

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
POWER COMPANY FOR (1) A GENERAL)	
ADJUSTMENT OF ITS RATES FOR)	
ELECTRIC SERVICE; (2) APPROVALS OF)	
TARIFFS AND RIDERS; (3) APPROVAL OF)	CASE NO. 2025-00257
CERTAIN REGULATORY AND)	
ACCOUNTING TREATMENTS; AND (4) ALL)	
OTHER REQUIRED APPROVALS AND)	
RELIEF)	

<p>DIRECT TESTIMONY</p> <p>AND EXHIBITS OF</p> <p>RICHARD A. BAUDINO</p>

**ON BEHALF OF THE
OFFICE OF THE ATTORNEY GENERAL OF THE COMMONWEALTH OF KENTUCKY
AND KENTUCKY INDUSTRIAL UTILITY CUSTOMERS**

**J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA**

NOVEMBER 17, 2025

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
POWER COMPANY FOR (1) A GENERAL)	
ADJUSTMENT OF ITS RATES FOR)	
ELECTRIC SERVICE; (2) APPROVALS OF)	
TARIFFS AND RIDERS; (3) APPROVAL OF)	CASE NO. 2025-00257
CERTAIN REGULATORY AND)	
ACCOUNTING TREATMENTS; AND (4) ALL)	
OTHER REQUIRED APPROVALS AND)	
RELIEF)	

TABLE OF CONTENTS

I. INTRODUCTION AND QUALIFICATIONS.....	2
II. ROE GUIDELINES AND REVIEW OF ECONOMIC CONDITIONS	4
III. DETERMINATION OF FAIR RATE OF RETURN	14
DCF Model	15
Capital Asset Pricing Model.....	21
Conclusions and Recommendations	32
IV. RESPONSE TO KENTUCKY POWER TESTIMONY	37
DCF Model	38
CAPM and ECAPM.....	41
Utility Risk Premium	46
Expected Earnings Approach.....	48
Flotation Costs	49
Non-Utility Benchmark.....	50

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
POWER COMPANY FOR (1) A GENERAL)	
ADJUSTMENT OF ITS RATES FOR)	
ELECTRIC SERVICE; (2) APPROVALS OF)	
TARIFFS AND RIDERS; (3) APPROVAL OF)	CASE NO. 2025-00257
CERTAIN REGULATORY AND)	
ACCOUNTING TREATMENTS; AND (4) ALL)	
OTHER REQUIRED APPROVALS AND)	
RELIEF)	

DIRECT TESTIMONY OF RICHARD A. BAUDINO

I. INTRODUCTION AND QUALIFICATIONS

1
2 **Q. State your name, occupation, and business address.**

3 A. My name is Richard A. Baudino. My business address is J. Kennedy and
4 Associates, Inc. (Kennedy and Associates), 570 Colonial Park Drive, Suite 305,
5 Roswell, Georgia 30075.

6 **Q. What is your occupation and by whom are you employed?**

7 A. I am a consultant with Kennedy and Associates.

8 **Q. Describe your educational and professional background.**

9 A. I received my Master of Arts degree with a major in Economics and a minor in
10 Statistics from New Mexico State University in 1982. I also received my Bachelor
11 of Arts Degree with majors in Economics and English from New Mexico State in
12 1979.

1 I began my professional career with the New Mexico Public Service
2 Commission Staff in October 1982 and was employed there as a Utility Economist.
3 During my employment with the Staff, my responsibilities included the analysis of
4 a broad range of issues in the ratemaking field. Areas in which I testified included
5 cost of service, rate of return, rate design, revenue requirements, analysis of
6 sale/leasebacks of generating plants, utility finance issues, and generating plant
7 phase-ins.

8 In October 1989, I joined the utility consulting firm of Kennedy and
9 Associates as a Senior Consultant where my duties and responsibilities covered
10 substantially the same areas as those during my tenure with the New Mexico Public
11 Service Commission Staff. I became Manager in July 1992 and was named
12 Director of Consulting in January 1995. Currently, I am a consultant with Kennedy
13 and Associates.

14 Exhibit RAB-1 summarizes my expert testimony experience.

15 **Q. On whose behalf are you testifying?**

16 A. I am submitting Direct Testimony on behalf of the Office of the Attorney General
17 of the Commonwealth of Kentucky (OAG) and the Kentucky Industrial Utility
18 Customers (KIUC).

19 **Q. What is the purpose of your Direct Testimony?**

20 A. The purpose of my Direct Testimony is to address the investor required return on
21 equity (ROE) for the regulated electric operations of Kentucky Power Company
22 (KPC or Company). I will also address the Company's requested capital structure
23 and costs of long-term debt.

1 **Q. Please summarize your conclusions and recommendations.**

2 A. I recommend that the Kentucky Public Service Commission (KPSC or
3 Commission) authorize a ROE for KPC's retail electric operations of 9.50%. My
4 recommended ROE for electric operations is based on: (1) the results of a
5 discounted cash flow (DCF) analysis applied to a proxy group of 17 regulated
6 electric utilities and (2) Capital Asset Pricing Model (CAPM) analyses using
7 historical and forecasted market risk premiums as well as publicly available
8 estimates of market risk premiums from other publicly available sources. My
9 recommendation fully reflects current economic and financial market conditions at
10 the time I prepared my testimony, which I will describe in more detail in Section
11 II. A 9.50% ROE provides a fair return on low-risk regulated electric utility
12 investments for KPC. Section III presents my ROE analyses.

13 Regarding the Company's ratemaking capital structure, I recommend that
14 the Commission accept the Company's filed capital structures. I also recommend
15 that KPC's cost of long-term debt be accepted.

16 In Section IV, I will respond to the testimony and ROE recommendation of
17 Company witness Mr. Adrien McKenzie. Mr. McKenzie conducted ROE analyses
18 that employed the DCF method, the CAPM, the Empirical CAPM (ECAPM), the
19 Utility Risk Premium, and Expected Earnings. Mr. McKenzie concluded that a
20 reasonable ROE range for the Company is 10.0% - 11.0% with a midpoint of
21 10.5%. He also noted that the Company's requested ROE of 10.0% in this case
22 understates the investor required ROE for KPC but represents a reasonable
23 compromise between impacts on customers and the need to provide the Company

1 a reasonable return that adequately compensates investors. I will demonstrate in
2 Section IV that Mr. McKenzie's approach systematically overstates the investor
3 required ROE for KPC and that the 10.0% does not represent a reasonable
4 compromise between impacts on customers and an adequate ROE for shareholders.

5 **II. ROE GUIDELINES AND REVIEW OF ECONOMIC CONDITIONS**

6 **Q. What are the main guidelines to which you adhere in estimating the cost of**
7 **equity?**

8 A. Generally speaking, the estimated cost of equity should be comparable to the
9 returns of other firms with similar risk structures and should be sufficient for the
10 firm to attract capital. These are the basic standards set out by the United States
11 Supreme Court in *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591
12 (1944), and *Bluefield W.W. & Improv. Co. v. Public Service Comm'n*, 262 U.S. 679
13 (1922).

14 From an economist's perspective, the notion of "opportunity cost" plays a
15 vital role in estimating the ROE for KPC. One measures the opportunity cost of an
16 investment equal to what one would have obtained in the next best alternative. For
17 example, suppose that an investor decides to purchase the stock of a publicly traded
18 regulated electric utility. That investor will make the decision based on the
19 expectation of dividend payments and perhaps some appreciation in the stock's
20 value over time; however, that investor's opportunity cost is measured by what she
21 or he could have invested in as the next best alternative. That alternative could

1 have been another utility stock, a utility bond, a mutual fund, a money market fund,
2 or any number of alternative investment vehicles.

