greater than 95% of its revenue from residential and
29   commercial customers and derives the remainder from the
30   more-volatile industrial class.

31   *   *   *

32   **Financial Risk**

33   Under our base-case scenario, we anticipate AEP Texas' stand-
34   alone FFO to debt to be in the 11%-13% range through 2026
35   while its FFO cash interest coverage will be in the 3.5x-4x range
36   through 2026. We expect these measures to remain in these
37   ranges   because   the   company   benefits   from   recovery

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[15]*S&P Global Ratings*: "AEP Texas Inc.," December 12, 2023.

1   mechanisms such as the DCRF and TCOS[16] allowing for the
2   timely recovery of costs and support more stable operating cash
3   flows. In addition, we expect AEP Texas's DCF, after capital
4   spending and dividends, will remain negative through 2026. This
5   indicates a need for external funding, including our expectation
6   for debt issuances. We expect the company will continue to fund
7   its investments in a manner that preserves its credit quality.

8   We assess AEP Texas's financial risk under our medial volatility
9   financial benchmarks, which reflects its lower risk, regulated
10   utility operations and effective management of regulatory risk.
11   These benchmarks are more relaxed than those we use for
12   typical corporate issuers.[17]

13   The Texas Commission's regulatory practice and regulatory mechanisms have

14   provided supportive regulatory treatment, which has contributed to predictably strong

15   financial performance for AEP Texas.

16 Q   **HOW HAS AEP TEXAS' CREDIT RATING BEEN IMPACTED BY ITS AFFILIATION**

17   **WITH ITS PARENT COMPANY, AEP?**

18 A   Negatively. AEP Texas' credit profile from S&P is linked to its parent company, AEP,

19   Inc. ("AEP"), which has caused credit rating problems at AEP Texas. On March 4,

20   2024, AEP was downgraded by S&P from A- to BBB+. Due to the minimum financial

21   isolation between AEP and its subsidiaries, most of AEP's operating utilities were also

22   downgraded.

23   S&P describes the credit rating downgrade in AEP and its affiliates including

24   AEP Texas as follows:

25   **Rating Action Rationale**

26   The downgrade reflects our expectation that the company's
27   consolidated FFO to debt will remain consistently below our 16%
28   downgrade threshold for the 'A-' rating. AEP's financial measures have
29   remained consistently below our downgrade threshold for the 'A-' rating.

---

[16] Distribution Cost Recovery Factor ("DCRF") and Transmission Cost Recovery Factor ("TCRF").
[17] *S&P Global Ratings:* "AEP Texas Inc.," December 12, 2023 at 2, 4-5.

1   In 2022 and 2023, the company's FFO to debt was 14.8% and 12.0%,
2   respectively. We expect AEP's financial measures will continue to be
3   pressured by its robust capital spending program. We estimate the
4   company's average capital spending will rise to more than $8.8 billion
5   annually through 2026, which represents a significant increase relative
6   to its historical levels.

7   *   *   *

8   Our assessment of AEP's business risk profile remains excellent,
9   though its management of regulatory risk could become more
10   challenging.

11   *   *   *

12   We downgraded AEP's subsidiaries by one notch (except for KPCo).
13   We assess all of the company's rated subsidiaries (except for KPCo) as
14   core subsidiaries. Furthermore, <u>we believe there is insufficient</u>
15   <u>separateness and/or insulating measures in place to rate any of AEP's</u>
16   <u>subsidiaries above our group credit profile. As such, a downgrade of the</u>
17   <u>parent directly leads to the downgrade of its subsidiaries</u> (except for
18   KPCo which is rated lower than the parent).[18]

19   **Q**   **WHAT DOES MOODY'S STATE ABOUT AEP TEXAS' CREDIT RATING**

20   **OUTLOOK?**

21   A   Like S&P, Moody's also is concerned about the size of AEP Texas' capital expenditure

22   program, and the need to maintain affordable rates. Moody's states:

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[18] *S&P Global Ratings:* "American Electric Power Co. Inc. Downgraded To 'BBB+' On Weak Financial Measures, Outlook Negative," March 4, 2024 at 1-2, emphasis added.

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20 **II.E. AEP Texas' Proposed Capital Structure**

21 **Q**   **WHAT IS THE COMPANY'S PROPOSED CAPITAL STRUCTURE?**

22 **A**   AEP Texas witness Mr. Noah K. Hollis sponsors the Company's proposed capital

23   structure, which is shown below in Table 4.

---

[19] *Moody's Investors Service Credit Opinion*: "AEP Texas Inc. Update following outlook change to negative," March 25, 2024 at 1-3, provided by AEP Texas as Response to TIEC 2-4, HIGHLY SENSITIVE Attachment 2.

TABLE 4

AEP Texas' Proposed Capital Structure

Description	Weight
Long-Term Debt	55.00%
Common Equity	45.00%
Total Regulatory Capital Structure	100.00%

Sources: Hollis Direct Testimony at 5 and
            Schedule II-C-2.1.

---

1   AEP Texas witness Hollis notes that the Company's authorized capital structure in its

2   last rate case in 2019 (Docket No. 49494) was composed of 42.5% equity and 57.5%

3   debt[20] but states that the Company proposes to change the capital structure in this case

4   and increases the common equity ratio to 45.0%, which he believes is necessary to

5   improve AEP Texas' financial integrity and credit quality.   Mr. Hollis testifies that a

6   capital structure with an increased common equity ratio will better position the

7   Company to keep its cost of debt low, which would be achieved by strengthening the

8   Company's cash flow credit metrics necessary to maintain or improve its investment

9   grade credit rating.[21]

10   Q   IS AEP TEXAS' PROPOSAL TO INCREASE THE COMMON EQUITY RATIO

11   NECESSARY TO SUPPORT ITS INVESTMENT GRADE BOND RATING AND

12   LARGE CAPITAL PROGRAM?

13   A   No.   AEP Texas' credit metrics will remain stressed by its large capital program, but

14   should remain within S&P's and Moody's projected credit metric levels that will support

---

[20] Hollis Direct at 6.
[21] *Id.*

1   its credit rating through 2026. After the large capital spending period is completed and

2   AEP Texas' new investments are placed into rates and begin to yield increased

3   revenues, it is reasonable to expect, as do credit analysts, that the credit metrics for

4   AEP Texas will improve and its outlook will stabilize or possibly turn positive.

5   But more significantly, AEP Texas' proposal to increase its equity ratio

6   disregards its need to manage rate affordability, and the impact on customer bills while

7   managing its elevated capital expenditure program. AEP Texas' proposed change in

8   its capital structure will increase its cost of service and erode rate affordability. Further,

9   the proposed increase in AEP Texas' cost of capital will increase its profitability and

10   appears to be designed to improve the credit metrics of AEP Texas' parent company

11   and its out-of-Texas affiliates.

12 Q HAS THE TEXAS COMMISSION'S REGULATORY TREATMENT FOR

13   TRANSMISSION AND DISTRIBUTION UTILITIES ("TDUs") SUPPORTED STRONG

14   CREDIT RATINGS, FINANCIAL INTEGRITY, AND RATE AFFORDABILITY?

15 A Yes. The authorized overall rates of return for TDUs in Texas have consistently

16   reflected and been appropriate for Texas' more highly leveraged TDUs that benefit from

17   low-cost recovery risk due to the state's regulatory mechanisms including interim rate

18   adjustments. As noted above from S&P, the DCRF and TCOS allow for prompt interim

19   adjustments in customer bills to accommodate changes in plant investment relative to

20   a utility's last comprehensive base rate case. These regulatory mechanisms

21   significantly reduce regulatory lag and enhance utilities' earnings and cash flow as plant

22   investments increase past the last general rate case. These mechanisms enhance

23   AEP Texas' ability to increase FFO relative to total debt, and not only support credit

24   metrics during large capital programs, but also will allow credit metrics to more quickly

1   rebound as the utilities' large capital programs wind down. Table 5 below summarizes

2   how TDUs operating within the Electric Reliability Council of Texas, Inc. ("ERCOT")—

3   including Oncor Electric Delivery Company, CenterPoint Energy Houston, and AEP

4   Texas—have benefited from strong credit ratings based on the Texas Commission's

5   regulatory practices.

TABLE 5

Texas TDUs Risk Characteristics

Line	Description	Oncor Electric Delivery Co. (1)	CenterPoint Energy Houston (2)	AEP Texas (3)
	I. Credit Factors[1]			
1	FFO / Debt[2]	16.1%	14.7%	12.7%
2	Equity Ratio[2]	43.7%	45.3%	41.2%
3	Credit Rating	A/Stable	BBB+/Negative	BBB+/Negative
4	Business Risk	Excellent	Excellent	Excellent
5	Financial Risk	Intermediate	Significant	Aggressive
	II. Regulatory Factors[3]			
6	Authorized Equity Ratio	42.50%	42.50%	42.50%
7	Authorized ROE	9.70%	9.40%	9.40%

Sources:
[1] *S&P Capital IQ*, Various Reports, downloaded May 9, 2024.
[2] *S&P Global Rating*: "AEP Texas, Inc.," December 12, 2023 at 4.
[3] *S&P Capital IQ*, TDUs Rate Case Profiles.xlsx.

6   As outlined in Table 5 above, the largest Texas TDUs all have strong investment

7   grade bond ratings. The equity ratio in line 2 in Table 5 is the credit rating equity ratio

8   which reflects the long-term debt included in the ratemaking capital structure, plus

9   short-term debt and off-balance-sheet debt equivalents for calendar year 2022. It

10   shows that AEP Texas can earn above S&P's minimum FFO/Debt ratio, above 12.0%,

11   with a ratemaking capital structure equity ratio of 42.5% during a period of large capital

12   expenditures.

1   The outlooks for CenterPoint Energy Houston and AEP Texas both reflect large

2   parent company capital programs, as well as utility affiliate capital programs. While

3   both of these utilities' credit metrics may be strained during extra-large capital

4   programs, the credit metrics are expected to improve after either the capital program

5   subsides to more normal levels, or plant in-service balances increase sufficiently to

6   offset the cash flow temporary impacts due to large construction work in progress

7   ("CWIP") balances. As outlined in the table, these positive financial strengths and

8   strong credit ratings have been supported by the ratemaking capital structure that has

9   been approved by the Texas Commission, which involves 42.5% equity for each of

10   these utilities. Changing ratemaking capital structures can unnecessarily increase

11   costs to customers and impair the utilities' ability to keep rates as low as possible,

12   thereby negatively impacting rate affordability.

13   As outlined in Table 5 above, both AEP Texas and CenterPoint Energy Houston

14   have "Negative" outlooks due to their affiliation with parent companies that are

15   implementing large capital programs across their entire portfolio, but for both of these

16   utilities, and particularly AEP Texas, existing regulatory mechanisms are anticipated to

17   support acceptable credit metrics as they implement large capital programs and will

18   support improved credit metrics once those large capital programs begin to either wind

19   down, or embedded plant investment grows in proportion to large capital spending,

20   thus improving credit metrics.

21   It is important to note that as embedded plant grows in relationship to annual

22   capital expenditures, a larger portion of the Company's plant in-service, excluding

23   CWIP, will be generating earnings and cash flow because the cost of these in-service

24   investments will be included in customer bills through interim rate mechanisms and/or

25   future base rate cases. Increasing bills to pay for greater plant in-service costs will

1   increase the Company's operating income and internal cash flow, and improve core

2   credit metrics of FFO/Debt coverages and cash flow from operations ("CFO") debt

3   coverages, which are the key credit metrics noted by both S&P and Moody's as

4   concerns for managing credit metrics through AEP Texas' large capital program.

5   **Q**   **WHY DO YOU STATE THAT AEP TEXAS' CREDIT METRICS AT ITS EXISTING**

6   **APPROVED CAPITAL STRUCTURE WITH A COMMON EQUITY RATIO OF 42.50%**

7   **IS ALREADY ACHIEVING THE CASH FLOW CREDIT METRICS PROJECTED BY**

8   **S&P AND MOODY'S THAT SHOULD MAINTAIN ITS BOND RATING THROUGH ITS**

9   **LARGE CAPITAL PROGRAM?**

10   A   As evident by a comparison of the current and projected credit metrics for AEP Texas

11   using S&P and Moody's methodologies, AEP Texas' large capital program has strained

12   metrics but have been effectively managed to generally fall in the range that both S&P

13   and Moody's state will support AEP Texas' credit rating during the large capital

14   program.

15   For example, historical and projected credit metric ranges for AEP Texas from

16   S&P are shown below in Table 6.

TABLE 6

AEP Texas
S&P Key Credit Metrics

Description	Actual					S&P Forecast[2]
	2019	2020	2021	2022	2023	2024 - 2026
I. Credit Metrics[1]						
Debt/EBITDA (x)	4.8	5.5	6.3	6.0	5.6	5.5-6.0
FFO/Debt (%)	17.3	15.6	12.3	12.7	13.3	11.0-13.0
II. Regulatory Authorized[3]						
Equity Ratio	42.5%	42.5%	42.5%	42.5%	42.5%	
ROE	9.4%	9.4%	9.4%	9.4%	9.4%	
III. Actual[4]						
Equity Ratio	43.8%	42.0%	42.7%	41.6%	45.2%	
Earned ROE	6.4%	7.8%	8.5%	8.2%	8.5%	
IV. Capital Expenditure[4]						
CWIP/Net Plant	9.2%	6.6%	5.5%	7.3%	8.3%	
Capital Exp. (M$)	(1,295)	(1,298)	(1,037)	(1,312)	(1,489)	

Source and Notes:
[1] *S&P Capital IQ,* downloaded May 1, 2024.
[2] *S&P Global Rating:* "AEP Texas Inc.," December 12, 2023 at 3.
[3] *S&P Capital IQ,* TDUs Rate Case Profiles.xlsx.
[4] S&P Market Intelligence, FERC Form-1 Various Dates, downloaded on May 1, 2024.

1   As shown in the historical credit metrics, under S&P's methodology, AEP Texas'

2   FFO/Debt ratio has ranged from 12.3% to 13.3% over the period 2021 through 2023.

3   S&P notes that it expects AEP Texas to earn an FFO/Debt ratio within the range of

4   11.0% to 13.0% through 2026.   AEP Texas is earning this FFO/Debt ratio with its

5   current ratemaking capital structure equity ratio of 42.5%, while also earning less than

6   its authorized return on equity. The actual earned credit metrics relative to the credit

7   metric range based on AEP Texas' current "Aggressive" financial risk profile from S&P

1   are also in compliance with the targeted metrics. For a business risk profile of

2   "Excellent" and a financial risk profile of "Aggressive," S&P's target FFO/Debt ratio is

3   in the range of 9% to 13%. As AEP Texas moves through the large capital program

4   and its financial risk profile reverts to "Significant," S&P's FFO/Debt target range

5   increases to 13% to 15%.[22]

6   Similarly, the Company's historical credit metrics from Moody's are shown

7   below in Table 7.