3 The key determinant in deciding whether to invest, however, is based on
4 comparative levels of risk. Our hypothetical investor would not invest in a
5 regulated electric utility stock if it offered a return lower than other investments of
6 similar risk. The opportunity cost simply would not justify such an investment.
7 Thus, the task for the rate of return analyst is to estimate a return on equity that is
8 equivalent to that being offered by other risk-comparable firms.

9 **Q. Please provide the Commission an overview of important economic factors**
10 **that affect your estimate of the allowed ROE for KPC.**

11 A. Certain key factors in the economy are important influences on the current investor
12 required ROE. These factors include the current level of interest rates, current
13 levels of inflation, the effects of unemployment and economic growth, and stock
14 market volatility.

15 **Q. Does the level of interest rates affect the allowed ROE for regulated utilities?**

16 A. Generally, yes. The common stock of regulated utilities tends to be interest rate
17 sensitive. This means that the cost of equity for regulated utilities tends to rise and
18 fall with changes in interest rates. For example, as interest rates rise, the cost of
19 equity will also rise, and vice versa when interest rates fall. This relationship is due
20 in large part to the capital-intensive nature of regulated industries, including electric
21 and gas utility companies, that rely heavily on both debt and equity to finance their
22 regulated investments.

1 **Q. Before you continue, please provide a brief explanation of how the Federal**
2 **Reserve Board (Fed) uses interest rates to affect conditions in the financial**
3 **markets.**

4 A. Generally, the Fed uses monetary policy to implement certain economic goals. The
5 Fed explained its monetary policy as follows:

6 Monetary policy in the United States comprises the Federal
7 Reserve's actions and communications to promote maximum
8 employment, stable prices, and moderate long-term interest rates--
9 the economic goals the Congress has instructed the Federal Reserve
10 to pursue.¹

11 One of the Fed's primary tools for conducting monetary policy is setting the
12 federal funds rate. The federal funds rate is the interest rate set by the Fed that
13 banks and credit unions charge each other for overnight loans of reserve balances.
14 Traditionally, the federal funds rate directly influences short-term interest rates,
15 such as the Treasury bill rate and interest rates on savings and checking accounts.
16 The federal funds rate has a more indirect effect on long-term interest rates, such
17 as the 30-Year Treasury Bond and private and corporate long-term debt. Long-
18 term interest rates are set more by market forces that influence the supply and
19 demand of loanable funds.

20 **Q. Describe the trend in interest rates over the last 10 years.**

¹ Monetary Policy, FED. RESERVE BD., (Feb. 19, 2025),
<https://www.federalreserve.gov/monetarypolicy.htm>.

1 A. Until recently, the overall trend in interest rates in the U.S. and the world economy
2 had been lower and this continued into 2020-2021 as governments and central
3 banks, including the Fed, instituted programs in response to the economic shocks
4 brought about by the COVID-19 pandemic. The trend of lower interest rates was
5 precipitated by the 2007 financial crisis and severe recession that followed in
6 December 2007. In response to this economic crisis, the Fed undertook a series of
7 steps to stabilize the economy, ease credit conditions, and lower unemployment and
8 interest rates. These steps are commonly known as Quantitative Easing (QE) and
9 were implemented in three distinct stages: QE1, QE2, and QE3. The Fed's stated
10 purpose of QE was "to support the liquidity of financial institutions and foster
11 improved conditions in financial markets."²

12 In 2022, however, the Fed began an aggressive policy of raising short-term
13 interest rates in response to concerns about persistently high inflation in the
14 economy, which began to be a significant problem in 2021. After the Fed reduced
15 the federal funds rate to nearly 0% through 2021, it was increased several times in
16 2022 and 2023, rising to a target range of 5.25% - 5.50%.

17 As inflation began to ease in 2023 and 2024, the Fed cut the federal funds
18 rate by 50 basis points, or 0.50% on September 18, 2024, to a range of 4.75% to
19 5.00%, noting progress on reducing inflation toward its goal of 2.0%.³ The Fed
20 further lowered the federal funds rate on November 7, 2024, December 18, 2024,

² *Credit and Liquidity Programs and the Balance Sheet*, Monetary Policy, FED. RESERVE BD., (May 10, 2021), https://www.federalreserve.gov/monetarypolicy/bst_crisisresponse.htm.

³ <https://www.federalreserve.gov/monetarypolicy/files/monetary20240918a1.pdf>.

1 September 17, 2025 and again on October 29, 2025 to its current level of 3.75% -
2 4.00%. In its most recent press release issued on October 29, 2025, the Fed stated,
3 in part, the following:

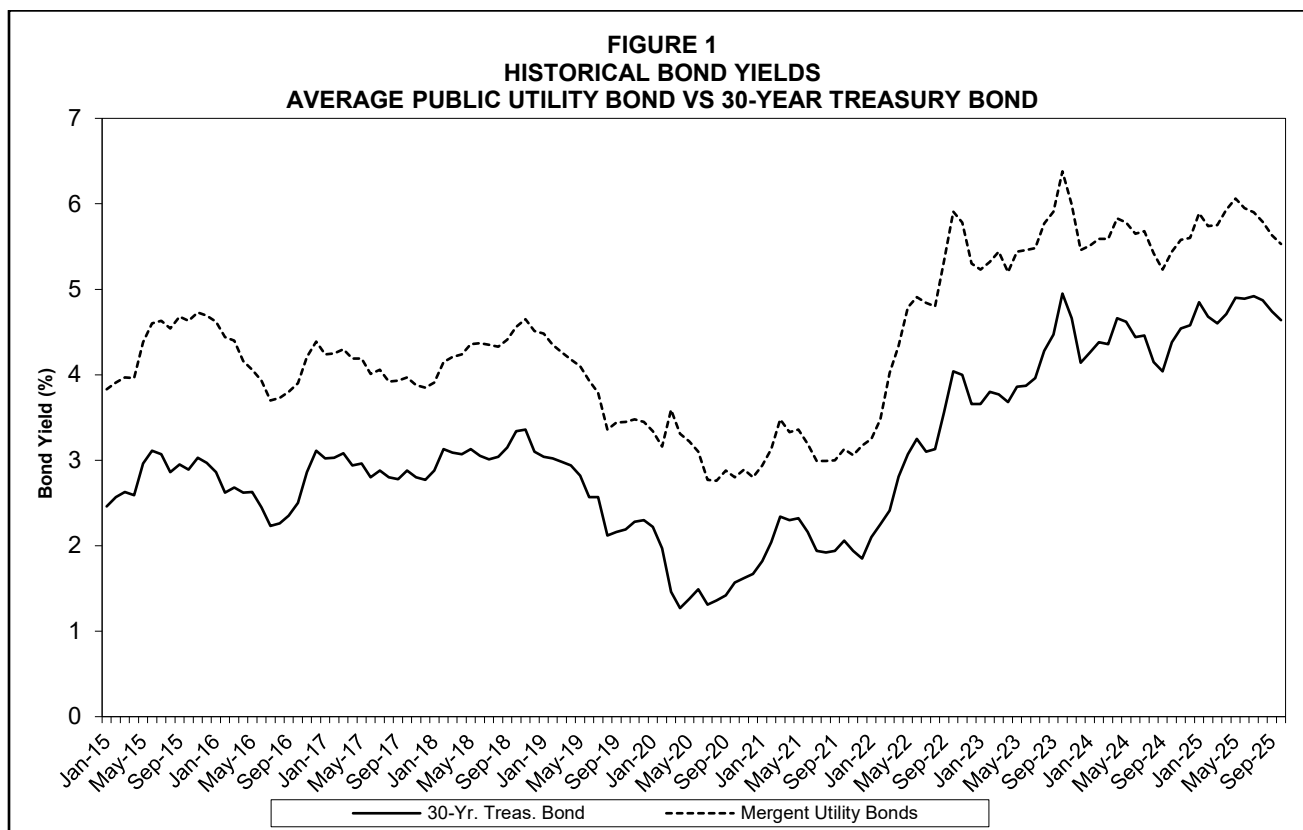
4 Available indicators suggest that economic activity has been
5 expanding at a moderate pace. Job gains have slowed this year, and
6 the unemployment rate has edged up but remained low through
7 August; more recent indicators are consistent with these
8 developments. Inflation has moved up since earlier in the year and
9 remains somewhat elevated.

10 The Committee seeks to achieve maximum employment and
11 inflation at the rate of 2 percent over the longer run. Uncertainty
12 about the economic outlook remains elevated. The Committee is
13 attentive to the risks to both sides of its dual mandate and judges that
14 downside risks to employment rose in recent months.

15 In support of its goals and in light of the shift in the balance
16 of risks, the Committee decided to lower the target range for the
17 federal funds rate by 1/4 percentage point to 3-3/4 to 4 percent. In
18 considering additional adjustments to the target range for the federal
19 funds rate, the Committee will carefully assess incoming data, the
20 evolving outlook, and the balance of risks.⁴

21 Figure 1 below presents a graph that tracks the 30-Year Treasury Bond yield
22 and the Mergent average utility bond yield. The graph covers the period from
23 January 2015 through October 2025.

⁴ *Federal Reserve issues FOMC statement*, Press Release, FED. RESERVE BD., (October 29, 2025), <https://www.federalreserve.gov/newsevents/pressreleases/monetary20251029a.htm>



1

2

3

4

5

6

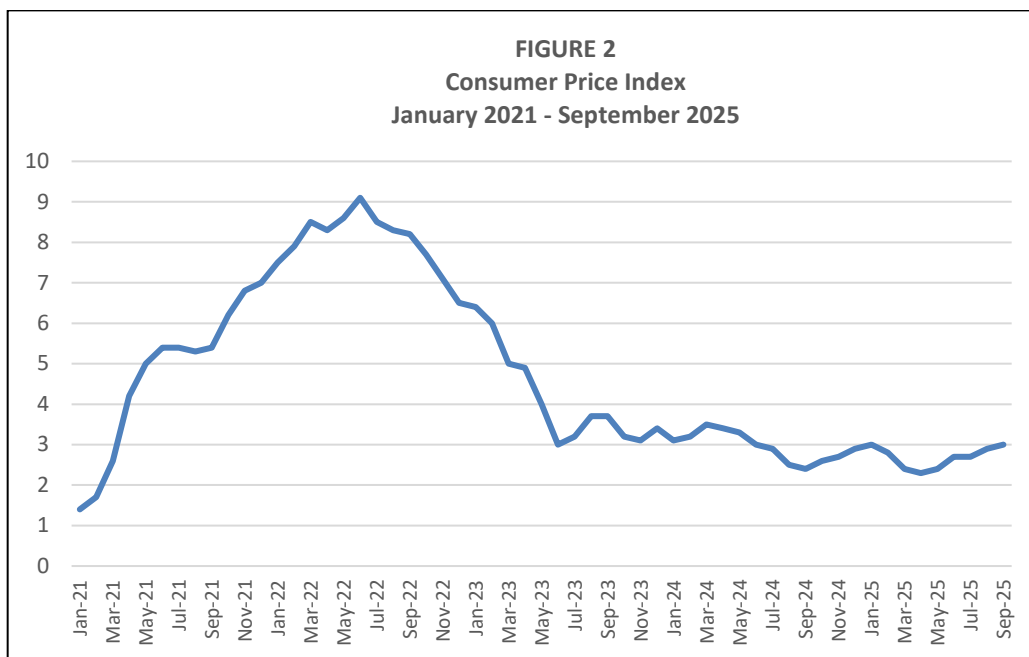
Q. What has been the recent experience with inflation?

7

A. Figure 2 presents monthly annualized inflation data from January 2021 through September 2025, the most recent monthly data that was available to me.⁵

8

⁵ Unemployment data was downloaded from the U.S. Bureau of Labor Statistics.



1

2

3

4

5 **Q.**

6

7 **A.**

8

9

10

11

12

13

14

Figure 2 shows that inflation greatly accelerated in 2021, peaked in June 2022 at 9.1%, then declined substantially through the rest of the study period. The inflation rate for September 2025 was 3.0%.

What are the expectations for inflation, interest rates, and other economic indicators going forward?

The Federal Reserve Bank of Philadelphia publishes the *Survey of Professional Forecasters* (“Survey”), in which a panel of 36 forecasters provide projections for a number of economic variables, including growth in Gross Domestic Product (GDP), inflation, and unemployment, as well as short-term and long-term interest rates. The most recent edition of the Survey dated August 15, 2025, provided the following forecasts:

- Consumer Price Index (CPI) inflation is expected to average 2.90% for 2025, 2.50% 2026 and 2.31% over the next 10 years.

- 1 • 10-Year Treasury Bond yield is forecasted to be 4.4% for 2025 and 4.1%
2 for 2026.

- 3 • An unemployment rate of 4.2% is forecasted for 2025 and 4.5% for 2026.

- 4 • Real growth in GDP of 1.7% is forecasted in 2025 and 1.6% for 2026.⁶

5 The Fed's economic projections as of September 17, 2025, showed the
6 following median forecasts:

- 7 • Personal Consumption Expenditures (PCE) inflation rate of 3.0% for 2025,
8 2.6% for 2026, and longer run inflation at 2.0%;

- 9 • Unemployment rate of 4.5% for 2025 and 4.4% for 2026, with a longer run
10 unemployment rate of 4.2%; and

- 11 • Growth in real GDP of 1.6% for 2025, 1.8% for 2026, with a longer run
12 growth rate of 1.8%.⁷

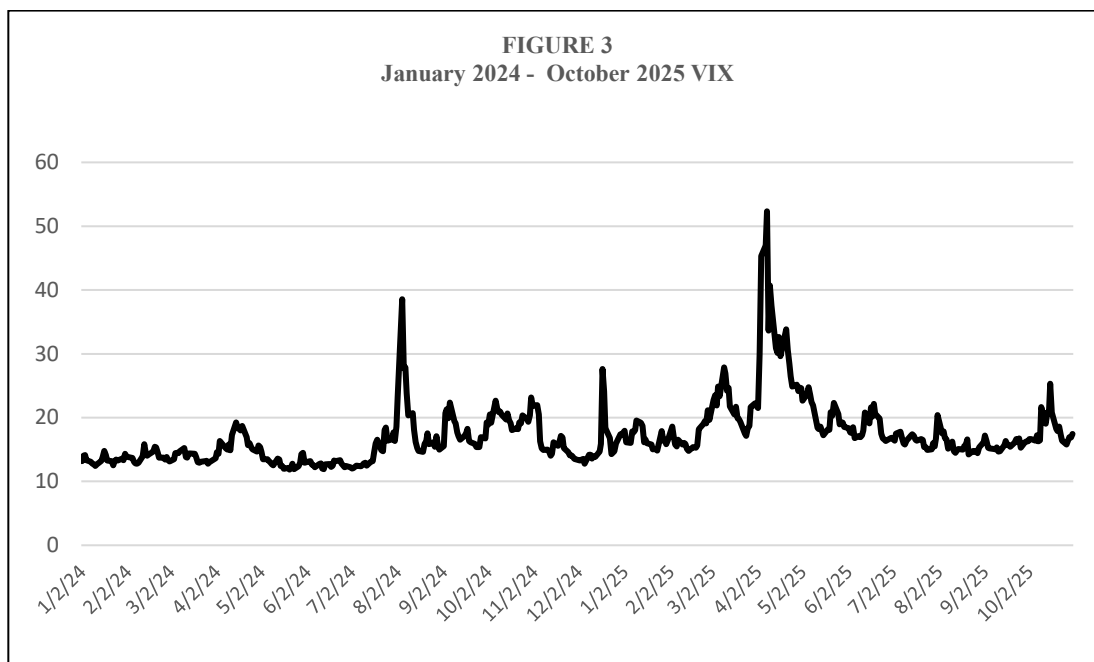
13 **Q. Please explain the market volatility index and its performance since the**
14 **beginning of 2024.**