TABLE 7

AEP Texas
Moody's Key Credit Metrics

	2019	2020	2021	2022	2023
CFO Pre-WC + Interest / Interest	6.0x	4.4x	4.4x	4.6x	4.1x
CFO Pre-WC / Debt	17.1%	12.6%	12.3%	13.7%	13.3%
CFO Pre-WC - Div / Debt	17.1%	12.6%	12.3%	13.7%	13.3%
Debt / Capitalization	54.9%	54.3%	53.2%	53.9%	50.5%

Source:
Hollis Direct Testimony at 8, Updated though the end of 2023 using the Moody's report provided by AEP Texas as Response to TIEC 2-4, HIGHLY SENSITIVE Attachment 2.

8   As shown in the table, the Company's actual historical earned cash flow from

9   operations pre-Working Capital ("CFO/pre-WC")/Debt consistently has been above

10   12.0% since 2020. As outlined in the Moody's report discussed above: ███████

11   ███

12   ██ AEP

13   Texas has earned this CFO coverage for many years under the current ratemaking

14   capital structure.

_____

[22]Standard & Poor's: "Criteria: Corporate Methodology," November 19, 2013.

1   Moody's assesses AEP Texas under its low business risk grid because the

2   Company is not exposed to any commodity risk.[23] For a low business risk utility,

3   Moody's targets for the CFO Pre-WC/Debt fall in the range of 11% to 19%.[24] As shown

4   in the table above. AEP Texas has operated within this range since 2020 during a large

5   capital program period and with a ratemaking common equity ratio of 42.5%.

6   Q   PLEASE EXPLAIN WHY INCREASING THE RATEMAKING CAPITAL STRUCTURE

7   COMMON EQUITY RATIO DOES NOT SUPPORT AEP TEXAS' OBLIGATION TO

8   MANAGE RATE AFFORDABILITY ON BEHALF OF ITS CUSTOMERS.

9   A   As outlined above, increasing the common equity ratio is not necessary to meet the

10   credit rating targets presented by credit rating agencies during this rate case cycle.

11   Further, AEP Texas has other alternative means to improve its credit metrics aside

12   from increasing its common equity ratio. Setting those issues aside for now, increasing

13   the common equity ratio will result in overstating its claimed revenue deficiency by

14   approximately $21 million, as shown on my Exhibit MPG-3.

15   Q   PLEASE EXPLAIN WHY A CAPITAL STRUCTURE WITH TOO MUCH COMMON

16   EQUITY OVERSTATES A UTILITY'S REVENUE REQUIREMENT

17   A   Using an equity-thick capital structure increases AEP Texas' rate of return and revenue

18   requirement because common equity is the most expensive form of capital, and is

19   subject to income tax expense. For example, customers will pay a return of 12.73%

20   for the revenue requirement to produce a 9.50% return on equity (9.50% x 1.34

21   gross-up). In comparison, customers will pay around 5.50% on debt capital because it

---

[23] *Moody's Investors Service Credit Opinion*: "AEP Texas Inc. Update following outlook change to negative," March 25, 2024 at 4, provided by AEP as Response to TIEC 2-4, HIGHLY SENSITIVE Attachment 2.

[24] Moody's: "Rating Methodology: Regulated Electric and Gas Utilities," June 23, 2017.

1   is not subject to income tax expense. As such, common equity capital is more than

2   twice as expensive as debt capital.

3   Because of the significantly greater cost, a utility should finance its utility plant

4   investments with a reasonable mix of debt and equity. Equity is needed to manage the

5   level of financial risk to support strong investment grade credit. Too much common

6   equity, however, increases a utility's rates above that necessary to support strong

7   investment credit and reasonable access to capital markets. Conversely, a balanced

8   capital structure will produce reasonable cost to customers, while still supporting a

9   strong investment grade credit standing and in turn allowing a utility to fund necessary

10   plant investment to maintain service quality and reliability. As such, a capital structure

11   composed of a reasonable mix of debt and equity capital will support a utility's financial

12   integrity and credit standing at the most reasonable and just prices to retail customers.

13   Q   DO YOU RECOMMEND THE COMMISSION CONTINUE TO SET RATEMAKING

14   CAPITAL STRUCTURES FOR ELECTRIC UTILITIES OPERATING WITHIN ERCOT

15   CONSISTENTLY WITH WHAT IT HAS FOUND TO BE A REASONABLE

16   RATEMAKING CAPITAL STRUCTURE SINCE THE RESTRUCTURING OF THE

17   TEXAS MARKET?

18   A   Yes. It appears that credit rating agencies and market participants believe that the

19   regulatory capital structures approved by the PUCT for TDUs like AEP Texas,

20   CenterPoint, and Oncor are appropriate in light of the low-risk operating nature of wires-

21   only TDUs operating in ERCOT. Therefore, I recommend the Commission continue to

22   set rates for AEP Texas in a litigated proceeding based on its current approved

23   common equity ratio of 42.50%. Below, I show that this ratemaking capital structure,

24   along with the other ratemaking components of AEP Texas' cost of service in this case,

1   will produce credit metrics that are adequate to support its investment grade bond

2   rating.

3 Q   **WHAT IS YOUR PROPOSED CAPITAL STRUCTURE FOR AEP TEXAS IN THIS**

4   **REGULATORY PROCEEDING?**

5 A   I recommend a ratemaking capital structure for AEP Texas as shown below in Table 8.

TABLE 8

<u>**Gorman's Proposed Capital Structure**</u>
(September 30, 2023)

<u>Description</u>	<u>Weight</u>
Long-Term Debt	57.50%
Common Equity	42.50%
Total Regulatory Capital Structure	100.00%

Source: Exhibit MPG-1.

6 ## II.F. Embedded Cost of Debt

7 Q   **WHAT IS AEP TEXAS' EMBEDDED COST OF LONG-TERM DEBT?**

8 A   AEP Texas is proposing an embedded cost of long-term debt of 5.12% as developed

9   on Schedule II-C-2.4a and supported by the Company's witness Mr. Hollis. I have used

10   AEP Texas' proposed embedded cost of long-term debt in my calculation of an overall

11   weighted cost of capital.

1 # III. RETURN ON EQUITY

2 Q **PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON**

3 **EQUITY."**

4 A A utility's cost of common equity is the expected return that investors require on an

5 investment in the utility. Investors expect to earn their required return from receiving

6 dividends and through stock price appreciation.

7 Q **PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED**

8 **UTILITY'S COST OF COMMON EQUITY.**

9 A In general, determining a fair cost of common equity for a regulated utility has been

10 framed by two hallmark decisions of the U.S. Supreme Court: Bluefield Water Works

11 & Improvement Co. v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679 (1923) and Fed.

12 Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944). In these decisions, the

13 Supreme Court found that just compensation depends on many circumstances and

14 must be determined by fair and enlightened judgments based on relevant facts. The

15 Court found that a utility is entitled to such rates as were permitted to earn a return on

16 its property devoted to the convenience of the public that is generally consistent with

17 the same returns available in other investments of corresponding risk. The Court

18 continued that the utility has no constitutional rights to profits such as those realized or

19 anticipated in highly profitable enterprises or speculative ventures, and defined the

20 ratepayer/investor balance as follows:

21 The return should be reasonably sufficient to assure confidence in the
22 financial soundness of the utility and should be adequate, under efficient
23 and economical management, to maintain and support its credit and
24 enable it to raise the money necessary for the proper discharge of its
25 public duties.[25]

---

[25] Bluefield, 262 U.S. 679, 693 (1923), emphasis added.

1   As such, a fair rate of return is based on the expectation that the utility's costs

2   reflect efficient and economical management, and the return will support its credit

3   standing and access to capital, without being in excess of this level. From these

4   standards, rates to customers will be just and reasonable, and under economic

5   management, compensation to the utility will be fair and support financial integrity and

6   credit standing.

III.A. Risk Proxy Group

8   **Q   PLEASE DESCRIBE HOW YOU IDENTIFIED A PROXY UTILITY GROUP THAT**

9   **COULD BE USED TO ESTIMATE AEP TEXAS' CURRENT MARKET COST OF**

10   **EQUITY.**

11   A   I relied on the same proxy group developed by AEP Texas witness Ms. Bulkley. I find

12   this group reasonably comparable to AEP Texas' investment risk characteristics.

13   **Q   PLEASE DESCRIBE WHY YOU BELIEVE YOUR PROXY GROUP IS REASONABLY**

14   **COMPARABLE IN INVESTMENT RISK TO AEP TEXAS.**

15   A   My proxy group is shown in Exhibit MPG-4. The proxy group has an average credit

16   rating from S&P and Moody's of BBB+ and Baa2, respectively, which are identical to

17   AEP Texas' credit ratings.[26]

18   The proxy group has an average common equity ratio of 41.6% from S&P

19   (including short-term debt) and a 45.2% equity ratio from *Value Line* (excluding short-

20   term debt). An equity ratio for AEP Texas of 42.5%[27] is comparable to and within the

21   proxy group equity ratio range.

---

[26] S&P Global Market Intelligence, downloaded April 19, 2024.
[27] Hollis Direct Testimony at 6 and Exhibit MPG-1.

1   ### III.B. DCF Model

2   **Q   PLEASE DESCRIBE THE DCF MODEL.**

3   A   The DCF model posits that a stock price is valued by summing the present value of

4   expected future cash flows discounted at the investor's required rate of return or cost

5   of capital. This model is expressed mathematically as follows:

6         $$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} \ldots \frac{D_\infty}{(1+K)^\infty} \qquad \text{(Equation 1)}$$
7

8   P_0 = Current stock price
9   D = Dividends in periods $1 - \infty$
10   K = Investor's required return

11   This model can be rearranged in order to estimate the discount rate or investor-

12   required return, known as "K." If it is reasonable to assume that earnings and dividends

13   will grow at a constant rate, then Equation 1 can be rearranged as follows:

14        $$K = D_1/P_0 + G \qquad \text{(Equation 2)}$$

15   K = Investor's required return
16   D_1 = Dividend in first year
17   P_0 = Current stock price
18   G = Expected constant dividend growth rate

19   Equation 2 is referred to as the annual "constant growth" DCF model.

20   **Q   PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.**

21   A   As shown in Equation 2 above, the DCF model requires a current stock price, expected

22   dividend, and expected growth rate in dividends.

23   **Q   WHAT STOCK PRICE DID YOU USE IN YOUR CONSTANT GROWTH DCF**

24   **MODEL?**

25   A   I relied on the average of the weekly high and low stock prices of the utilities in the

26   proxy group over a 13-week period ending on April 19, 2024. An average stock price

1   is less susceptible to market price variations than a price at a single point in time.

2   Therefore, an average stock price is less susceptible to aberrant market price

3   movements, which may not reflect the stock's long-term value.

4   A 13-week average stock price reflects a period that is still short enough to

5   contain data that reasonably reflects current market expectations, but the period is not

6   so short as to be susceptible to market price variations that may not reflect the stock's

7   long-term value. In my judgment, a 13-week average stock price is a reasonable

8   balance between the need to reflect current market expectations and the need to

9   capture sufficient data to smooth out aberrant market movements.

10   **Q**   **WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF MODEL?**

11   A   I used the most recently paid quarterly dividend as reported in *Value Line*.[28] This

12   dividend was annualized (multiplied by 4) and adjusted for next year's growth to

13   produce the D_1 factor for use in Equation 2 above. In other words, I calculate D_1 by

14   multiplying the annualized dividend (D_0) by $(1+G)$.

15   **Q**   **WHAT DIVIDEND GROWTH RATES DID YOU USE IN YOUR CONSTANT GROWTH**

16   **DCF MODEL?**

17   A   There are several methods that can be used to estimate the expected growth in

18   dividends. However, regardless of the method, to determine the market-required return

19   on common equity, one must attempt to estimate investors' consensus about what the

20   dividend, or earnings growth rate, will be and not what an individual investor or analyst

21   may use to make individual investment decisions.

---

[28] *The Value Line Investment Survey,* February 9, March 8, and April 19, 2024.

1   As predictors of future returns, securities analysts' growth estimates have been

2   shown to be more accurate than growth rates derived from historical data.[29] That is,

3   assuming the market generally makes rational investment decisions, analysts' growth

4   projections are more likely to influence investors' decisions, which are captured in

5   observable stock prices, than growth rates derived only from historical data.

6   For my constant growth DCF analysis, I have relied on a consensus, or mean,

7   of professional securities analysts' earnings growth estimates as a proxy for investor

8   consensus dividend growth rate expectations. I used the average of analysts' growth

9   rate estimates from three sources: Zacks, S&P Global Market Intelligence ("MI"), and

10   Yahoo! Finance. All such projections were available on April 19, 2024, and all were

11   reported online.

12   Each consensus growth rate projection is based on a survey of securities

13   analysts. There is no clear evidence whether a particular analyst is most influential on

14   general market investors. Therefore, a single analyst's projection does not as reliably

15   predict consensus investor outlooks as does a consensus of market analysts'

16   projections. The consensus estimate is a simple arithmetic average, or mean, of

17   surveyed analysts' earnings growth forecasts. A simple average of the growth

18   forecasts gives equal weight to all surveyed analysts' projections. Therefore, a simple

19   average, or arithmetic mean, of analyst forecasts is a good proxy for market consensus

20   expectations.

---

[29] *See, e.g.*, David Gordon, Myron Gordon & Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.

1   Q   WHAT ARE THE GROWTH RATES YOU USED IN YOUR CONSTANT GROWTH

2   DCF MODEL?

3   A   The growth rates I used in my DCF analysis are shown in Exhibit MPG-5. The average

4   growth rate for my proxy group is 6.37%.

5   Q   WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?

6   A   As shown in Exhibit MPG-6, the average and median constant growth DCF returns for

7   my proxy group for the 13-week analysis are 11.06% and 10.71%, respectively.

8   Q   DO YOU HAVE ANY COMMENTS ON THE RESULTS OF YOUR CONSTANT

9   GROWTH DCF ANALYSIS?

10   A   Yes. The constant growth DCF analysis for my proxy group is based on an average

11   long-term sustainable growth rate of 6.37%. The three- to five-year growth rate

12   exceeds my estimate of a maximum long-term sustainable growth rate of 4.10% by

13   approximately 230 basis points. As discussed in more detail below, it is unreasonable

14   to believe that utility earnings can grow more than the sustainable growth rate of the

15   U.S. economy as measured by the long-term projected Gross Domestic Product

16   ("GDP") growth for an indefinite period. Therefore, I find the results of the constant

17   growth DCF model unreasonable.

18   Also, the results of my constant growth DCF proxy group average are subject

19   to outlier results. For example, the DCF return for Portland General of 16.39% is based

20   on a growth rate of 11.22%, which is almost three times the growth of the U.S.

21   economy. As discussed in more detail below, this growth is not sustainable in

22   perpetuity as required by the DCF methodology. Therefore, I find the results produced

1   by the proxy group median to better describe the central tendency of my proxy group

2   results, but it still is inflated by an unsustainable short-term growth rate projection.

3 Q **HOW DID YOU ESTIMATE A MAXIMUM LONG-TERM SUSTAINABLE GROWTH**

4   **RATE?**

5 A The long-term sustainable growth rate for a utility stock cannot exceed the growth rate

6   of the economy in which it sells its goods and services. The long-term maximum

7   sustainable growth rate for a utility investment is, accordingly, best proxied by the

8   projected long-term GDP growth rate as that reflects the projected long-term growth

9   rate of the economy as a whole. While growth rates on shorter periods can exceed the

10   GDP growth rate, those short-term growth periods are likely followed by other periods

11   where the growth rate is below the GDP. On average over long periods of time, the

12   growth rate is most accurately approximated by the long-term growth rate outlooks of

13   the U.S. GDP.