15 A. A widely used measure of market volatility is the Chicago Board Options Exchange
16 (CBOE) Volatility Index (VIX), also called the "fear index" or "fear gauge."
17 Basically, the VIX measures the market's expectations for volatility over the next
18 30-day period. The higher the VIX, the greater the expectation of volatility and

⁶ *Survey of Professional Forecasters*, August 15, 2025;
<https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/spf-q3-2025>

⁷ *Summary of Economic Projections*, FED. RESERVE BD., (September 17, 2025),
<https://www.federalreserve.gov/monetarypolicy/files/fomcproptabl20250917.pdf>

1 market risk. Figure 3 presents the VIX from January 1, 2024 through October 31,
2 2025.⁸



3
4 Figure 3 shows a sharp increase in the VIX on August 5, 2024. Then in
5 March 2025, the VIX turned sharply higher with very high expected volatility in
6 April after President Trump announced a wide-ranging tariff plan. The VIX
7 reached a high of 52.33 on April 8 but fell to 24.7 by April 30, 2025. The VIX has
8 generally trended lower since then, with a value of 17.44 on October 31, 2025. The
9 average VIX value so far for 2025 is 19.19 compared to the 2024 average of 15.55.
10 This indicates increased expected market volatility so far in 2025.

11 **Q. Did you review recent commission-allowed ROEs as part of your review of**
12 **current financial and economic conditions?**

⁸ Historical Data for CBOE VIX Index and Other Volatility Indices, CBOE,
https://www.cboe.com/tradable_products/vix/vix_historical_data/.

1 A. Yes. Regulatory Research Associates (RRA) is a group within S&P Global
2 Commodity Insights that compiles and publishes commission-allowed ROEs from
3 across the country. For 2024 and the first six months of 2025 RRA reported the
4 following average allowed ROEs:⁹

- 5 • For 2024, the average allowed ROE for vertically integrated electric utilities
6 was 9.84%.
- 7 • For the first six months of 2025, the average allowed ROE for vertically
8 integrated utilities was 9.74%.

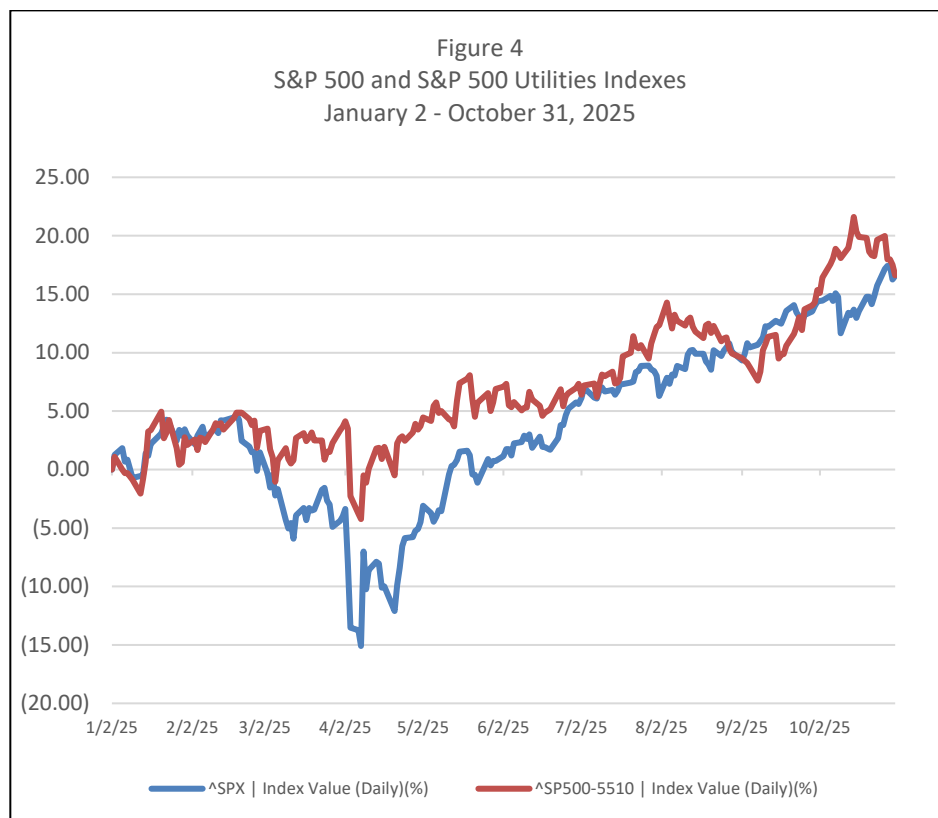
9 I also downloaded updated allowed ROE information from RRA from
10 January through October 2025. The average allowed ROE for vertically integrated
11 electric utilities (both settled and litigated cases) was 9.71%.

12 **Q. You provided the Commission with analyses showing higher long-term**
13 **interest rates and increased market volatility so far in 2025. How have utility**
14 **stocks fared so far in 2025?**

15 A. Despite increased market volatility, utility stocks have done well so far in
16 2025. Figure 4 below tracks the percentage changes in the S&P 500 Index and the
17 S&P 500 Utilities Index from January 2, 2025, through October 31, 2025.¹⁰

⁹ *Major energy rate case decisions in the US, January – June 2025*, Regulatory Research Associates, a group within S&P Global Commodity Insights.

¹⁰ Data for Figure 4 downloaded from S&P Capital IQ Pro.



1

2

3

4

5

6

7

8

III. DETERMINATION OF FAIR RATE OF RETURN

9 Q.

Please describe the methods you employed in estimating a fair rate of return for the regulated electric operations of KPC.

10

1 A. I employed two methods of estimating the ROE for KPC: the Discounted Cash
2 Flow (DCF) model and the Capital Asset Pricing Model (CAPM). I applied these
3 ROE estimation techniques to a proxy group of seventeen electric utility companies
4 that was developed by Mr. McKenzie and then modified as I will explain later. My
5 DCF analyses are based on the standard constant growth form of the model that
6 employs four different growth rate forecasts from the Value Line Investment
7 Survey, S&P Capital IQ, and Zacks. I also employed Capital Asset Pricing Model
8 (CAPM) analyses using both historical and forward-looking data as well as sources
9 that provide additional recommendations for the market risk premium portion of
10 the CAPM. The results from the DCF and CAPM support the reasonableness of
11 my ROE recommendation of 9.50% to the Commission.

12 **DCF Model**

13 **Q. Please describe the basic DCF approach.**

14 A. The basic DCF approach is rooted in valuation theory. It is based on the premise
15 that the value of a financial asset is determined by its ability to generate future net
16 cash flows. In the case of a common stock, those future cash flows generally take
17 the form of dividends and appreciation in stock price. The value of the stock to
18 investors is the discounted present value of future cash flows. The general equation
19 is:

$$20 \quad V = \frac{R}{(1+r)} + \frac{R}{(1+r)^2} + \frac{R}{(1+r)^3} + \cdots \frac{R}{(1+r)^n}$$

21 *Where:* V = asset value
22 R = yearly cash flows
23 r = discount rate

This is no different from determining the value of any asset from an economic point of view; however, the commonly employed DCF model makes certain simplifying assumptions. One is that the stream of income from the equity share is assumed to be perpetual; that is, there is no salvage or residual value at the end of some maturity date (as is the case with a bond). Another important assumption is that financial markets are reasonably efficient; that is, they correctly evaluate the cash flows relative to the appropriate discount rate, thus rendering the stock price efficient relative to other alternatives. Finally, the model I typically employ also assumes a constant growth rate in dividends. The fundamental relationship employed in the DCF method is described by the formula:

$$k = D_1/P_0 + g$$

Where: D_1 = the next period dividend
 P_0 = current stock price
 g = expected growth rate
 k = investor-required return

Using this formula, it is apparent that “k” must reflect the investors’ expected return. Use of the DCF method to determine an investor-required return is complicated by the need to express investors’ expectations relative to dividends, earnings, and book value over an infinite time horizon. Financial theory suggests that stockholders purchase common stock on the assumption that there will be some change in the rate of dividend payments over time. We assume that the rate of growth in dividends is constant over the assumed time horizon, but the model could easily handle varying growth rates if we knew what they were. Finally, the relevant time frame is prospective rather than retrospective.

1 **Q. Please describe your approach for selecting proxy group of companies.**

2 A. I began with the proxy group of vertically integrated electric utilities that Company
3 witness Mr. McKenzie used for his analysis. Mr. McKenzie described the criteria
4 he used to select companies for his proxy group on page 21 of his Direct Testimony.
5 These screening criteria resulted in a 20-member proxy group shown in his Exhibit
6 AMM-3 that is generally reasonable to use for estimating the ROE for KPC, but
7 with three exceptions.

8 In this case I chose to exclude Edison International from the Electric Utility
9 Proxy Group. Edison International's stock price was adversely affected by the risk
10 associated with the wildfires that occurred in its service territory in January. As of
11 January 2, 2025, Edison's stock price was \$80.01 per share. The price dropped
12 precipitously in January to \$54 on January 31. At this point, the market is still
13 substantially discounting Edison's stock price because of the uncertainty of the
14 company's role in the wildfires. This significant event and its ongoing impact on
15 Edison's stock price provide a sound basis for excluding it from the proxy group at
16 this time. I also excluded NorthWestern Energy Group and Black Hills Corporation
17 from the proxy group due to a recently announced merger between these
18 companies.

19 The 17-member proxy group I used for my ROE analyses is:

- 20 1. Alliant Energy Corp.
- 21 2. American Electric Power Company, Inc.
- 22 3. Avista Corp.
- 23 4. CenterPoint Energy
- 24 5. CMS Energy Corp.
- 25 6. Dominion Energy
- 26 7. DTE Energy Co.

- 1 8. Duke Energy Corp.
- 2 9. Entergy Corp.
- 3 10. Evergy Inc.
- 4 11. Eversource Energy
- 5 12. FirstEnergy Corp.
- 6 13. IDACORP, Inc.
- 7 14. Otter Tail Corp.
- 8 15 Pinnacle West Capital
- 9 16 Public Service Enterprise Group
- 10 17. Sempra Energy

11 **Q. What was your first step in determining the DCF return on equity for the**
12 **proxy group?**

13 A. I first determined the current dividend yield, D_0/P_0 , from the basic equation. My
14 general practice is to use six months as the most reasonable period over which to
15 estimate the dividend yield. The six-month period I used covered the months from
16 May through October, 2025. I averaged daily stock prices from S&P Capital IQ
17 for 1-month, 2-month, 3-month, and 6-month periods. The current dividend for
18 each company was taken from each company's most recent Value Line report.

19 The resulting average 6-month dividend yield for the proxy group is 3.49%.
20 These calculations are presented in Exhibit RAB-2.

21 **Q. Having established the average dividend yield for your proxy group, how did**
22 **you determine the investors' expected growth rate?**

23 A. The investors' expected growth rate, in theory, correctly forecasts the constant rate
24 of growth in dividends. The dividend growth rate is a function of earnings growth
25 and the payout ratio, neither of which is known precisely for the future. We refer
26 to a perpetual growth rate since the DCF model has no arbitrary cut-off point. We
27 must estimate the investors' expected growth rate because there is no way to know

1 with absolute certainty what investors expect the growth rate to be in the short term,
2 much less in perpetuity.

3 For my analysis in this proceeding, I used three major sources of analysts'
4 forecasts for growth: Value Line, S&P Capital IQ, and Zacks.

5 **Q. Please briefly describe Value Line, S&P Capital IQ, and Zacks.**

6 A. Value Line is a widely used and respected source of investor information that
7 covers approximately 1,700 companies in its Standard Edition and several thousand
8 in its Plus Edition. It is updated quarterly and represents a comprehensive source
9 of information for investors. It provides both historical and forecasted information
10 on a number of important data elements. Value Line neither participates in
11 financial markets as a broker nor works for the utility industry in any capacity of
12 which I am aware.

13 Zacks gathers opinions from a variety of analysts on earnings growth
14 forecasts for numerous firms including regulated electric utilities. The estimates of
15 the analysts responding are combined to produce consensus average estimates of
16 earnings growth. I obtained Zacks' earnings growth forecasts from its web site.
17 Like Zacks, S&P Capital IQ also compiles and reports consensus analysts'
18 forecasts of earnings growth.

19 **Q. Why did you rely on analysts' forecasts in your analysis?**

20 A. ROE analysis is a forward-looking process. Five-year or ten-year historical growth
21 rates may not accurately represent investor expectations for future dividend and
22 earnings growth. Analysts' forecasts for earnings and dividend growth provide
23 better proxies for the expected growth component in the DCF model than historical

1 growth rates. Analysts' forecasts are also widely available to investors and one can
2 reasonably assume that they influence investor expectations.

3 In this case, however, I am concerned that the consensus analysts' forecasts
4 from S&P Capital IQ and Zacks will overstate the long-run constant growth rate
5 for the proxy group. I will discuss this in greater detail in the Conclusions and
6 Recommendations portion of this section of my testimony.

7 **Q. Please explain how you used analysts' dividend and earnings growth forecasts**
8 **in your constant growth DCF analysis.**

9 A. Columns (1) through (4) of Exhibits RAB-3 shows the forecasted dividend and
10 earnings growth rates from Value Line and the earnings growth forecasts from S&P
11 Capital IQ and Zacks for the companies in the proxy group. It is important to
12 include dividend growth forecasts in the DCF model since the model calls for
13 forecasted cash flows and Value Line is the only source of which I am aware that
14 forecasts dividend growth.

15 **Q. Using this information, how did you determine the DCF ROE for the proxy**
16 **group?**

17 A. To estimate the expected dividend yield (D_1), the current dividend yield must be
18 moved forward in time to account for dividend increases over the next twelve
19 months. I estimated the expected dividend yield by multiplying the current
20 dividend yield by one plus one-half the expected growth rate.

21 Exhibits RAB-3 presents my standard method of calculating dividend
22 yields, growth rates, and ROE for the proxy groups. The DCF ROE section of this
23 exhibit shows the application of each of four growth rates to the current dividend

1 yield to calculate the expected dividend yield. I then added the expected growth
2 rates to the expected dividend yield. My DCF ROE was calculated using two
3 different methods. Method 1 uses the average growth rates for the proxy group and
4 Method 2 utilizes the median growth rates.

5 **Q. What are the results of your constant growth DCF model for the proxy**
6 **groups?**

7 A. The Method 1 results range from 8.39% to 11.10%, with the average of these results
8 being 9.84%. For Method 2 (median growth rates), the ROE results range from
9 9.08% to 10.95%, with the average of these results being 9.96%.¹¹

10 **Capital Asset Pricing Model**

11 **Q. Briefly summarize the CAPM approach.**

12 A. The theory underlying the CAPM approach is that investors, through diversified
13 portfolios, may combine assets to minimize the total risk of the portfolio.
14 Diversification allows investors to diversify away all risks specific to a particular
15 company and be left only with market risk that affects all companies. Thus, the
16 CAPM theory identifies two types of risks for a security: company-specific risk and
17 market risk. Company-specific risk includes such events as strikes, management
18 errors, marketing failures, lawsuits, and other events that are unique to a particular
19 firm. Market risk includes inflation, business cycles, war, variations in interest
20 rates, and changes in consumer confidence. Market risk tends to affect all stocks

¹¹ Refer to Exhibit RAB-3 for the detailed calculations.