14   *Blue Chip Economic Indicators* projects that over the next 5 and 10 years, the

15   U.S. nominal GDP will grow at an annual rate of approximately 4.1%. These GDP

16   growth projections reflect a real growth outlook of around 1.9% and an inflation outlook

17   of around 2.2% going forward. As such, the average nominal growth rate over the next

18   5 to 10 years is around 4.1%, which I believe is a reasonable proxy of long-term

19   sustainable growth.[30]

---

[30] *Blue Chip Economic Indicators*, March 11, 2024, at 14.

1 Q IS THERE INDEPENDENT AUTHORITATIVE SUPPORT FOR USING LONG-TERM

2 GDP GROWTH AS A MAXIMUM SUSTAINABLE GROWTH RATE?

3 A Yes. In my multi-stage growth DCF analysis, I discuss academic and investment

4 practitioner support for using the projected long-term GDP growth outlook as a

5 maximum sustainable growth rate projection. Using the long-term GDP growth rate,

6 however, as a conservative projection for the maximum sustainable growth rate is

7 logical, and is generally consistent with academic and economic practitioner accepted

8 practices.

9 **III.C. Sustainable Growth DCF**

10 Q PLEASE DESCRIBE HOW YOU ESTIMATED A SUSTAINABLE LONG-TERM

11 GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF MODEL.

12 A A sustainable growth rate is based on the percentage of the utility's earnings that is

13 retained and reinvested in utility plant and equipment. These reinvested earnings

14 increase the earnings base (rate base). Earnings grow when plant funded by

15 reinvested earnings is put into service, and the utility is allowed to earn its authorized

16 return on such additional rate base investment.

17 The internal growth methodology is tied to the percentage of earnings retained

18 by the utility and not paid out as dividends. The earnings retention ratio is 1 minus the

19 dividend payout ratio. As the payout ratio declines, the earnings retention ratio

20 increases. An increased earnings retention ratio will fuel stronger growth because the

21 business funds more investments with retained earnings.

22 The payout ratios of the proxy group are shown in my Exhibit MPG-7. These

23 dividend payout ratios and earnings retention ratios then can be used to develop a

24 sustainable long-term earnings retention growth rate. A sustainable long-term earnings

1   retention ratio will help gauge whether analysts' current three- to five-year growth rate

2   projections can be sustained over an indefinite period of time.

3   The data used to estimate the long-term sustainable growth rate is based on

4   AEP Texas' current market-to-book ratio and on *Value Line*'s three- to five-year

5   projections of earnings, dividends, earned returns on book equity, and stock issuances.

6   As shown in Exhibit MPG-8, the average sustainable growth rate using this

7   internal growth rate model is 4.69% for my proxy group. However, I would point out

8   that prior to accounting for the external sale of additional shares the internal growth

9   rate for my proxy group is 4.11%, which is almost identical to the maximum sustainable

10   growth rate of 4.10% as described above.

11   Q   WHAT IS THE DCF ESTIMATE USING THESE SUSTAINABLE LONG-TERM

12   GROWTH RATES?

13   A   A DCF estimate based on these sustainable growth rates is developed in Exhibit

14   MPG-9. As shown there, the sustainable growth DCF analysis produces proxy group

15   average and median DCF results for the 13-week period of 9.31% and 9.19%,

16   respectively.

17   **III.D. Multi-Stage Growth DCF Model**

18   Q   HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?

19   A   Yes. My first constant growth DCF is based on consensus analysts' growth rate

20   projections so it is a reasonable reflection of rational investment expectations over the

21   next three to five years. The limitation on this constant growth DCF model is that it

22   cannot reflect a rational expectation that a period of high or low short-term growth can

23   be followed by a change in growth to a rate that better reflects long-term sustainable

1   growth. Therefore, I performed a multi-stage growth DCF analysis to reflect this outlook

2   of changing growth expectations.

3   Q   WHY DO YOU BELIEVE GROWTH RATES CAN CHANGE OVER TIME?

4   A   Analyst-projected growth rates over the next three to five years will change as utility

5   earnings growth outlooks change. Utility companies go through cycles in making

6   investments in their systems. When utility companies are making large investments,

7   their rate base grows rapidly, which in turn accelerates earnings growth. Once a major

8   construction cycle is completed or levels off, growth in the utility rate base slows and

9   its earnings growth slows from an abnormally high three- to five-year rate to a lower

10   sustainable growth rate.

11   As major construction cycles extend over longer periods of time, even with an

12   accelerated construction program, the growth rate of the utility will slow simply because

13   the pace of rate base growth will slow and because the utility has limited human and

14   capital resources available to expand its construction program. Therefore, the three-

15   to five-year growth rate projection should only be used as a long-term sustainable

16   growth rate in concert with a reasonable, informed judgment as to whether it considers

17   the current market environment, the industry, and whether the three- to five-year growth

18   outlook is actually sustainable.

19   Q   PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.

20   A   The multi-stage growth DCF model reflects the possibility of non-constant growth for a

21   company over time. The multi-stage growth DCF model reflects three growth periods:

22   (1) a short-term growth period consisting of the first five years; (2) a transition period,

1   consisting of the next five years (6 through 10); and (3) a long-term growth period

2   starting in year 11 through perpetuity.

3   For the short-term growth period, I relied on the consensus analysts' growth

4   projections I used above in my constant growth DCF model. For the transition period,

5   the growth rates were reduced or increased by an equal factor reflecting the difference

6   between the analysts' growth rates and the long-term sustainable growth rate. For the

7   long-term growth period, I assumed each company's growth would converge to the

8   maximum sustainable long-term growth rate, which is the projected long-term GDP

9   growth rate.

10   Q   WHY IS THE GDP GROWTH PROJECTION A REASONABLE PROXY FOR THE

11   MAXIMUM SUSTAINABLE LONG-TERM GROWTH RATE?

12   A   Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the

13   economy in which they sell services. Utilities' earnings/dividend growth are created by

14   increased utility investment or rate base. Such investment, in turn, is driven by service

15   area economic growth and demand for utility service. In other words, utilities invest in

16   plant to meet sales demand growth. Sales growth, in turn, is tied to economic growth

17   in their service areas.

18   The U.S. Department of Energy, Energy Information Administration ("EIA") has

19   observed utility sales growth tracks U.S. GDP growth, albeit at a lower level, as shown

20   in Exhibit MPG-10. Utility sales growth has lagged behind GDP growth for more than

21   a decade. As a result, nominal GDP growth is a very conservative proxy for utility sales

22   growth, rate base growth, and earnings growth. Therefore, the U.S. GDP nominal

23   growth rate is a reasonable proxy for the highest sustainable long-term growth rate of

24   a utility.

1 Q IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER THE

2 LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT A

3 RATE GREATER THAN THE GROWTH OF THE U.S. GDP?

4 A Yes. This concept is supported in published analyst literature and academic work.

5 Specifically, in "Fundamentals of Financial Management," a textbook published by

6 Eugene Brigham and Joel F. Houston, the authors state:

7 The constant growth model is most appropriate for mature companies
8 with a stable history of growth and stable future expectations. Expected
9 growth rates vary somewhat among companies, but <u>dividends for</u>
10 <u>mature firms are often expected to grow in the future at about the same</u>
11 <u>rate as nominal gross domestic product (real GDP plus inflation)</u>.[31]

12 The use of the economic growth rate is also supported by investment

13 practitioners as outlined as follows:

14 **Estimating Growth Rates**

15 One of the advantages of a three-stage discounted cash flow model is
16 that it fits with life cycle theories in regards to company growth. In these
17 theories, companies are assumed to have a life cycle with varying
18 growth characteristics. Typically, the potential for extraordinary growth
19 in the near term eases over time and eventually growth slows to a more
20 stable level.

21 * * *

22 Another approach to estimating long-term growth rates is to focus on
23 estimating the overall economic growth rate. Again, this is the approach
24 used in the *Ibbotson Cost of Capital Yearbook*. To obtain the economic
25 growth rate, a forecast is made of the growth rate's component parts.
26 Expected growth can be broken into two main parts: expected inflation
27 and expected real growth. By analyzing these components separately,
28 it is easier to see the factors that drive growth.[32]

---

[31] *"Fundamentals of Financial Management,"* Eugene F. Brigham & Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298, emphasis added.
[32] *Morningstar, Inc., Ibbotson SBBI 2013 Valuation Yearbook* at 51 and 52.

1   Q   ARE THERE ACTUAL INVESTMENT RESULTS THAT SUPPORT THE THEORY

2   THAT THE GROWTH ON STOCK INVESTMENTS WILL NOT EXCEED THE

3   NOMINAL GROWTH OF THE U.S. GDP?

4   A   Yes. This is evident by a comparison of the compound annual growth of the U.S. GDP

5   to the geometric growth of the U.S. stock market. Kroll measures the historical

6   geometric growth of the U.S. stock market over the period 1926-2022 to be

7   approximately 6.1%.[33] During this same time period, the U.S. nominal compound

8   annual growth of the U.S. GDP was approximately 6.1%.[34]

9   As such, over the past 95 years, the geometric average growth of the U.S.

10   nominal GDP has been comparable to the geometric average growth of the U.S. stock

11   market capital appreciation. This historical relationship indicates that the U.S. GDP

12   growth outlook is a reasonable estimate of the long-term sustainable growth of U.S.

13   stock investments.

14   Q   WHAT IS THE GEOMETRIC AVERAGE AND WHY IS IT APPROPRIATE TO USE

15   THIS MEASURE TO COMPARE GDP GROWTH TO CAPITAL APPRECIATION IN

16   THE STOCK MARKET?

17   A   The terms geometric average growth rate and compound annual growth rate are used

18   interchangeably. The geometric annual growth rate is the calculated growth rate, or

19   return, that measures the magnitude of growth from start to finish. The geometric

20   average is best, and most often, used as a measurement of performance or growth

21   over a long period of time.[35] Because I am comparing achieved growth in the stock

---

[33] Kroll, *2023 SBBI Yearbook* at 137.
[34] U.S. Bureau of Economic Analysis, Table 1.1.5 Gross Domestic Product, Revised March 30, 2023.
[35] *New Regulatory Finance*, Roger Morin, PhD, at 133-134.

1   market to achieved growth in U.S. GDP over a long period of time, the geometric

2   average growth rate is most appropriate.

3 Q   **HOW DID YOU DETERMINE A LONG-TERM GROWTH RATE THAT REFLECTS**

4   **THE CURRENT CONSENSUS MARKET PARTICIPANT OUTLOOK?**

5 A   I relied on the economic consensus of long-term GDP growth projections. *Blue Chip*

6   *Economic Indicators* publishes the consensus for GDP growth projections twice a year.

7   These consensus GDP growth outlooks are the best available measure of the market's

8   assessment of long-term GDP growth because the analysts' projections reflect all

9   current outlooks for GDP. They are therefore likely the most influential on investors'

10   expectations of future growth outlooks. The consensus projection for the GDP growth

11   rate outlook is 4.1% over the next 5 to 10 years.[36]

12   I propose to use the consensus for projected five-year average GDP growth

13   rates of 4.1%, as published by *Blue Chip Economic Indicators*, as an estimate of

14   long-term sustainable growth. *Blue Chip Economic Indicators* projections provide real

15   GDP growth projections of 1.9% and inflation of approximately 2.2% over the next 5 to

16   10-year (2025-2034) period, resulting in an average projected nominal annual GDP

17   growth projection of 4.1%.[37] These GDP growth forecasts represent the most likely

18   views of market participants because they are based on published economic

19   consensus projections.

---

[36] *Blue Chip Economic Indicators*, March 11, 2024, at 14.
[37] *Id.*

1 Q DO YOU CONSIDER OTHER SOURCES OF PROJECTED LONG-TERM GDP

2   GROWTH?

3 A Yes and these alternative sources corroborate the consensus analysts' projections I

4   relied on. Various commonly relied upon analysts' projections are shown in Table 9

5   below.

TABLE 9

GDP Forecasts

Source	Projected Period	Real GDP	Inflation	Nominal GDP
Blue Chip Economic Indicators [1]	5-10 Yrs	1.9%	2.2%	4.1%
EIA - Annual Energy Outlook[2]	27 Yrs	1.9%	2.3%	4.3%
Congressional Budget Office[3]	30 Yrs	1.7%	2.0%	3.8%
Moody's Analytics[4]	31 Yrs	2.0%	2.1%	4.1%
Social Security Administration[5]	77 Yrs	1.6%	2.4%	4.1%
Economist Intelligence Unit[6]	31 Yrs	1.7%	2.2%	4.0%

Sources:

[1] Blue Chip Economic Indicators, March 11, 2024 at 14.

[2] U.S. EnergyInformation Administration (EIA),
Annual Energy Outlook 2023, September, 2022.

[3] Congressional Budget Office, Long-Term Budget Outlook, June 28, 2023.

[4] Moody's Analytics Forecast, last updated January 8, 2024.

[5] Social Security Administration, "2023 OASDI Trustees Report,"
Table VI.G6. March 31, 2023.

[6] S&P MI, Economist Intelligence Unit, downloaded on April 25, 2024.

6   As shown in the table above, the real GDP and inflation fall in the range of 1.6%

7   to 2.0% and 2.0% to 2.4%, respectively. This results in a nominal GDP in the range of

8   3.8% to 4.3%.

1   Therefore, the nominal GDP growth projections made by these independent

2   sources support my use of 4.1% as a reasonable estimate of market participants'

3   expectations for long-term GDP growth.

4   Q   WHAT STOCK PRICE, DIVIDEND, AND GROWTH RATES DID YOU USE IN YOUR

5   MULTI-STAGE GROWTH DCF ANALYSIS?

6   A   I relied on the same 13-week average stock prices and the most recent quarterly

7   dividend payment data discussed above. For stage one growth, I used the consensus

8   analysts' growth rate projections discussed above in my constant growth DCF model.

9   The first stage covers the first five years, consistent with the time horizon of the

10   securities analysts' growth rate projections. The second stage, or transition stage,

11   begins in year 6 and extends through year 10. The second stage growth transitions

12   the growth rate from the first stage to the third stage using a straight linear trend. For

13   the third stage, or long-term sustainable growth stage, starting in year 11, I used a

14   4.10% long-term sustainable growth rate based on the consensus economists' long-

15   term projected nominal GDP growth rate.

16   Q   WHAT ARE THE RESULTS OF YOUR MULTI-STAGE GROWTH DCF MODEL?

17   A   As shown in Exhibit MPG-11, the average and median DCF returns on equity for my

18   proxy group using the 13-week average stock price are 9.38% and 9.36%, respectively.