1 and cannot be diversified away. The idea behind the CAPM is that diversified
2 investors are rewarded with returns based on market risk.

3 Within the CAPM framework, the expected return on a security is equal to
4 the risk-free rate of return plus a risk premium that is proportional to the security's
5 market, or non-diversifiable risk. Beta is the factor that reflects the inherent market
6 risk of a security and measures the volatility of a particular security relative to the
7 overall market for securities. For example, a stock with a beta of 1.0 indicates that
8 if the market rises by 15%, that stock will also rise by 15%. This stock moves in
9 tandem with movements in the overall market. Stocks with a beta of 0.5 will only
10 rise or fall 50% as much as the overall market. With an increase in the market of
11 15%, this stock will only rise 7.5%. Stocks with betas greater than 1.0 will rise and
12 fall more than the overall market. Thus, beta is the measure of the relative risk of
13 individual securities vis-à-vis the market.

14 Based on the foregoing discussion, the equation for determining the return
15 for a security in the CAPM framework is:

16
$$K = R_f + \beta(MRP)$$

17 *Where:* K = *Required Return on equity*
18 R_f = *Risk-free rate*
19 MRP = *Market risk premium*
20 β = *Beta*
21

22 This equation tells us about the risk/return relationship posited by the
23 CAPM. Investors are risk averse and will only accept higher risk if they expect to
24 receive higher returns. These returns can be determined in relation to a stock's beta

1 and the market risk premium (MRP). The general level of risk aversion in the
2 economy determines the MRP. If the risk-free rate of return is 3.0% and the
3 required return on the total market is 10%, then the market risk premium is 7%.
4 Any stock's risk premium can be determined by multiplying its beta by the MRP.
5 Its total return may then be estimated by adding the risk-free rate to that risk
6 premium. Stocks with betas greater than 1.0 are considered riskier than the overall
7 market and will have higher required returns. Conversely, stocks with betas less
8 than 1.0 will have required returns lower than the market as a whole.

9 **Q. In general, are there concerns regarding the use of the CAPM in estimating**
10 **the ROE?**

11 A. Yes. There is some controversy surrounding the use of the CAPM and its accuracy
12 regarding expected returns. There is substantial evidence that beta is not the
13 primary factor for determining the risk of a security. For example, Value Line's
14 "Safety Rank" is a measure of total risk, not its calculated beta coefficient. Dr.
15 Burton Malkiel, author of *A Random Walk Down Wall Street*, noted the following
16 in his best-selling book on investing:

17 Second, as Professor Richard Roll of UCLA has argued, we must
18 keep in mind that it is very difficult (indeed probably impossible) to
19 measure beta with any degree of precision. The S&P 500 Index is
20 not "the market." The total stock market contains many thousands
21 of additional stocks in the United States and thousands more in
22 foreign countries. Moreover, the total market includes bonds, real
23 estate, commodities, and assets of all sorts, including one of the most
24 important assets any of us has - the human capital built up by
25 education, work, and life experience. Depending on exactly how you
26 measure "the market" you can obtain very different beta values.¹²

¹² Burton G. Malkiel, *A Random Walk Down Wall Street*, 219 (2023 ed.)

Shannon Pratt and Roger Grabowski, authors of *Cost of Capital*, also stated the following with respect to the CAPM:

Even though the capital asset pricing model (CAPM) is the most widely used method of estimating the cost of equity capital, the accuracy and predictive power of beta as the sole measure of risk have increasingly come under attack. As a result, alternative measures of risk have been proposed and tested. That is, despite its wide adoption, academics and practitioners alike have questioned the usefulness of CAPM in accurately estimating the cost of equity capital and the use of beta as a reliable measure of risk.¹³

As a practical matter, there is substantial judgment involved in estimating the required market return and MRP. In theory, the CAPM requires an estimate of the return on the total market for investments, including stocks, bonds, real estate, etc. It is nearly impossible for the analyst to estimate such a broad-based return. Often in utility cases, a market return is estimated using the S&P 500. However, as Dr. Malkiel pointed out, this is a limited source of information with respect to estimating the investor's required return for all investments. In practice, the total market return and MRP estimates face limitations to estimation and, ultimately, their usefulness in quantifying the investor required CAPM ROE.

In the final analysis, a considerable amount of judgment must be employed in determining the market return and expected risk premium elements of the CAPM equation. The analyst's application of judgment can significantly influence the results obtained from the CAPM. My experience with the CAPM indicates that it is prudent to use a wide variety of data in estimating investor-required returns. Of

¹³ Shannon Pratt & Roger Grabowski, Cost of Capital 269 (5th ed 2014).

1 course, the range of results may also be wide, indicating the challenge in obtaining
2 a reliable estimate from the CAPM.

3 **Q. How did you estimate the market return and MRP of the CAPM?**

4 A. I used three approaches to estimate the MRP portion of the CAPM equation. First,
5 I will present an approach that uses the expected return on the market and is
6 forward-looking. Second, I will present an approach that employs three historical
7 MRPs based on actual stock and bond returns. Third, I will present four published
8 sources that estimate the current investor required MRP.

9 **Q. Please describe your forward-looking approach to estimating the MRP.**

10 A. The first source I used was the Value Line *Summary and Index* dated October 31,
11 2025. The Value Line *Summary and Index* provides data with which one may
12 calculate a DCF estimate on the companies that Value Line follows. Value Line
13 presents a median estimated dividend yield for all dividend paying stocks (2.10%)
14 and the median estimated 3–5-year price appreciation potential of all stocks in the
15 Value Line universe (40%). The estimated 3-5-year appreciation estimate
16 translates into an annualized appreciation number, or growth rate, of 8.78%. I
17 present Value Line’s projected annual returns on page 1 of Exhibit RAB-4. The
18 DCF ROE result for the market is 10.88%.

19 **Q. Do you have any concerns related to this forward-looking MRP estimate?**

20 A. Yes. The expected growth rate of 8.78% is overstated as a long-term constant
21 growth rate for the market. This is because it is far higher than the expected
22 nominal growth rate for the Gross Domestic Product of the U.S., which is around
23 4.0%. I will discuss this concern in greater detail in Section IV where I respond to

1 Mr. McKenzie's forward-looking market risk premium. A long-term earnings
2 growth rate of 8.78% cannot be sustained over the long run and, therefore, it may
3 overstate the investor-required return on the market and the CAPM ROE result.

4 **Q. Please continue with your MRP analysis.**

5 A. The second source I considered came from Kroll, which compiled a study of
6 historical returns on the stock market in its *Cost of Capital Navigator: U.S. Cost of*
7 *Capital Module* and is part of its Cost of Capital Navigator subscription service.
8 Kroll provides services to clients in 140 countries covering valuation, compliance
9 and regulation, corporate finance and restructuring, and other areas. Kroll now
10 provides the Cost of Capital Navigator service that was formerly provided by Duff
11 and Phelps.

12 Some analysts employ historical data to estimate the MRP of stocks over
13 the risk-free rate. The assumption is that a risk premium calculated over a long
14 period of time is reflective of investor expectations going forward. Exhibit RAB-
15 4, page 2, presents the calculation of the market returns and MRPs using the
16 historical data from Kroll.

17 **Q. Please explain how these historical MRPs are calculated.**

18 A. Exhibit RAB-4, page 2, shows the historical arithmetic average MRP over the
19 historical period from 1926 – 2024. The historical MRP is calculated by subtracting
20 the average annual return for the 20-year Treasury Bond from historical average
21 stock returns, resulting in an historical MRP of 7.31%.