19   **III.E. DCF Summary Results**

20   Q   PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.

21   A   The results from my DCF analyses are summarized in Table 10 below:

TABLE 10

Summary of DCF Results

Description	Average	Median
Constant Growth DCF Model (Analysts' Growth)	11.06%	10.71%
Constant Growth DCF Model (Sustainable Growth)	9.31%	9.19%
Multi-Stage Growth DCF Model	9.38%	9.36%

---

1   Based on the current market conditions, my DCF studies indicate a fair return

2   on equity for AEP Texas of 9.30%. This DCF point estimate is primarily based on the

3   average and median DCF results of my sustainable growth DCF and the multi-stage

4   DCF models. As discussed above, the constant growth DCF model based on analysts'

5   growth rates is based on growth rates that are not sustainable in the long-run. The

6   excessive growth rates overstate the constant growth DCF return. The remaining DCF

7   analyses are based on more reasonable estimates of long-term sustainable growth and

8   support a DCF return of 9.30%.

9 ## III.F. Risk Premium Model

10   Q   PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.

11   A   This model is based on the principle that investors require a higher return to assume

12   greater risk. Common equity investments have greater risk than bonds because bonds

13   have more security of payment in bankruptcy proceedings than common equity and the

14   coupon payments on bonds represent contractual obligations. In contrast, companies

15   are not required to pay dividends or guarantee returns on common equity investments.

16   Therefore, common equity securities are considered to be riskier than bond securities.

1   This risk premium model is based on two estimates of an equity risk premium.

2   First, I quantify the difference between regulatory commission-authorized returns on

3   common equity and contemporary U.S. Treasury bonds. The difference between the

4   authorized return on common equity and the Treasury bond yield is the risk premium.

5   I estimated the risk premium on an annual basis for each year from 1986 through 2023.

6   The authorized returns on equity were based on regulatory commission-authorized

7   returns for utility companies.   Authorized returns are typically based on expert

8   witnesses' estimates of the investor-required return at the time of the proceeding.

9   The second equity risk premium estimate is based on the difference between

10   regulatory commission-authorized returns on common equity and contemporary "A"

11   rated utility bond yields by Moody's. I selected the period 1986 through the first quarter

12   of 2024 because public utility stocks have consistently traded at a premium to book

13   value during that period.   This is illustrated in Exhibit MPG-12, which shows the

14   market-to-book ratio since 1986 for the utility industry was consistently above a multiple

15   of 1.0x. Over this period, an analyst can infer that authorized returns on equity were

16   sufficient to support market prices that at least exceeded book value.   This is an

17   indication that commission-authorized returns on common equity supported a utility's

18   ability to issue additional common stock without diluting existing shares.   It further

19   demonstrates utilities were able to access equity markets without a detrimental impact

20   on current shareholders.

21   Based on this analysis, as shown in Exhibit MPG-13, the average indicated

22   equity risk premium over U.S. Treasury bond yields has been 5.70%. Since the risk

23   premium can vary depending upon market conditions and changing investor risk

24   perceptions, I believe using an estimated range of risk premiums provides the best

1   method to measure the current return on common equity for a risk premium

2   methodology.

3   I incorporated five-year and ten-year rolling average risk premiums over the

4   study period to gauge the variability over time of risk premiums. These rolling average

5   risk premiums mitigate the impact of anomalous market conditions and skewed risk

6   premiums over an entire business cycle. As shown on my Exhibit MPG-13, the five-

7   year rolling average risk premium over Treasury bonds ranged from 4.25% to 7.09%,

8   with an average of 5.73%. The ten-year rolling average risk premium ranged from

9   4.38% to 6.91%, with an average of 5.75%.

10   As shown on my Exhibit MPG-14, the average indicated equity risk premium

11   over contemporary "A" rated Moody's utility bond yields was 4.34%. The five-year

12   rolling average risk premiums ranged from 2.88% to 5.90%, with an average of 4.39%.

13   The ten-year rolling average risk premiums ranged from 3.20% to 5.73%, with an

14   average of 4.39%.

15 **Q**   **DO YOU BELIEVE THAT THE TIME PERIOD USED TO DERIVE THESE EQUITY**

16   **RISK PREMIUM ESTIMATES IS APPROPRIATE TO FORM ACCURATE**

17   **CONCLUSIONS ABOUT CONTEMPORARY MARKET CONDITIONS?**

18 **A**   Yes. Contemporary market conditions can change during the period that rates

19   determined in this proceeding will be in effect. A relatively long period of time where

20   stock valuations reflect premiums to book value indicates that the authorized returns

21   on equity and the corresponding equity risk premiums were supportive of investors'

22   return expectations and provided utilities access to the equity markets under

23   reasonable terms and conditions. Further, this time period is long enough to smooth

24   abnormal market movement that might distort equity risk premiums. While market

1   conditions and risk premiums do vary over time, this historical time period is a

2   reasonable period to estimate contemporary risk premiums.

3   Alternatively, some studies, such as Kroll, have recommended that the use of

4   "actual achieved investment return data" in a risk premium study should be based on

5   long historical time periods. The studies find that achieved returns over short time

6   periods may not reflect investors' expected returns due to unexpected and abnormal

7   stock price performance. Short-term, abnormal actual returns would be smoothed over

8   time and the achieved actual investment returns over long time periods would

9   approximate investors' expected returns. Therefore, it is reasonable to assume that

10   averages of annual achieved returns over long time periods will generally converge on

11   the investors' expected returns.

12   My risk premium study is based on data that inherently relied on investor

13   expectations, not actual investment returns, and, thus, need not encompass a very long

14   historical time period.

15 Q **WHAT DOES CURRENT OBSERVABLE MARKET DATA SUGGEST ABOUT**

16   **INVESTOR PERCEPTIONS OF UTILITY INVESTMENTS?**

17 A The equity risk premium should reflect the relative market perception of risk today in

18   the utility industry. I have gauged investor perceptions in utility risk today in Exhibit

19   MPG-15, where I show the yield spread between utility bonds and Treasury bonds over

20   the last 44 years. As shown in this exhibit, the average utility bond yield spreads over

21   Treasury bonds for "A" and "Baa" rated utility bonds for this historical period are 1.48%

22   and 1.90%, respectively. The utility bond yield spreads over Treasury bonds for "A"

23   and "Baa" rated utilities in 2022 were 1.61% and 1.91%, respectively. In 2023, the

24   spreads have declined to 1.45% for "A" rated utilities and 1.75% for "BBB" utilities.

1   More recently, the spreads have decreased even further to 1.20% for "A" rated utilities

2   and 1.43% for "BBB" utilities.

3   The current 13-week average "A" rated utility bond yield of 5.59% when

4   compared to the current Treasury bond yield of 4.42%, as shown in Exhibit MPG-16,

5   implies a yield spread of 1.17%. This current utility bond yield spread is lower than the

6   44-year average spread for "A" rated utility bonds of 1.48%. The current spread for the

7   "Baa" rated utility bond yield of 1.40% is also lower than the 44-year average spread of

8   1.90%.

9 Q IS THERE OBSERVABLE MARKET EVIDENCE TO HELP GAUGE MARKET RISK

10   PREMIUMS?

11 A Yes. Market data illustrates how the market is pricing investment risk and gauging the

12   current demands for returns based on securities of varying levels of investment risk.

13   This market evidence includes bond yield spreads for different bond return ratings as

14   implied by the yield spreads for Treasury, corporate and utility bonds. These spreads

15   provide an indication of the market's return requirement for securities of different levels

16   of investment risk and required risk premiums.

17   Table 11 below summarizes the utility and corporate bond spreads relative to

18   Treasury bond yields.

TABLE 11

Yield Spreads - Risk Premium

Year	Utility Bonds[1]		Corporate Bonds[1]		Utility Stock Spreads[2]			Forward Inflation
	A - T	Baa - T	Aaa - T	Baa - T	Treasury	A	Baa	
Average Historical Spread	1.32%	1.83%	0.87%	1.94%	0.46%	-0.87%	-1.37%	2.16%
2022	1.61%	1.91%	0.96%	1.96%	0.31%	-1.32%	-1.63%	2.64%
2023	1.45%	1.75%	0.72%	1.77%	0.24%	-1.69%	-1.99%	2.48%

Sources:
Average Historical Spread period: 2006 - 2023.
[1]Exhibit MPG-15.
[2]Exhibit MPG-2.

1   As outlined above, the observable market evidence indicates that utility equity-risk

2   premiums in the current market are very low. The equity risk premium in the current

3   market has contracted significantly relative to historical periods. Similarly, the utility

4   bond yield spread relative to Treasury yields has also declined. This is clear evidence

5   that the market is placing greater investment risk in debt securities currently than equity

6   securities, likely due to the fact that inflation risk has elevated due to more uncertain

7   inflation outlooks, which impact bond investment risk more than equity or stock

8   investment risk.

9   As outlined in the table above, utility A and B rated spreads to Treasuries are

10   lower than long-term historical averages. Further, utility stock spreads to Treasuries

11   and utility A and BBB rated bonds appear abnormally low. As also indicated in Table 9

12   above, inflation outlooks are relatively high now and have been for the last several

13   years, and are considerably higher than the long-term historical average (2006-2023).

14   This relationship between utility observable stock yields and bond yields, both Treasury

15   and utility, is outlined on my Exhibit MPG-2. Based on this assessment of observable

16   risk premiums in the market, I conclude that equity risk premiums in the current

17   marketplace are below historical averages, and the current utility spreads are lower

18   than historical averages. Again, this appears to be attributable to the uptick in inflation

19   risk in the current marketplace.

1 Q IS THERE OTHER OBSERVABLE MARKET EVIDENCE THAT SUPPORTS YOUR

2   CONCLUSION THAT EQUITY RISK PREMIUMS HAVE DECLINED RELATIVE TO

3   UTILITY BOND YIELDS?

4 A Yes. Over the last several years, bond yields have increased considerably, but

5   authorized returns on equity, and stock utility yields have been relatively stable over

6   the last three to five years. This is demonstrated in Table 12 below.

TABLE 12

Electric Utility and Bond Yield Market Data

Description	Electric Utility Authorized ROE[1]	Electric Utility Industry Average Dividend Yield[2]	Average Public Utility Bonds A Rating[3]	Average 30-Year Treasury Bond Yields[4]
2015	9.60%	3.72%	4.12%	2.84%
2016	9.60%	3.49%	3.93%	2.59%
2017	9.68%	3.36%	4.00%	2.89%
2018	9.55%	3.56%	4.25%	3.11%
2019	9.64%	3.19%	3.77%	2.58%
2020	9.39%	3.56%	3.05%	1.56%
2021	9.39%	3.52%	3.10%	2.06%
2022	9.52%	3.42%	4.74%	3.11%
2023	9.66%	3.86%	5.55%	4.09%

Sources:

[1]2015-2023 data from Michael P. Gorman Direct Testimony, Figure 2.

[2]Exhibit MPG-2, page 4. 2023.

[3]Exhibit MPG-2, page 5. 2023.

[4]https://fred.stlouisfed.org/series/DGS30. Monthly averages pulled from 1/1/2015-12/31/2023.

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7   As outlined in Table 12 above, authorized returns on equity have varied by

8   around 30 basis points over the period 2015 through 2023. During this same time

9   period, utility stock yields have varied by 70 basis points, while the utility and Treasury

1   yields have increased by 250 basis points. The authorized returns on equity, and utility

2   stock valuations suggest that market demand for making investments in utility stock

3   and related valuations have been relatively stable for many years now. That stability

4   in the authorized returns on equity, based on stock valuations, continues to be evident

5   in these factors currently.

6   Importantly, the increase in bond yields and stability in equity costs are evidence

7   of a dramatic decline in equity risk premiums in the current market, and the increase in

8   bond yields is not reflective of a similar increase in common equity costs.

9 Q   **WHAT IS YOUR RECOMMENDED RETURN FOR AEP TEXAS BASED ON YOUR**

10   **RISK PREMIUM STUDY?**

11 A   I am recommending relying on the average equity risk premium estimates. As outlined

12   above, I believe the current market is reflecting high premiums for investing in securities

13   of greater levels of investment risk. Based on this observation, I propose to be

14   conservative in applying a risk premium analysis. For these reasons, I recommend a

15   risk premium near the historical average to reflect the observable market evidence of

16   the equity risk premiums reflected in utility stock, bond and Treasury bond valuations.

17   For Treasury bond yields, I relied on the five-year rolling average historical risk

18   premium of 5.73% for my proxy group, in combination with the forecasted Treasury

19   bond yield. Using a Treasury bond risk premium of 5.73% and a projected 30-year

20   Treasury bond yield of 4.00%[38] produces an indicated equity risk premium of 9.73%

21   (5.73% + 4.00%), rounded to 9.75%.

22   A risk premium based on utility bond yields reflects current observable bond

23   yields. Current observable utility bond yields, the five-year rolling average risk premium

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[38]*Blue Chip Financial Forecasts*, April 1, 2024 at 2.

1   estimate of 4.39%, as shown on Exhibit MPG-14, and the average A-rated utility bond

2   yield of 5.59%, as shown on my Exhibit MPG-16, page 1, produce a risk premium return

3   on equity of 9.98% (4.39% + 5.59%), rounded to 10.00%.   However, as illustrated

4   above, observable market evidence shows that equity risk premiums are low relative

5   to utility bond risk premiums. Hence, a lower than average equity risk premium is more

6   reflective of the current market. As shown on my Exhibit MPG-14, over the last two

7   years the average utility equity risk premium has been around 4.15%. Therefore, I

8   recommend a risk premium estimate using an equity risk premium of 4.15%, in

9   combination with a utility bond yield of 5.59%. My risk premium estimate for AEP Texas

10   is 9.74%.

11   Based on this methodology, my Treasury bond risk premium and my utility bond

12   risk premium indicate a return of 9.75%.

13 **III.G. Capital Asset Pricing Model ("CAPM")**

14 Q   **PLEASE DESCRIBE THE CAPM.**

15 A   The CAPM method of analysis is based upon the theory that the market-required rate

16   of return for a security is equal to the risk-free rate, plus a risk premium associated with

17   the specific security.   This relationship between risk and return can be expressed

18   mathematically as follows:

19              $R_i = R_f + B_i \times (R_m - R_f)$ where:

20   R_i =   Required return for stock i
21   R_f =   Risk-free rate
22   R_m =   Expected return for the market portfolio
23   B_i =   Beta - Measure of the risk for stock

24   The stock-specific risk term in the above equation is beta. Beta represents the

25   investment risk that cannot be diversified away when the security is held in a diversified

26   portfolio. When stocks are held in a diversified portfolio, stock-specific risks can be

1   eliminated by balancing the portfolio with securities that react in the opposite direction

2   to firm-specific risk factors (e.g., business cycle, competition, product mix, and

3   production limitations).

4   Risks that cannot be eliminated when held in a diversified portfolio are

5   non-diversifiable risks. Non-diversifiable risks are related to the market and referred to

6   as systematic risks. Risks that can be eliminated by diversification are non-systematic

7   risks. In a broad sense, systematic risks are market risks and non-systematic risks are

8   business risks. The CAPM theory suggests the market will not compensate investors

9   for assuming risks that can be diversified away. Therefore, the only risk investors will

10   be compensated for are systematic, or non-diversifiable, risks. The beta is a measure

11   of the systematic, or non-diversifiable risks.

12   **Q   PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.**

13   A   The CAPM requires an estimate of the market risk-free rate, AEP Texas' beta, and the

14   market risk premium.