22 **Q. Did you include additional measures of historical risk premiums in this case?**

1 A. Yes. Kroll reported the results of a study by Dr. Roger Ibbotson and Dr. Peng Chen
2 indicating that the historical risk premium of stock returns over long-term
3 government bond returns has been significantly influenced upward by substantial
4 growth in the price/earnings (P/E) ratio.¹⁴ Kroll noted that this growth in the P/E
5 ratio for stocks was subtracted from the historical risk premium to arrive at an
6 adjusted “supply side” historical MRP. The most recent “supply side” historical
7 MRP is 6.26%, which I have also included in Exhibit RAB-4, page 2.

8 **Q. Is there additional evidence that the growth in the P/E ratio should be removed**
9 **from the historical risk premium?**

10 A. Yes. William Goetzman and Roger Ibbotson wrote the following regarding the
11 supply-side approach to estimating the equity risk premium:

12 There are several ways in which one might estimate an expected risk
13 premium used for forecasting. One way is to extrapolate historical
14 risk premiums, as did Ibbotson and Sinquefeld. Another is to use
15 investor demand models based upon investor risk aversion, as did
16 Mehra and Precott. A third way is to look at the type of returns that
17 the corporate sector supplies. Diermeir, Ibbotson, and Siegel (1984)
18 and later Ibbotson and Chen (2003) used this supply approach. They
19 extrapolated the cash flows and earnings growth generated by
20 companies themselves. These forecasts tend to give somewhat
21 lower historical risk premiums, primarily because part of the total
22 return of the stock market has come from price-to-earnings ratio
23 expansion. This expansion is not predicated to continue on
24 indefinitely and is removed from the expected risk premium.¹⁵

25
26 **Q. Are there other concerns regarding the use of historical MRPs for**
27 **estimating the investor required ROE?**

¹⁴ *Kroll Cost of Capital Navigator: U.S. Cost of Capital Module*, Basic Building Blocks of the Cost of Equity Capital – Risk-free Rate and Equity Risk Premium (Abridged), pp. 4 – 6.

¹⁵ William N. Goetzmann & Roger G. Ibbotson, Handbook of the Equity Risk Premium 522-523 (Rajnish Mehra ed., Elsevier B.V., 2008).

1 A. Yes. A historical MRP calculated over a long period of time may not reflect current
2 investor expectations and requirements. For example, Pratt and Grabowski
3 presented a detailed discussion of the sources of potential upward bias and
4 overstatement of the long-term historical risk premium.¹⁶ One potential source of
5 bias they analyzed was the historical period of 1942 – 1951, which included
6 government-imposed stability in interest rates for government bonds during the
7 Second World War. Pratt and Grabowski named this period “WWII Interest Rate
8 Bias” and estimated that it resulted in an overstatement of the long-run historical
9 risk premium of 117 basis points, or 1.17%. Pratt and Grabowski also considered
10 the supply-side MRP, which I considered and presented earlier.

11 Kroll analyzed and calculated the so-called World War II Interest Rate Bias
12 and subtracted it from the supply-side ERP of 6.26%, resulting in an adjusted
13 historical ERP of 5.31%. I also present this historical ERP on page 2 of Exhibit
14 RAB-4.

15 In addition to the foregoing discussions, Dr. Aswath Damodaran of the
16 Stern Business School observed the following regarding the use of historical MRPs:

17 Given how widely the historical risk premium approach is used, it
18 is surprising that the flaws in the approach have not drawn more
19 attention. Consider first the underlying assumption that investors’
20 risk premiums have not changed over time and that the average risk
21 investment (in the market portfolio) has remained stable over the
22 period examined. We would be hard pressed to find anyone who
23 would be willing to sustain this argument with fervor. The obvious
24 fix for this problem, which is to use a more recent time period, runs
25 directly into a second problem, which is the large noise associated
26 with historical risk premium estimates. While these standard errors

¹⁶ Pratt and Grabowski, Cost of Capital, 119 (Wiley, 5th ed.)

1 may be tolerable for very long time periods, they clearly are
2 unacceptably high when shorter periods are used.¹⁷

3 Although the simple, unadjusted long-run historical risk premium is widely
4 used and available to investors, it is flawed and likely to overstate the investor
5 expected risk premium for forecasting purposes. It should be viewed with caution
6 and supplemented with other sources as I have done here.

7 **Q. Did you consider any other sources for estimating the MRP?**

8 A. Yes, I also considered four other sources for estimating the MRP.

9 First, Kroll provides a recommendation for the MRP for the United States.
10 Its recommended MRP as of September 3, 2025 is 5.00%.¹⁸

11 Second, KMPG Corporate Finance and Evaluations produces an estimate of
12 the MRP based on its market valuation analyses. The markets included in KMPG's
13 analyses are the S&P 500, Financial Times Stock Exchange (FTSE), and STOXX
14 600. As of June 30, 2025 KMPG recommended an MRP of 5.25%.¹⁹

15 Third, Dr. Aswath Damodaran provides monthly estimates of the MRP
16 using what he calls an implied risk premium approach. Dr. Damodaran is a
17 professor of finance at the Stern School of Business at New York University and is
18 a researcher on the topic of MRPs, among other things. On October 1, 2025, Dr.

¹⁷ *Equity Risk Premiums (ERP): Determinants, Estimation, and Implications – The 2022 Edition*,
Updated: March 23, 2022, Aswath Damodaran, Stern School of Business.

¹⁸ <https://www.kroll.com/en/insights/publications/cost-of-capital/recommended-us-equity-risk-premium-and-corresponding-risk-free-rates>.

¹⁹ <https://indialogue.io/clients/reports/public/5d9da61986db2894649a7ef2/5d9da63386db2894649a7ef5>

1 Damodaran estimated an MRP in the range of 3.59% - 5.81%, with an average of
2 4.18%.²⁰

3 Fourth, Pablo Fernandez, Diego Garcia, and Lucia Acin prepared and
4 published a study entitled *Survey: Market Risk Premium and Risk-Free Rate used*
5 *for 54 countries in 2025*.²¹ This is a comprehensive survey of finance and economics
6 professors, analysts, and managers of companies regarding their expectations for the
7 market risk premium and risk-free rate for purposes of calculating the required return on
8 equity in various countries. This survey has been published yearly since 2008. The authors
9 received 1,079 survey responses for the MRP and risk-free rate for the United States. The
10 average and median MRP for 2025 was 5.50%.

11 These MRPs are presented on page 3 of Exhibit RAB-4.

12 **Q. How did you determine the risk-free rate?**

13 A. I considered a six-month average of the 30-year Treasury Bond yield from May
14 through October 2025. These yields are shown in Exhibit RAB-4, page 1. The six-
15 month average 30-Year Treasury Bond yield is 4.83%. This six-month period
16 tracks the six-month period I used for stock prices in my DCF analyses.