15   **Q   WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE RATE?**

16   A   As previously noted, *Blue Chip Financial Forecasts'* projected 30-year Treasury bond

17   yield is 4.00%.[39] The current 30-year Treasury bond yield is 4.42% as shown in Exhibit

18   MPG-16.

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[39] *Id.*

1   Q   WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE

2   OF THE RISK-FREE RATE?

3   A   Treasury securities are backed by the full faith and credit of the United States

4   government. Therefore, long-term Treasury bonds are considered to have negligible

5   credit risk. Also, long-term Treasury bonds have an investment horizon similar to that

6   of common stock. As a result, investor-anticipated long-run inflation expectations are

7   reflected in both common stock required returns and long-term bond yields. Therefore,

8   the nominal risk-free rate (or expected inflation rate and real risk-free rate) included in

9   a long-term bond yield is a reasonable estimate of the nominal risk-free rate included

10   in common stock returns.

11   Treasury bond yields, however, do include risk premiums related to

12   unanticipated future inflation and interest rates. In this regard, a Treasury bond yield

13   is not a risk-free rate. Risk premiums related to unanticipated inflation and interest

14   rates reflect systematic market risks. Consequently, for companies with betas less than

15   1.0, using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis

16   can produce an overstated estimate of the CAPM return.

17   Q   WHAT BETA DID YOU USE IN YOUR ANALYSIS?

18   A   For my CAPM, I largely relied on current and historical published utility betas from

19   *Value Line*. However, for the reasons outlined below, I believe the current published

20   betas are skewed based on statistical review of historical betas that includes two

21   abnormal months surrounding the outbreak of the global pandemic, the inclusion of

22   which has resulted in current published betas being at abnormally high levels. When

23   this limited data is excluded from the measurement of betas, the beta estimates are

24   more reflective of long-term historical normalized *Value Line* published betas, and more

1   consistent with other methods of measuring current betas that smooth out this statistical

2   outlier data.

3   In Table 13 below, I show various versions of betas measured during the time I

4   performed my analysis, and those published by *Value Line*. As shown in this table, the

5   current *Value Line* published beta for my proxy group is 0.94 (Column 1). This

6   compares to a historical average beta for the proxy group of approximately 0.77

7   (Column 2). For the electric utility industry, prior to the elevated beta estimates

8   triggered by the COVID-19 pandemic, the historical *Value Line* published beta typically

9   ranges between 0.65 and 0.79 as shown on my Exhibit MPG-17, pages 4-7.

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TABLE 13

5-Year Value Line Methodology Betas
(Proxy Group)

Description	Value Line		Calculated		
	Published[1] (1)	Historical[2] (2)	Weekly[3] (3)	Monthly[3] (4)	Weekly Excluding M&A '20[3/4] (5)
Beta	0.94	0.77	0.96	0.76	0.78

Source:
[1]Value Line Investment Surveys, February 9, March 8, and April 19, 2024.
[2]Exhibit MPG-17, page 2.
[3]S&P Global Market Intelligence, Downloaded on April 19, 2024.
  5-year period ending March 31, 2024.
[4]Excludes the months of March and April, 2020.

</div>

10   In Table 13 above, I also show calculated betas using monthly and weekly time

11   periods over the last five years. *Value Line*'s calculation of a raw beta is based on the

12   weekly percent change of the utility stock relative to the New York Stock Exchange

13   Index. I calculated this *Value Line* beta using their methodology to develop a raw beta,

1   and their *Value Line* adjustment process under Column 3 of Table 13. Note that this

2   calculation of the weekly *Value Line* beta aligns with the published *Value Line* beta in

3   Column 1. However, I also calculated the beta using monthly percent change of the

4   utility stock in the New York Stock Exchange. This is shown under Column 4 and

5   produces a beta estimate of 0.76, which reasonably aligns with the long-term historical

6   average beta of approximately 0.77 (Column 2). Finally, I calculated a weekly derived

7   raw beta adjusted using the *Value Line* methodology under Column 5 but I excluded

8   data from March and April of 2020. Excluding this data produced a *Value Line*

9   methodology beta of 0.78, which reasonably aligns with the long-term historical

10 average for the proxy group.

11 Q   WHY DID YOU CALCULATE A BETA EXCLUDING MARCH AND APRIL DATA

12   FROM CALENDAR YEAR 2020 IN DEMONSTRATING WHAT AN APPROPRIATE

13   NORMALIZED BETA ESTIMATE IS IN THE CURRENT MARKETPLACE?

14 A   I made this calculation because stock market data at the early onset of the COVID-19

15   pandemic in March and April of 2020 had the effect of skewing the calculation of beta.

16   This is demonstrated in Table 13 above, where excluding this data produces a beta

17   more consistent with normalized historical betas, and more consistent with a beta

18   calculated from monthly derived data, rather than the weekly derived data relied on by

19   *Value Line*.

1   Q   HAVE YOU REVIEWED THE BETAS FOR THE ELECTRIC UTILITY INDUSTRY TO

2   SEE WHETHER OR NOT THE DATA IN THE EARLY ONSET OF COVID HAD THE

3   EFFECT OF SKEWING BETAS ACROSS THE ENTIRE ELECTRIC UTILITY

4   INDUSTRY FOLLOWED BY *VALUE LINE*?

5   A   Yes. Using the S&P 500 utility index, relative to the New York Stock Exchange, shows

6   that beta estimates like those in *Value Line* are skewed due to two extraordinary

7   months within the 60-month time period used to measure beta. The two months that

8   skew the betas are March and April of 2020, the time period that coincides with the

9   start of the worldwide COVID-19 pandemic. Removing these two months to derive a

10   more normal level of beta has the effect of reducing utility beta estimates from the very

11   high levels right now of over 0.90, down to more normalized betas in the range of 0.65

12   to 0.79. This beta regression study is summarized in Table 14 below.

TABLE 14

S&P 500 Utilities vs. NYSE
<u>Regression Betas</u>

Period	Raw Beta	Adjusted Beta	R^2
5-Yr Ending Feb 2020	0.45	0.65	0.18
May 2020 - Current	0.66	0.79	0.36
Most Recent 5-Yr Period	0.88	0.94	0.56

Note:
Calculated using Value Line's regression-based beta methodology.
The current and most recent periods are through 4/19/24.

---

1   **Q**   **WHY IS IT UNREASONABLE TO ESTIMATE A CAPM RETURN ON A REGULATED**

2   **UTILITY BASED ON BETA ESTIMATES THAT ARE CLEARLY OUTLIERS**

3   **RELATIVE TO HISTORICAL AVERAGE BETAS?**

4   **A**   Utility company betas have increased from their normal levels of around 0.65 to 0.79

5   up to a current level around 0.90 over the last three years. This increase in betas

6   suggests that utility companies' investment risks are increasing relative to the overall

7   general marketplace. However, the outlook of increasing utility investment risk is

8   simply not supported by a review of other risk measures for utilities including: (a) current

9   robust valuation metrics of utilities as described above; (b) risk spreads of utility stock

10   yields relative to bond yields; (c) sustained investment grade bond ratings for utility

11   companies, and (d) utilities' continued access to significant amounts of capital. Again,

12   as shown on Exhibit MPG-2, the historically strong valuation metrics of regulated

13   utilities are particularly robust, indicating the market is paying a premium for utility

14   stocks. The fact that utility stocks are trading at a premium is inconsistent with the

15   notion that the market perceives the utility industry's investment risk to be increasing.

16   It also shows that the market is not demanding a higher rate of return to invest in these

17   securities. My conclusion is that the elevated betas for utility stocks were skewed by

18   the temporary effects of the market events during the onset of the pandemic but the

19   beta impacts have returned to more normal levels as the market recovered.

20   Therefore, in performing my CAPM, I used a normalized beta of 0.77 and

21   market risk premium parameters in order to derive a CAPM return estimate in this

22   proceeding.

1   Q   HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?

2   A   I derived two market risk premium estimates: a forward-looking estimate and one based

3   on a long-term historical average.

4   The forward-looking estimate was derived by estimating the expected return on

5   the market (as represented by the S&P 500) and subtracting the risk-free rate from this

6   estimate. I estimated the expected return on the S&P inflation rate to the long-term

7   historical arithmetic average real return on the market. The real return on the market

8   represents the achieved return above the rate of inflation.

9   Kroll's *2023 SBBI Yearbook* estimates the historical arithmetic average real

10   market return over the period 1926 to 2022 to be 8.9%.[40] A current consensus for

11   projected inflation, as measured by the GDP Deflator, is 2.2%.[41] Using these

12   estimates, the expected market return is 11.30%.[42] The market risk premium then is

13   the difference between the 11.30% expected market return and my 4.00% risk-free rate

14   estimate, or 7.30%, which I referred to as a normalized market risk premium.

15   I also developed a current market risk premium based on the difference

16   between the expected return on the market of 11.30% as described above and the

17   current 30-year Treasury yield of 4.42% as shown on my Exhibit MPG-18, which

18   produced a current market risk premium of approximately 6.88%.

19   A historical estimate of the market risk premium was also calculated by using

20   data provided by Kroll in its *2023 SBBI Yearbook*. Over the period 1926 through 2022,

21   the Kroll study estimated that the arithmetic average of the achieved total return on the

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[40]Kroll, 2023 SBBI Yearbook at 138.
[41]*Blue Chip Financial Forecasts*, April 1, 2024 at 2.
[42]$[(1 + 0.089) * (1 + 0.022) - 1] * 100$.

1   S&P 500 was 12.0%[43] and the total return on long-term Treasury bonds was 5.6%.[44]

2   The indicated market risk premium is 6.4% (12.0% - 5.6% = 6.4%).

3   The long-term Treasury bond yield of 5.6% occurred during a period of inflation

4   of approximately 3.0%, thus implying a real return on long-term Treasury bonds of

5   2.6%.

6 Q   **HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARE TO**

7   **KROLL'S ESTIMATE?**

8 A   Kroll makes several estimates of a forward-looking market risk premium based on

9   actual achieved data from the historical period of 1926 through 2022 as well as

10   normalized data. Using this data, Kroll estimates a market risk premium derived from

11   the total return on the securities that comprise the S&P 500, less the income return on

12   Treasury bonds. The total return includes capital appreciation, dividend or coupon

13   reinvestment returns, and annual yields received from coupons and/or dividend

14   payments. The income return, in contrast, only reflects the income return received from

15   dividend payments or coupon yields.

16   Kroll's range is based on several methodologies. First, Kroll estimates a market

17   risk premium of 7.17% based on the difference between the total market return on

18   common stocks (S&P 500) less the income return on 20-year Treasury bond

19   investments over the 1926-2022 period.[45]

20   Second, Kroll used the Ibbotson & Chen supply-side model which produced a

21   market risk premium estimate of 6.35%.[46] Kroll explains that the historical market risk

22   premium based on the S&P 500 was influenced by an abnormal expansion of price-to-

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[43]Kroll, *2023 SBBI Yearbook* at 137.
[44]*Id.*
[45]*Id.* at 191.
[46]*Id.* at 198-201.

1   earnings ("P/E") ratios relative to earnings and dividend growth during the period,

2   primarily over the last 30 years. Kroll believes this abnormal P/E expansion is not

3   sustainable. In order to control for the volatility of extraordinary events and their

4   impacts on P/E ratios, Kroll takes into consideration the three-year average P/E ratio

5   as well as the current P/E ratio.[47]

6   Finally, Kroll develops its own recommended equity, or market risk premium, by

7   employing an analysis that takes into consideration a wide range of economic

8   information, multiple risk premium estimation methodologies, and the current state of

9   the economy by observing measures such as the level of stock indices and corporate

10   spreads as indicators of perceived risk. Based on this methodology, and utilizing the

11   higher of a "normalized" risk-free rate of 3.5%, Kroll concludes the current expected, or

12   forward-looking, market risk premium is 5.5%, implying an expected return on the

13   market of 9.0%. However, when the current market risk-free rate exceeds the

14   normalized risk-free rate, Kroll recommends applying the current 20-year Treasury

15   yield of approximately 4.8%. Currently, the 20-year Treasury yield is above the

16   normalized risk-free rate. Hence, based on Kroll's methodology, the risk premium is

17   10.3%.[48]

18   Importantly, Kroll's market risk premiums are measured over a 20-year

19   Treasury bond. Because I am relying on a projected 30-year Treasury bond yield, the

20   results of my CAPM analysis should be considered conservative estimates for the cost

21   of equity.

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[47] *Id.*
[48] Kroll, "Kroll Cost of Capital Recommendations and Potential Upcoming Changes" February 8, 2024.

1   Q   WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

2   A   The current observable beta estimate for my proxy group is approximately 0.94.

3   However, recognizing beta estimates are currently skewed, the average normalized

4   beta estimate for my proxy group is reasonably estimated using the average historical

5   beta estimate of approximately 0.77.

6   As shown on my Exhibit MPG-18, using a current market risk-free rate of 4.42%

7   and a projected market return of 11.30% produces a market risk premium of 6.88%.

8   When combined with the current beta of 0.94, this indicates a CAPM return estimate of

9   10.86%.

10   Using a market return of 11.30%, with a projected risk-free rate of 4.00%,

11   produces a market risk premium of approximately 7.30%. This market risk premium

12   and risk-free rate with a normalized utility beta of 0.77, indicates a CAPM return of

13   9.63%

14   As discussed above, the current elevated betas do not reflect the low industry

15   risk for AEP Texas or the utility industry as a whole. Therefore, I find a more reasonable

16   result using a CAPM study in this case is to use a normalized utility beta, which

17   produces a return on equity of 9.63%, rounded to 9.60%.

18   **III.H.   Return on Equity Summary**

19   Q   BASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY ANALYSES

20   DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO YOU

21   RECOMMEND FOR AEP TEXAS?

22   A   Based on my analyses, I recommend AEP Texas' current market cost of equity be in

23   the range of 9.30% to 9.70%.

TABLE 15	
Return on Common Equity Summary	
Description	Results
DCF	9.30%
Risk Premium	9.75%
CAPM	9.60%

1   My market-based return on common equity of 9.50% falls at the midpoint of my

2   recommended range of 9.30% to 9.70%. The low-end of my range is based on my

3   DCF analyses, and the high-end is based on my CAPM and risk premium studies.

4   My return on equity estimates reflect observable market evidence, the impact

5   of Federal Reserve policies on current and expected long-term capital market costs,

6   an assessment of the current risk premium built into current market securities, and a

7   general assessment of the current investment risk characteristics of the regulated utility

8   industry and the market's demand for utility securities.

9   **III.I. Financial Integrity**

10   Q   WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN

11   INVESTMENT GRADE BOND RATING FOR AEP TEXAS?

12   A   Yes. I have reached this conclusion by comparing the key credit rating financial ratios

13   for AEP Texas at my proposed return on equity and my proposed capital structure to

14   S&P's benchmark financial ratios using S&P's new credit metric ranges.

1   Q   PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT

2   METRIC METHODOLOGY.

3   A   S&P publishes a matrix of financial ratios corresponding to its assessment of the

4   business risk of utility companies and related bond ratings. On May 27, 2009, S&P

5   expanded its matrix criteria by including additional business and financial risk

6   categories.[49]

7   Based on S&P's most recent credit matrix, the business risk profile categories

8   are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and "Vulnerable." Most utilities

9   have a business risk profile of "Excellent" or "Strong."

10   The financial risk profile categories are "Minimal," "Modest," "Intermediate,"

11   "Significant," "Aggressive," and "Highly Leveraged." Most of the utilities have a financial

12   risk profile of "Significant" or "Aggressive." Based on the most recent S&P report, AEP

13   Texas has an "Excellent" business risk profile and an "Aggressive" financial risk profile.

14   Q   PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN

15   ITS CREDIT RATING REVIEW.

16   A   S&P evaluates a utility's credit rating based on an assessment of its financial and

17   business risks. A combination of financial and business risks equates to the overall

18   assessment of AEP Texas' total credit risk exposure. On November 19, 2013, S&P

19   updated its methodology. In its update, S&P published a matrix of financial ratios that

20   defines the level of financial risk as a function of the level of business risk.

21   S&P publishes ranges for primary financial ratios that it uses as guidance in its

22   credit review for utility companies. The two core financial ratio benchmarks it relies on

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[49]S&P updated its 2008 credit metric guidelines in 2009, and incorporated utility metric benchmarks with the general corporate rating metrics. *Standard & Poor's RatingsDirect*: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

1   in its credit rating process include: (1) Debt to Earnings Before Interest, Taxes,

2   Depreciation and Amortization ("EBITDA"); and (2) Funds From Operations ("FFO") to

3   Total Debt.[50]

4 **Q**   **HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE**

5   **REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?**

6 **A**   I calculated each of S&P's financial ratios based on AEP Texas' cost of service for its

7   regulated utility operations in its Texas service territory. While S&P would normally

8   look at total consolidated AEP Texas financial ratios in its credit review process, my

9   investigation in this proceeding is not the same as S&P's. I am attempting to judge the

10   reasonableness of my proposed cost of capital for rate-setting in AEP Texas' regulated

11   utility operations. Hence, I am attempting to determine whether my proposed rate of

12   return will support cash flow metrics, balance sheet strength, and earnings that will in

13   turn support an investment grade bond rating and AEP Texas' financial integrity.

14 **Q**   **DID YOU INCLUDE ANY OFF-BALANCE-SHEET ("OBS") DEBT EQUIVALENTS?**

15 **A**   Yes. I obtained AEP Texas' off-balance-sheet debt equivalents and the associated

16   interest and amortization expenses from S&P Capital IQ. Further, I included AEP

17   Texas' short-term debt obligations as provided by the Company in its response to

18   Question TIEC 2-10, as shown on my Exhibit MPG-19, page 3.

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[50]*Standard & Poor's RatingsDirect*: "Criteria: Corporate Methodology," November 19, 2013.

1 Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS AS IT

2   RELATES TO AEP TEXAS.

3 A The S&P financial metric calculations for AEP Texas at a 9.50% return and my

4   proposed capital structure are developed on Exhibit MPG-19, page 1. The credit

5   metrics produced below, with AEP Texas' financial risk profile from S&P of "Aggressive"

6   and business risk profile of "Excellent" will be used to assess the strength of the credit

7   metrics based on AEP Texas' retail operations in the state of Texas.

8   The adjusted debt ratio for credit metric purposes assuming an authorized

9   equity ratio of 42.5% is 58.6%. While this ratio is higher than the adjusted debt ratio

10   for a typical utility with a BBB+ credit rating, it is reasonable because of AEP Texas'

11   unique low business risk attributes. This allows AEP Texas to finance with more

12   financial leverage and maintain its investment grade bond rating.

13   Based on an equity return of 9.50% and the Company's last approved common

14   equity ratio of 42.5%, AEP Texas will be provided an opportunity to produce a Debt to

15   EBITDA ratio of 5.4x. This is within S&P's "Aggressive" guideline range of 4.5x to

16   5.5x.[51]

17   AEP Texas' retail utility operations FFO to total debt coverage at a 9.50% equity

18   return and 42.5% equity ratio is 14%, which is at the low end of S&P's "Significant"

19   metric guideline range of 13% to 23%. This ratio is again within the FFO/total debt

20   range that will support AEP Texas' credit rating.

21   I conclude that AEP Texas' core credit metrics ratios based on the Company's

22   last approved capital structure and my return on equity will support its investment grade

23   credit rating of BBB+.

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[51] *Standard & Poor's RatingsDirect*®: "Criteria: Corporate Methodology," November 19, 2013.

1 Q DOES THIS FINANCIAL INTEGRITY ASSESSMENT SUPPORT YOUR

2   RECOMMENDED OVERALL RATE OF RETURN FOR AEP TEXAS?

3 A Yes. As noted above, I believe my return on equity and my proposed capital structure

4   represent fair compensation in today's very low capital market costs, and as outlined

5   above, my overall rate of return will provide AEP Texas an opportunity to earn credit

6   metrics that will support its bond rating.

7 # IV. RESPONSE TO COMPANY WITNESS ANN E. BULKLEY

8 ## IV.A. Summary of Rebuttal

9 Q WHAT RETURN ON COMMON EQUITY IS AEP TEXAS PROPOSING IN THIS

10   PROCEEDING?

11 A Ms. Bulkley recommends a return on equity in the range of 10.00% to 11.00% with a

12   point estimate of 10.60%, which is slightly above the midpoint of her range. [52]   Ms.

13   Bulkley's recommendation reflects her assessment of the current capital market

14   conditions and the Company's business risks relative to the companies included in her

15   proxy group.

16 Q ARE MS. BULKLEY'S RETURN ON EQUITY ESTIMATES REASONABLE?

17 A No. Ms. Bulkley's estimated return on equity is overstated and should be rejected. Ms.

18   Bulkley's analyses produce excessive results for various reasons, including the

19   following:

20   1. Her constant growth DCF results are based on unsustainably high
21   growth rates;

22   2. Her CAPM is based on inflated market risk premiums;

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[52]Bulkley Direct Testimony at 9.

1   3. Ms. Bulkley's Empirical CAPM ("ECAPM") is based on a flawed
2   methodology; and

3   4. Both Ms. Bulkley's CAPM and risk premium studies are based on
4   projected interest rates that are highly uncertain and unreliable.

5   Q   PLEASE COMPARE YOUR RECOMMENDED RETURN ON EQUITY WITH MS.

6   BULKLEY'S RETURN ON EQUITY ESTIMATES.

7   A   Ms. Bulkley's return on equity estimates are summarized in Table 16 below. In the

8   "Gorman Adjusted" Column 2, I show the results with prudent and sound adjustments

9   to correct the flaws referenced above. With these adjustments to Ms. Bulkley's proxy

10   group's DCF and CAPM return estimates, Ms. Bulkley's studies reflect that my 9.50%

11   recommended return on equity for AEP Texas is reasonable.

TABLE 16		
Bulkley's Adjusted Return on Equity Estimates		
Description	**Bulkley Mean / Median[1]**	**Gorman Adjusted**
	(1)	**(2)**
Constant Growth DCF		
30-Day Average	9.94% / 9.81%	8.95% / 9.07%
90-Day Average	10.03% / 9.92%	9.05% / 9.21%
180-Day Average	9.90% / 9.69%	8.91% / 9.01%
Average	9.96% / 9.81%	8.97% / 9.10%
CAPM DCF-Derived Results (*Value Line* Beta)		
Current 30-Yr Treasury (4.19%)	11.63%	10.79%
Near-Term Projected 30-Yr Treasury (4.10%)	11.62%	10.79%
Long-Term Projected 30-Yr Treasury (4.10%)	11.62%	Reject
CAPM DCF-Derived Results (Bloomberg Beta)		
Current 30-Yr Treasury (4.19%)	10.64%	9.84%
Near-Term Projected 30-Yr Treasury (4.10%)	10.62%	9.84%
Long-Term Projected 30-Yr Treasury (4.10%)	10.62 %	Reject
CAPM DCF-Derived Results (Historical Beta)		
Current 30-Yr Treasury (4.19%)	10.41%	9.60%
Near-Term Projected 30-Yr Treasury (4.10%)	10.39%	9.60%
Long-Term Projected 30-Yr Treasury (4.10%)	10.39%	Reject
ECAPM	10.84% to 11.78%	Reject
Risk Premium		
Current 30-Yr Treasury (4.19%)	10.35%	9.40%
Near-Term Projected 30-Yr Treasury (4.10%)	10.30%	9.40%
Long-Term Projected 30-Yr Treasury (4.10%)	10.30%	Reject
Recommended Return on Equity	10.60%	9.50%

Sources: [1] Bulkley Direct Testimony at 78 and Exhibit AEB-2.

1   As shown in Table 16 above, reasonable adjustments to Ms. Bulkley's return

2   on equity estimates support a return on equity for AEP Texas of 9.50%.

1   **IV.B. Reliability of DCF and CAPM Return Estimates**

2   Q   DOES MS. BULKLEY COMMENT ON THE RELIABILITY OF MARKET-BASED

3   MODELS TO MEASURE A FAIR RETURN ON EQUITY FOR AEP TEXAS?

4   A   Yes. Ms. Bulkley opines that the traditional DCF and CAPM (based on current risk-

5   free rates) analyses are not producing reasonable results at this time due to the current

6   capital market conditions. She states that the DCF model, which relies on historical

7   averages, is likely to understate the cost of equity for AEP Texas and needs to be

8   considered with caution.[53] She also opines that it is important now to consider

9   projected market data.[54]

10   Q   HAS MS. BULKLEY IDENTIFIED ANYTHING DIFFERENT IN THIS CASE TO

11   DISTINGUISH THE PROJECTIONS THAT HAVE BEEN OFFERED OVER THE LAST

12   FIVE TO TEN YEARS BUT HAVE YET TO MATERIALIZE?

13   A   No. Even though interest rates have recently increased due to the Federal Reserve

14   intervention as discussed above, they have remained relatively stable. Importantly,

15   Ms. Bulkley's own data shows that the projected interest rates are actually lower than

16   the current interest rates. For example, in her CAPM analyses she uses a current risk-

17   free rate of 4.19%, and near-term and long-term projected risk-free rates of 4.10%.

18   Also, I show that interest rate projections by independent consensus economists over

19   the next five to ten years have been moderated. This is clear evidence that today's

20   market is embracing the sustainability of the current capital market costs. A

21   comparison of the components of the DCF return for utilities generally to other income

22   return investment options and growth investment options shows that the results of DCF

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[53]*Id.* at 7, 17, 28, 31, 37, 43.
[54]*Id.* at 15-17, 31.

1 models are producing accurate estimates of the current market cost for utility

2 companies.

3 Q PLEASE EXPLAIN WHY YOU BELIEVE THE DCF MODELS PRODUCE A

4 REASONABLE ESTIMATE OF AEP TEXAS' MARKET COST OF COMMON

5 EQUITY.

6 A The DCF model produces an economically logical estimate of the current market cost

7 of equity and a return that is comparable with observable returns in alternative

8 investments of comparable risk. The DCF model sums the observable dividend yield

9 on utility stocks and then adds to that an estimate of expected growth. These two

10 components yield DCF returns that are comparable to alternative investments, and,

11 thus, reasonably reflect the current market cost of capital for AEP Texas.

12 Specifically, as shown on my Exhibit MPG-2 (pages 5 and 13), the 2023

13 dividend yield of electric (3.86%) and gas (3.68%) utility stock is lower than the 13-week

14 average yield on "A" rated utility bonds (5.59%). Historically, the stock yield spread

15 has been at a positive spread to that of "A" rated utility bond yields as shown on my

16 Exhibit MPG-2 (pages 5 and 13). The stock yield spread relative to the "A" rated utility

17 bond yield spread during the study period has converged to more normal levels relative

18 to the last few years, where stock spreads were actually at a negative level. The current

19 stock yield is currently below the historical utility stock versus utility bond yield spread.

20 This suggests that the risk premium for stock investments versus utility bond

21 investments is below the historical average. The yield component of the DCF model is

22 comparable to alternative income investments, and produces a reasonable estimate of

23 the current market level of income for comparable risk investments.

1   The growth component of the DCF return relates to earnings and stock growth

2   over time. The growth outlook for utility stocks is not depressed generally, but rather

3   provides a robust outlook for dividends and stock price growth. The DCF return is not

4   understated due to the DCF growth rate component. On the contrary, due to these

5   high growth rate estimates relative the growth rate of the U.S. economy as described

6   above, the DCF model produces high return estimates.

7   Additionally, the annual growth in dividends for utilities over the last 18 years

8   has been approximately 3.89% for electric and 4.95% for gas as shown on my Exhibit

9   MPG-2 (pages 6 and 14). In my constant growth DCF study presented above, the

10   current three- to five-year forward projected growth rate for electric utilities is

11   approximately 6.37%, which is higher than the historical growth rate for the electric and

12   gas industry. Furthermore, utility earnings growth is expected to be considerably more

13   robust than U.S. GDP growth, which generally is regarded as a reasonable proxy for

14   the maximum sustainable rate of growth for investor capital markets. Going forward,

15   long-term internal growth for equity investments is around 4.10%, as described above.

16   Based on these factors, the growth rate component of a regulated utility DCF return is

17   quite robust and produces a highly competitive DCF return estimate.

18   For these reasons, both dividend yield and growth components of a utility DCF

19   indicate an economically logical return estimate that is competitive with comparably

20   risky alternative investments.

1   **IV.C. Ms. Bulkley's Constant Growth DCF Models**

2   Q   PLEASE DESCRIBE MS. BULKLEY'S CONSTANT GROWTH DCF RETURN

3   ESTIMATES.

4   A   Ms. Bulkley's constant growth DCF returns are developed on her Exhibit AEB-7. Ms.

5   Bulkley's constant growth DCF models are based on consensus growth rates published

6   by *Yahoo! Finance* and *Zacks* and individual growth rate projections made by *Value*

7   *Line*. The average and median growth rate estimates for her proxy group are

8   approximately 5.55% and 5.25%, respectively.

9   She relied on dividend yield calculations based on average stock prices over

10   three different time periods: 30-day, 90-day, and 180-day ending January 31, 2024 –

11   all reflecting a half year of dividend growth adjustments. Ms. Bulkley's average mean

12   and median DCF results are 9.96% and 9.81%, respectively.[55]

13   Q   ARE THE CONSTANT GROWTH DCF RESULTS PRODUCED BY MS. BULKLEY

14   REASONABLE?

15   A   No. My major concern with Ms. Bulkley's DCF study is her use of unsustainable growth

16   rate estimates. As discussed in regard to my own DCF study, the current consensus

17   analysts' growth rates are substantially higher than the long-term sustainable growth

18   rate of 4.10%. Specifically, Ms. Bulkley's constant growth DCF model is based on an

19   average growth rate of approximately 5.50% for her proxy group. This growth rate is

20   excessive and cannot reasonably be expected to last into perpetuity, the time period

21   which is assumed by the constant growth DCF model. As I discussed in detail above,

22   company growth rates that exceed the growth rate of GDP in the economy in which a

23   company provides goods and services cannot be sustained. I also discussed how over

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[55]Bulkley Direct Testimony at 43, 78, Exhibit AEB-4.

1   time, even with extended capital investment, growth rates will slow. Therefore, it is

2   necessary to consider a multi-stage DCF model, which reflects a sustainable rate of

3   growth.

4   Q   IS THERE A WAY TO CORRECT MS. BULKLEY'S DCF MODEL TO PRODUCE A

5   REASONABLE DCF RETURN?

6   A   Yes. In Column 2 in Table 16 above and my Exhibit MPG-20, using Ms. Bulkley's data,

7   I present the results of a multi-stage DCF model that is similar to my multi-stage model

8   that reflects a reasonable long-term sustainable growth rate of 4.10% as discussed in

9   regard to my own studies.

10   Ms. Bulkley's DCF mean and median adjusted results generally support a return

11   on equity of around 9.00% for her proxy group. This multi-stage analysis reflects the

12   short-term growth rate used by Ms. Bulkley in her constant growth analysis and the

13   impact on a more economically logical DCF dividend stream that could be used to value

14   the stocks.

15 **IV.D. Ms. Bulkley's CAPM Studies**

16 Q   PLEASE DESCRIBE MS. BULKLEY'S CAPM ANALYSIS.

17 A   As indicated above, the CAPM analysis is based upon the theory that the market-

18   required rate of return for a security is equal to the risk-free rate plus a risk premium

19   associated with the specific security. The risk premium associated with the specific

20   security is expressed mathematically as:

21   B_i = Beta (measure of risk for stock)
22   R_m = Expected return for the market portfolio
23   R_f = Risk-free rate

1   Ms. Bulkley's CAPM model is based on proxy group average beta estimates of 0.93

2   from *Value Line*, 0.80 from Bloomberg, and a historical beta estimate of 0.77. She also

3   relied on a market risk premium in the range of 8.03% to 8.12% and current risk-free

4   rate of 4.19%, near-term projected risk-free rate of 4.10% and long-term projected risk-

5   free rate of 4.10%. These parameters produced a CAPM return in the range of 10.39%

6   to 11.63%.

7   Q   PLEASE DESCRIBE THE ISSUES YOU HAVE WITH MS. BULKLEY'S CAPM

8   STUDIES.

9   A   I have two primary issues with Ms. Bulkley's CAPM studies. First, I believe the market

10   risk premiums she used in all her CAPM studies are overstated because they do not

11   reflect a reasonable estimate of the expected return on the market. Second, Ms.

12   Bulkley relies on a projected risk-free rate based on the 30-year Treasury yield for 2025

13   to 2029. Ms. Bulkley's consistent reliance on projected interest rates is unreasonable

14   and should be rejected.

15 Q   PLEASE DESCRIBE MS. BULKLEY'S ANALYSIS WITH REGARD TO MARKET

16   RISK PREMIUMS.

17 A   Ms. Bulkley derived her market risk premiums by conducting a DCF analysis for the

18   market (S&P 500). Ms. Bulkley used two market risk premium estimates of 8.03%

19   and8.12%, based on a DCF market return of 12.22% less the current, near-term and

20   projected 30-year Treasury bond yields of 4.19%, 4.10%, and 4.10%, respectively.[56]

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[56]Exhibit AEB-5.

1   Q   PLEASE DESCRIBE YOUR DISAGREEMENTS WITH REGARD TO MS.

2   BULKLEY'S MARKET RISK PREMIUM ESTIMATES.

3   A   Ms. Bulkley's DCF-derived market risk premium is based on a market return of 12.22%,

4   which consists of a growth rate component of 10.51% and market-weighted dividend

5   yield of 1.63%.[57] As discussed above with respect to my own DCF model, the DCF

6   model requires a reasonable long-term sustainable growth rate. Ms. Bulkley's

7   sustainable market growth rate of 10.51% is far too high to be a rational outlook for

8   sustainable long-term market growth. This growth rate is more than twice the growth

9   rate of the U.S. GDP long-term growth outlook of 4.10%.

10   As a result of these unreasonable long-term market growth rate estimates, Ms.

11   Bulkley's market DCF returns used in her CAPM analyses are inflated and not reliable.

12   Consequently, Ms. Bulkley's market risk premiums should be given minimal weight in

13   estimating AEP Texas' CAPM-based return on equity.

14 Q   DO HISTORICAL ACTUAL RETURNS ON THE MARKET SUPPORT MS.

15   BULKLEY'S PROJECTED MARKET RETURNS?

16 A   No. Historical data shows just how unreasonable Ms. Bulkley's projected DCF return

17   on the market is on a going-forward basis. Kroll estimates the actual capital

18   appreciation for the S&P 500 over the period 1926 through 2022 to have been 6.1% to

19   7.9%.[58] This contrasts sharply to Ms. Bulkley's own projected growth rate of the market

20   of 10.51%.

21   Further, historically the geometric growth of the market of 6.1%[59] has reflected

22   geometric growth of GDP over this same time period of approximately 6.1%.[60]

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[57]Exhibit AEB-7.
[58]Kroll, *2023 SBBI Yearbook* at 137.
[59]*Id.*
[60]U.S. Bureau of Economic Analysis, March 30, 2023.

1   Notably, this review of historical data establishes two facts. First, historical,

2   actual achieved growth has been substantially less than the one projected by Ms.

3   Bulkley. Second, historical growth of the market has tracked historical growth of the

4   U.S. GDP. Projected growth of the U.S. GDP is now closer to the 4.0% to 4.5% range.

5   All this information strongly supports the conclusion that Ms. Bulkley's projected growth

6   rate on the market of 10.51% is substantially overstated. While I do not endorse the

7   use of a historical growth rate to draw assessments of the market's forward-looking

8   growth rate outlooks, this data can be used as a check of Ms. Bulkley's market return

9   estimate and to show how unreasonable and inflated it is.

10 **Q   WHY DO YOU BELIEVE MS. BULKLEY'S RELIANCE ON A PROJECTED LONG-**

11 **TERM RISK-FREE RATE IS UNREASONABLE?**

12 A   Ms. Bulkley relies primarily on projected yields because of her assumption that interest

13   rates will remain at the current high levels.[61] This bond yield is largely based on

14   projections of long-term Treasury bond yields five years out (2025-2029). In fact, her

15   own data shows the opposite. Ms. Bulkley's long-term projected risk-free rate of 4.10%

16   is lower than the current risk-free rate of 4.19% and the same as the near-term

17   projected risk-free rate of 4.10%. The long-term projections are highly uncertain, and

18   may not reflect the cost of capital in the test year, the period in which rates determined

19   in this proceeding will largely be in effect. As such, the market risk premium should be

20   based on observable bond yields in the market today. Alternatively, the market risk

21   premium should at most reflect bond yield projections through the rate-effective period

22   in this case.

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[61]Bulkley Direct Testimony at 15-17, 31.

1   Q   DO YOU HAVE ANY FURTHER COMMENTS REGARDING MS. BULKLEY'S CAPM

2   ANALYSES?

3   A   Yes. Ms. Bulkley recognizes the recent increase in utility betas and she offers an

4   alternative CAPM analysis relying on historical or long-term average *Value Line* beta

5   estimates for the period 2013 to 2023, which produces a return on equity that is about

6   100 basis points lower than the CAPM returns produced by the current beta.

7   Importantly, Ms. Bulkley also used Bloomberg betas based on 10 years of weekly

8   returns, which produced betas much lower than the *Value Line* betas affected by the

9   recent market anomalies triggered at the onset of the COVID-19 pandemic as

10   described above.

11   Q   CAN MS. BULKLEY'S CAPM ANALYSIS BE REVISED TO REFLECT A MORE

12   REASONABLE MARKET RISK PREMIUM?

13   A   Yes. Using my updated forward-looking risk-free rate of around 4.00%, her average

14   current *Value Line* and Bloomberg beta estimates of 0.93 and 0.80,[62] and my market

15   return of around 11.30%, Ms. Bulkley's CAPM will be 10.79% and 9.84%,

16   respectively.[63] Using the same parameters and Ms. Bulkley's historical *Value Line* beta

17   of 0.77,[64] her alternative CAPM will produce returns of approximately 9.60%.[65] As

18   discussed above in regard to my own CAPM analysis, the current betas produce CAPM

19   returns that do not correspond to the low risk of the regulated utilities. Therefore, I find

20   the results of Ms. Bulkley's revised CAPM of 9.60% more reliable.

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[62]Exhibit AEB-5.
[63]4.00% + 0.93 x (11.30% - 4.00%) = 10.79% and 4.00% + 0.80 x (11.30% - 4.00%) = 9.84%
[64]Exhibit AEB-6.
[65]4.00% + 0.77 x (11.30% - 4.00%) = 9.62%, rounded to 9.60%.

1   **IV.E. Ms. Bulkley's ECAPM Studies**

2   **Q   PLEASE DESCRIBE MS. BULKLEY'S ECAPM ANALYSIS.**

3   A   Ms. Bulkley relies on empirical tests of the traditional CAPM model to modify it in such

4   a way to attempt to *correct* the original CAPM for some deficiencies inherent in the

5   original model. Empirical tests show that the expected return line, or security market

6   line, predicted by the CAPM is not as steep as the model would have us believe. In

7   other words, the traditional CAPM understates the expected return for securities with

8   betas less than 1, and overstates the expected return for securities with betas greater

9   than 1. In order to correct for this empirical finding, Ms. Bulkley modifies the traditional

10   CAPM model as follows:

11
12
13
14
15
16

$$R_i = R_f + 0.75 \times B_i \times (R_m - R_f) + 0.25 \times B_m \times (R_m - R_f)$$

R_i = Required return for stock i
R_f = Risk-free rate
R_m = Expected return for the market portfolio
B_m = Beta (measure of market volatility)
B_i = Beta (measure of stock price volatility)

17   **Q   WHAT ISSUES DO YOU TAKE WITH MS. BULKLEY'S ECAPM ANALYSIS?**

18   A   The principal issue I have with Ms. Bulkley's ECAPM analysis is her use of an adjusted

19   beta as published by *Value Line*. The impact of Ms. Bulkley's ECAPM adjustments

20   increases her beta estimate range of 0.77 to 0.93 to a range of 0.83 to 0.95.[66] The

21   weighting adjustments applied in the ECAPM are mathematically the same as adjusting

22   beta since the inputs are all multiplicative as shown in the formula above. In other

23   words, Ms. Bulkley's adjustment to the betas is duplicative of the adjustments the

24   ECAPM already makes to correct for any shortcomings of the traditional CAPM. As a

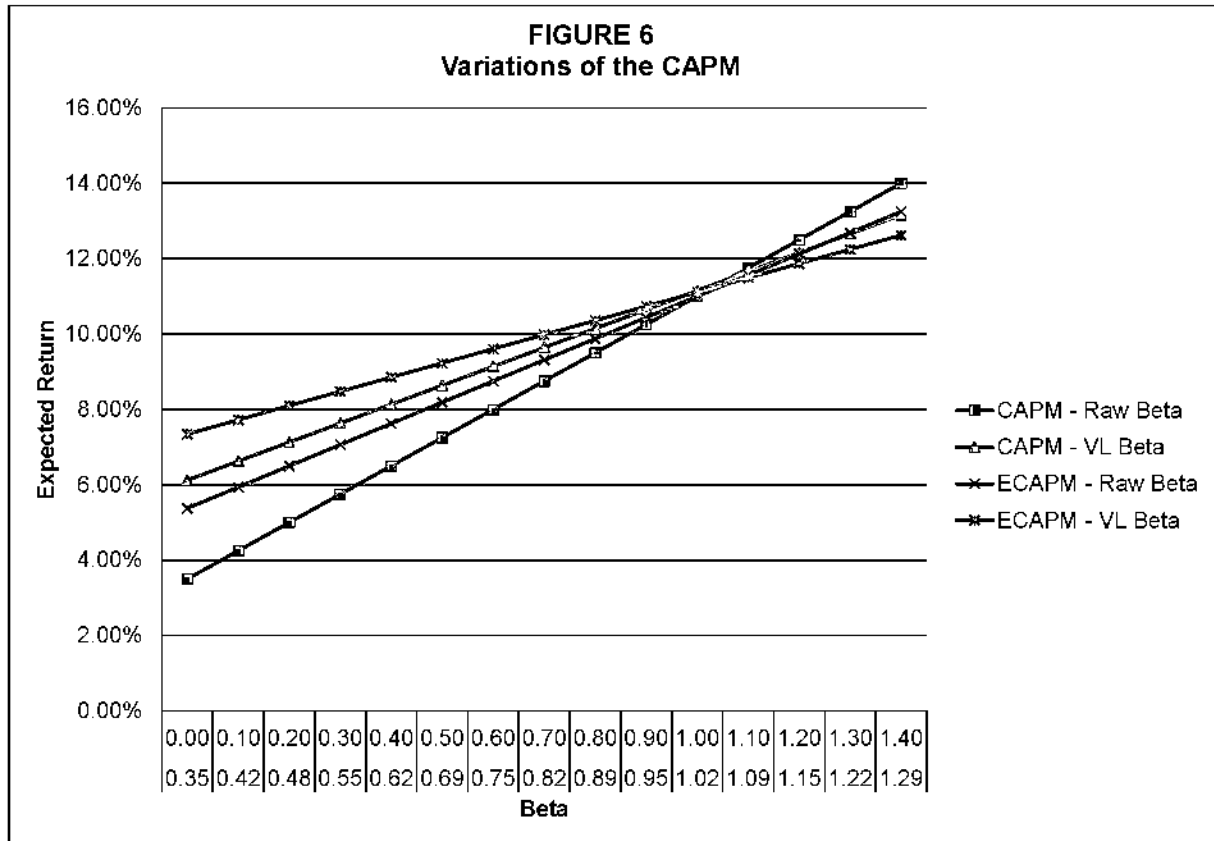25   result, her model produces overstated results.

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[66]75% x 0.77+ 25% x 1 = 0.83 and 75% x 0.93 + 25% x 1 = 0.95.

1   Further, Ms. Bulkley's reliance on an adjusted *Value Line* beta in her ECAPM

2   study is inconsistent with the academic research that I am aware of supporting the

3   development of the ECAPM.[67] The end result of using adjusted betas in the ECAPM

4   is essentially an expected return line that has been flattened by two adjustments. In

5   other words, the vertical intercept has been raised twice and the security market line

6   has been flattened twice: once through the adjustments *Value Line* made to the raw

7   beta, and again by weighting the risk-adjusted market risk premium as Ms. Bulkley has

8   done. In addition to the many adjustments employed by Ms. Bulkley, she further

9   increases the intercept and flattens the security market line by using projected long-

10   term Treasury yields that are at odds with current market expectations and inconsistent

11   with the Federal Reserve's projections and monetary policy.

12   Ms. Bulkley goes over the theory of the ECAPM at pages 47-48 of her Direct

13   Testimony. The ECAPM with adjusted betas has the effect of increasing CAPM return

14   estimates for companies with betas less than 1, and decreasing the CAPM return

15   estimates for companies with betas greater than 1. I have modeled the expected return

16   line resulting from the application of the various forms of the CAPM/ECAPM below in

17   Figure 6.

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[67] *See* Black, Fischer, "Beta and Return," *The Journal of Portfolio Management,* Fall 1993, 8-18;
and Black, Fischer, Michael C. Jensen and Myron Scholes, "The Capital Asset Pricing Model: Some
Empirical Tests," 1972.

FIGURE 6
Variations of the CAPM

0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40
0.35	0.42	0.48	0.55	0.62	0.69	0.75	0.82	0.89	0.95	1.02	1.09	1.15	1.22	1.29

Legend:
- CAPM - Raw Beta
- CAPM - VL Beta
- ECAPM - Raw Beta
- ECAPM - VL Beta

1   Along the horizontal axis in Figure 6 above, I have provided the raw unadjusted

2   beta (top row) and the corresponding adjusted *Value Line* beta (bottom row). As shown

3   in Figure 6 above, the CAPM using a *Value Line* beta compared to the CAPM using an

4   unadjusted beta shows that the *Value Line* beta raises the intercept point and flattens

5   the slope of the security market line. As shown in the figure above, the two variations

6   with the most similar slope are the CAPM with the *Value Line* beta, and the ECAPM

7   with a raw beta. This evidence shows that the ECAPM adjustment has a very similar

8   impact on the expected return line as a *Value Line* beta. Another observation that can

9   be made from the figure above is the magnifying effect that the ECAPM using a *Value*

10   *Line* beta has on raising the vertical intercept and flattening the slope relative to all

11   other variations. It is unreasonable to use an adjusted beta within an ECAPM because

1   it unjustifiably alters the security market line and materially inflates a CAPM return for

2   a company with a beta less than 1.

3   **Q   IN YOUR EXPERIENCE, IS MS. BULKLEY'S PROPOSED USE OF AN ADJUSTED**

4   **BETA IN AN ECAPM STUDY CONSISTENT WITH WIDELY ACCEPTED**

5   **PRACTICES IN THE REGULATORY FIELD?**

6   A   No. In my experience, regulatory commissions generally disregard the use of the

7   ECAPM, particularly when an adjusted beta is used in the model. For example, the

8   Illinois Commerce Commission ("ICC") has stated the following regarding the ECAPM:

9   The Commission cannot recall a proceeding in which it relied upon the
10   ECAPM in establishing the cost of common equity for a utility. In the
11   instant proceeding, the record supports a finding that use of adjusted
12   betas in the ECAPM is inappropriate. As Staff witness Ms. Freetly
13   explained, by using adjusted betas she already effectively transformed
14   her Traditional CAPM into an ECAPM.   Therefore, including an
15   additional beta adjustment in the ECAPM model would result in inflated
16   estimates of the samples' cost of common equity.[68]

17   Similarly, in a more recent Nicor Gas rate case the ICC stated:

18   The Company also used ECAPM analyses and bond yield plus risk
19   premium models to determine an ROE, which the Commission has also
20   historically rejected.[69]

21   The California Public Utilities Commission has even more recently noted:

22   We are not persuaded that ECAPM produces a result that should be
23   considered. Electric utilities in general have low betas. Adjusting betas
24   upward guarantees a higher ROE.[70]

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[68]Illinois Commerce Commission, Docket No. 11-0767, Illinois-American Water Company, Order at 109, September 19, 2012.

[69]Illinois Commerce Commission, Docket No. 21-0098, Northern Illinois Gas Company d/b/a Nicor Gas Company, Final Order at 94, November 18, 2021.

[70]Public Utilities Commission of the State of California Application 22-04-008 et al., Decision Addressing Test Year 2023 Cost Of Capital For Pacific Gas And Electric Company, Southern California Edison, Southern California Gas Company, And San Diego Gas & Electric Company, at 23, December 19, 2022.

1   Therefore, the Commission should reject Ms. Bulkley's ECAPM, which as

2   described above is based on adjusted beta estimates.

3   **IV.F. Ms. Bulkley's Bond Yield Plus Risk Premium ("RP")**

4   **Q   PLEASE DESCRIBE MS. BULKLEY'S RP METHODOLOGY.**

5   A   As shown on her Exhibit AEB-8, Ms. Bulkley constructs a risk premium return on equity

6   estimate based on the premise that equity risk premiums are inversely related to

7   interest rates. She estimates an average equity risk premium of 5.38% over the period

8   January 1980 through January 31, 2024.[71] She then applies a regression formula to

9   the current, near-term, and long-term projected 30-year Treasury bond yields of 4.19%,

10   4.10%, and 4.10%, respectively, to produce equity risk premiums of 6.10%, 6.20%, and

11   6.20%, respectively. Thus, she calculates return on equity estimates of 10.35%,

12   10.30%, and 10.30%, respectively.[72]

13   **Q   DO YOU AGREE WITH MS. BULKLEY'S RP METHODOLOGY?**

14   A   No. Ms. Bulkley contends that there is a simplistic inverse relationship between equity

15   risk premiums and interest rates without any regard to differences in investment risk.

16   Academic studies are clear that interest rates are a relevant factor in assessing current

17   market equity risk premiums, but the risk premium ties more specifically to the market's

18   perception of investment risk of debt and equity securities, and not simply changes in

19   interest rates.

20   More specifically, while academic studies have shown that, in the past, there

21   has been an inverse relationship among these variables, researchers have found that

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[71]Bulkley Direct Testimony at 51.
[72]Exhibit AEB-8.

1   the relationship changes over time and is influenced by changes in perception of the

2   risk of bond investments relative to equity investments, and not simply changes to

3   interest rates.[73]

4   In the 1980s, equity risk premiums were inversely related to interest rates, but

5   that was likely attributable to the interest rate volatility that existed at that time. As

6   such, when interest rates were more volatile, perceptions of bond investment risk

7   increased relative to the investment risk of equities. This changing investment risk

8   perception caused changes in equity risk premiums.

9   In today's marketplace, interest rate volatility is not as extreme as it was during

10   the 1980s.[74] Nevertheless, changes in the perceived risk of bond investments relative

11   to equity investments still drive changes in equity premiums and cannot be measured

12   simply by observing nominal interest rates. Changes in nominal interest rates are

13   heavily influenced by changes to inflation outlooks, which also change equity return

14   expectations. As such, the relevant factor needed to explain changes in equity risk

15   premiums is the relative changes between the risk of equity versus debt investments,

16   and not simply changes in interest rates.

17   Importantly, Ms. Bulkley's analysis also ignores investment risk differentials.

18   She bases her adjustment to the equity risk premium exclusively on changes in nominal

19   interest rates. This is a flawed methodology that does not produce accurate or reliable

20   risk premium estimates.

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[73]Robert S. Harris & Felicia C. Marston, "The Market Risk Premium: "Expectational Estimates Using Analysts' Forecasts," *Journal of Applied Finance*, Volume 11, No. 1, 2001 at 10-13; Eugene F. Brigham, Dilip K. Shome, & Steve R. Vinson, "The Risk Premium Approach to Measuring a Utility's Cost of Equity," *Financial Management*, Spring 1985, at 42-43.

[74]"The Risk Premium Approach to Measuring a Utility's Cost of Equity," *Financial Management*, Spring 1985, at 44.

1   Q   DO YOU BELIEVE THAT THE REGRESSION STUDY USED BY MS. BULKLEY IN

2   HER RP DEMONSTRATES AN ACCURATE CAUSE AND EFFECT BETWEEN

3   INTEREST RATES AND EQUITY RISK PREMIUMS?

4   A   No. Because the returns on equity she uses are authorized by commissions, those

5   returns are not directly adjusted by market forces. While I also use commission-

6   authorized returns as a proxy for market-required returns, it is significant that Ms.

7   Bulkley uses a simple regression analysis that tries to describe and gauge equity risk

8   premiums based on only changes in interest rates.

9   Equity risk premiums can move based on changes in market conditions that can

10   impact both equity returns and bond returns in a like manner. This simplistic regression

11   analysis of equity risk premiums and interest rates ignores these relevant market

12   factors in describing the current market-required equity risk premium.

13   Q   CAN MS. BULKLEY'S RP ANALYSIS BE REVISED TO REFLECT CURRENT

14   PROJECTIONS OF TREASURY YIELDS?

15   A   Yes. Ms. Bulkley's basic and incomplete notion that equity risk premiums change only

16   with changes to nominal interest rates should be rejected. Therefore, disregarding her

17   inverse relationship methodology and adding her average equity risk premium over

18   Treasury bonds of 5.38% to an updated near-term projected Treasury yield of 4.00%

19   published by independent economists, produces an RP of approximately 9.38%,

20   rounded to 9.40%.

1   <u>**IV.G. Ms. Bulkley's Consideration of Additional Risks**</u>

2   Q   DID MS. BULKLEY DISCUSS CONSIDERATION OF ADDITIONAL BUSINESS

3   RISKS TO JUSTIFY HER RETURN ON EQUITY?

4   A   Yes. Ms. Bulkley believes that the Company is exposed to several additional risks that

5   should be accounted for: (1) customer concentration, (2) capital requirements, and

6   (3) regulatory risk.   Ms. Bulkley believes that these additional risks should be

7   considered in determining a fair return on equity for AEP Texas.[75]

8   Q   DO YOU BELIEVE THAT AEP TEXAS FACES RISKS THAT ARE COMPARABLE

9   TO THE RISKS FACED BY MS. BULKLEY'S AND YOUR PROXY GROUP

10   COMPANIES?

11   A   The business risks identified by Ms. Bulkley are already considered in the assigning of

12   a credit rating by the various credit rating agencies.

13   As shown on my Exhibit MPG-4, the average S&P credit rating for my proxy

14   group of BBB+ is identical to AEP Texas' credit rating from S&P. The relative risks

15   discussed on pages 54-72 of Ms. Bulkley's direct testimony are already incorporated

16   in the credit ratings of the proxy group companies. Indeed, S&P and other credit rating

17   agencies go to great lengths and detail in assessing a utility's business risk and

18   financial risk in order to evaluate total investment risk. This total investment risk

19   assessment of AEP Texas, in comparison to the proxy group, is fully absorbed into the

20   market's perception of the proxy group companies' risk. Therefore, the proxy group

21   fully captures the investment risk of AEP Texas.

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[75]Bulkley Direct Testimony at 54-72.

1 Q   HOW DOES S&P ASSIGN CORPORATE CREDIT RATINGS FOR REGULATED

2   UTILITIES?

3 A   In assigning corporate credit ratings, the credit rating agency considers both business

4   and financial risks.   Business risks, among others, include a company's size,

5   competitive position, generation portfolio, and capital expenditure programs, as well as

6   consideration of the regulatory environment, current state of the industry, and the

7   economy as whole. Specifically, S&P states:

> 8   To determine the assessment for a corporate issuer's business risk
> 9   profile, the criteria combine our assessments of industry risk, country
> 10   risk, and competitive position. Cash flow/leverage analysis determines
> 11   a company's financial risk profile assessment.   The analysis then
> 12   combines the corporate issuer's business risk profile assessment and
> 13   its financial risk profile assessment to determine its anchor. In general,
> 14   the analysis weighs the business risk profile more heavily for
> 15   investment-grade anchors, while the financial risk profile carries more
> 16   weight for speculative-grade anchors.[76]

17   As mentioned above, regulatory risk is a key credit rating consideration by credit

18   analysts in assigning utilities' business risk, which is fully reflected in the utility's bond

19   rating. Ms. Bulkley's focus on a limited number of investment risk characteristics, while

20   ignoring many other significant risk factors such as actual financial performance of

21   Texas utilities generally, and AEP Texas specifically, renders her analysis incomplete

22   and her findings inconclusive. Credit analysts consider all these risk factors, along with

23   all other risk factors, in assigning a bond rating. Therefore, including companies that

24   have similar investment risk to AEP Texas by reviewing a bond rating of the proxy

25   group companies is a more robust and reliable assessment of total investment risk,

26   including these specific line item risks identified by Ms. Bulkley in selecting comparable

27   risk proxy group companies.

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[76]*Standard & Poor's RatingsDirect®:* "Criteria/Corporates/General: Corporate Methodology," November 19, 2013.

1   Q   PLEASE DESCRIBE THE RELATIONSHIP BETWEEN THE RISK REDUCTION

2   FACTORS AND CONSIDERATION OF A UTILITY'S COST OF CAPITAL.

3   A   The utility operating risk factors identified by Ms. Bulkley are mitigated through

4   regulatory mechanisms which are designed to improve the likelihood that a utility, if

5   operated economically and efficiently, can fully recover its cost of providing service.

6   These regulatory mechanisms improve the likelihood, or reduce the operating risk, that

7   the Company will be able to earn its authorized rate of return and fully recover its cost

8   of providing service to its customers.

9   Reducing the uncertainty of earning a utility's rate of return reduces its

10   investment risk because such risk reduction enhances a utility's assurance that it is

11   growing investors' stock value by producing sufficient earnings to pay dividends and to

12   retain sufficient earnings to fund reinvestments and grow the utility's earnings and

13   dividend-paying ability over time. These are the primary investment targets for utility

14   investors.

15   For these reasons, regulatory mechanisms that reduce the Company's risk of

16   not fully recovering its cost of service reduce its investment risk because these

17   mechanisms stabilize the Company's earnings and dividends and make the Company's

18   earnings growth and dividends more predictable and stable.

19   Q   PLEASE DESCRIBE THE EXTENT TO WHICH RISK REDUCTION FACTORS ARE

20   AVAILABLE TO AEP TEXAS.

21   A   In addition to having no commodity risk, AEP Texas utilizes transmission cost of service

22   ("TCOS") and distribution cost recovery factor ("DCRF") rider adjustment mechanisms

23   that allow the Company to recover its investments in transmission and distribution

24   systems between rate cases.

1   Q   PLEASE DESCRIBE THE EFFECT OF THESE RISK REDUCTION FACTORS,

2   INCLUDING UTILIZATION OF EXPENSE AND CAPITAL TRACKING

3   MECHANISMS, IN MORE DETAIL.

4   A   Use of trackers can reduce a utility's cost recovery risk because it allows a utility to

5   adjust prices to customers outside of a traditional rate case to improve earnings.

6   Typically, these trackers reflect line item specific costs. In combination with base rates,

7   the use of trackers may allow for rate increases without a full consideration of whether

8   or not cost increases to certain line item amounts are offset by cost decreases to other

9   line item cost of service items. This erodes customers' protections of paying rates that

10   reflect efficient costs.

11   In addition, these mechanisms can allow for increases in prices on an expedited

12   basis, and reduce the lag utilities face in adjusting their regulatory mechanisms to

13   reflect their changes in cost of service.

14 Q   PLEASE EXPLAIN THE RELATIONSHIP BETWEEN THE REDUCTION OF THE

15   UTILITY'S RISK AS THE RESULT OF TRACKERS AND ITS CORRESPONDING

16   EFFECT ON RATEPAYERS.

17 A   Importantly, the changes in investor risk discussed above are not created by eliminating

18   the risk altogether, as explained previously. Rather, the surcharge mechanisms

19   typically shift cost recovery risk from investors to ratepayers. Because ratepayers will

20   be obligated to pay for increased costs through trackers, without consideration of

21   decreases to other cost of service components, customers are faced with paying

22   increased bills composed of both base rates and trackers, where the Company's total

23   cost of service may not actually be increasing. Rather, only the costs recovered

24   through the tracker mechanism costs may be increasing. As such, customer