17 **Q. Please summarize your calculated MRP estimates with the forward-looking**
18 **data from Value Line, the historical MRPs, and the four other sources you**
19 **described.**

20 A. The MRPs from Exhibit RAB-4, pages 1 through 3 are as follows:

²⁰Aswath Damodaran, Damodaran Online (last visited October 31, 2025),
https://pages.stern.nyu.edu/~adamodar/New_Home_Page/home.htm

²¹ Fernandez, Garcia, and Acin, *Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025*, IESE Business School, May 20, 2025.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5260463

1	• Value Line forward-looking risk premium	6.05%
2	• Historical risk premium	5.31% - 7.31%
3	• Kroll	5.00%
4	• KMPG	5.25%
5	• IESE Survey	5.50%
6	• Average Damodaran MRP	4.18%

7 **Q. How did you determine the value for beta?**

8 A. I used two sources in this case. I obtained the betas for the companies in the proxy
9 group from the most recent Value Line reports at the time I prepared my Direct
10 Testimony and analyses. The average of the Value Line betas for the proxy group
11 is 0.77.²²

12 The second source is from S&P Capital IQ. S&P publishes 5-year betas for
13 each company in the proxy group. I added this additional source for a more robust
14 estimate of the CAPM. The S&P betas, however, are known as “raw betas,”
15 meaning that they are not adjusted for beta’s tendency to rise toward the market
16 beta of 1.0 over time. Value Line adjusts its betas for this tendency and an adjusted
17 beta is thought to be superior to the “raw” unadjusted beta for forecasting purposes.
18 In order to adjust the raw S&P Capital IQ betas, I employed a commonly used
19 formula called “the Blume Adjustment” or “the Bloomberg Adjustment.” The
20 formula is as follows:

21
$$\text{Adjusted beta} = (\text{Raw beta} * 0.67) + .33$$

²² Refer to Exhibit RAB-4, page 1.

1 This formula results in upward adjustments to beta values less than 1.0,
2 which is the case for all the electric utility companies in the proxy group. The
3 adjusted S&P Capital IQ beta for the companies in the proxy group is 0.68.²³

4 Finally, I used the average of the adjusted S&P Capital IQ and Value Line
5 betas for purposes of estimating the CAPM ROE for the proxy group, which is 0.73.

6 **Q. Please summarize the CAPM results.**

7 **A. For the proxy group, the CAPM ROE estimates are as follows:**

8	1.	Forward-looking MRP	9.21%
9	2.	Arithmetic Historical MRP	10.13%
10	3.	Supply-side Historical MRP	9.37%
11	4.	Supply-side Less WWII Bias	8.68%
12	5.	IESE Survey MRP	8.81%
13	6.	KMPG MRP	8.63%
14	7.	Kroll MRP	8.45%
15	8.	Damodaran Average MRP	7.86%

16 **Conclusions and Recommendations**

17 **Q. Please summarize the cost of equity results for your DCF and CAPM analyses**
18 **as they apply to the proxy group.**

19 **A. Table 1 summarizes my ROE results using the DCF and CAPM approaches.**

20

²³ Refer to Exhibit RAB-4, page 1.

TABLE 1 SUMMARY OF ROE ESTIMATES PROXY GROUP	
<u>DCF Methodology</u>	
Method 1	
- High	11.10%
- Low	8.39%
- Average	9.84%
Method 2	
- High	10.95%
- Low	9.08%
- Average	9.96%
<u>CAPM Methodology</u>	
Forward-looking Market Return:	9.21%
Historical Risk Premium:	
- Arithmetic Mean	10.13%
- Supply side MRP	9.37%
- Supply side Less WWII Bias	8.68%
IESE MRP Survey	8.81%
KMPG MRP	8.63%
Kroll MRP	8.45%
Damodaran MRP	7.86%
Average CAPM Results	8.89%
Average CAPM Excluding High and Low	8.86%
CAPM Midpoint	8.99%
CAPM Midpoint Excluding High and Low	8.91%

1

2 **Q. What is your recommended ROE for the electric utility operations of KPC?**

3 A. Based on my DCF and CAPM results, I recommend a ROE range of 8.90% - 10.0%.

4 The lower end of the range is based on the average and midpoint CAPM results.

5 The high end of the range is based on the DCF results, Method 2, rounded upward.

6 My recommended ROE for KPC is 9.50%, which is near the approximate midpoint
7 of this range.

8 **Q. Earlier in your testimony you expressed concerns regarding the increase in the**
9 **consensus analysts' earnings growth forecasts for your DCF model. Please**
10 **explain your concern in this regard.**

1 A. In this case, the average of consensus analysts' earnings growth rates from S&P
2 Capital IQ and Zacks is 6.96% to 7.48% as shown in my Exhibit RAB-3. Median
3 growth rates range from 7.10% to 7.33%. These earnings growth forecasts are
4 significantly higher than the long-term growth rate of the overall economy as
5 measured by growth in the GDP, as well as historical earnings and dividend growth
6 for the companies in the proxy groups. For mature, steady-state industries such as
7 electric utilities, it is highly unlikely that earnings growth significantly above GDP
8 growth can be maintained indefinitely as the constant growth DCF model assumes.
9 In other words, electric utilities cannot outgrow the GDP in perpetuity. Using these
10 consensus forecasts alone would overstate the DCF ROE in this case.

11 As support for this, in *Fundamentals of Financial Management*, Brigham
12 and Houston note the following:

13 Second, the constant growth model as expressed in Equation 9.2 is not
14 appropriate unless a company's growth rate is expected to remain constant
15 in the future. This condition almost never holds for new start-up firms, but
16 it does exist for many mature companies. Indeed, mature firms such as
17 Keller, Allied, and GE are generally expected to grow at about the same rate
18 as nominal gross domestic product (i.e., real gross domestic product [GDP]
19 plus inflation).²⁴
20

21 Pratt and Grabowski also cautioned as follows:

22 It is theoretically impossible for the sustainable perpetual growth rate for a
23 company to significantly exceed the growth rate in the economy. Any rate
24 over a 6% to 7% perpetual growth rate should be questioned carefully.²⁵
25

²⁴ Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial Management*, 333-334, Eleventh Edition (2022, 2020 Cengage Learning, Inc.)

²⁵ Shannon Pratt and Roger Grabowski, *Cost of Capital* 461 (Wiley, 5th ed.)

1 Regarding forecasts of GDP, Federal Reserve projections of September 17,
2 2025 called for longer-run real GDP growth of 1.8% and PCE inflation of 2.0%.
3 This translates into forecasted nominal GDP growth of 3.80% per year. The
4 Congressional Budget Office also projects growth in real GDP through 2035 of
5 1.80% and CPI inflation of 2.0%.²⁶ If we assume forecasted long-run nominal GDP
6 growth of around 4.0%, then forecasted perpetual earnings growth rates between
7 6.96% - 7.48% for the electric utility industry simply cannot be sustained over time.

8 Given current consensus earnings growth forecasts, forecasted dividend
9 growth must also be considered in the DCF ROE analyses. The lower dividend
10 growth forecasts from Value Line help to offset the higher consensus analysts'
11 forecasts for the proxy group.

12 **Q. How do the S&P Capital IQ and Zacks growth rates compare to historical**
13 **earnings and dividend growth for the proxy group?**

14 **A.** Table 2 below presents Value Line's 5-year and 10-year historical earnings and
15 dividend growth for the companies in the proxy group.

16

²⁶ <https://www.cbo.gov/system/files/2025-03/61187-Long-Term-Outlook-2025.pdf>.

1

	<u>Earnings Growth</u>		<u>Dividend Growth</u>	
	<u>5-Year</u>	<u>10-Year</u>	<u>5-Year</u>	<u>10-Year</u>
Alliant Energy Corporation	4.5%	5.5%	6.0%	6.5%
American Electric Power Company	4.0%	5.0%	5.0%	5.0%
Avista Corp.	-1.0%	3.0%	4.0%	4.0%
CenterPoint Energy	3.5%	1.0%	-7.0%	-1.0%
CMS Energy Corp.	6.0%	6.5%	6.5%	6.5%
Dominion Energy	-5.5%	NA	-4.5%	1.5%
DTE Energy Co.	2.5%	4.0%	5.5%	5.5%
Duke Energy Corp.	3.5%	3.5%	2.5%	3.0%
Entergy Corp.	4.0%	2.5%	4.0%	2.5%
Eversource Energy	6.0%	6.5%	6.0%	6.5%
FirstEnergy Corp.	-0.5%	NA	0.5%	-1.0%
IDACORP, Inc.	3.5%	4.0%	6.0%	7.5%
Otter Tail Corp.	14.5%	18.0%	4.0%	2.5%
Pinnacle West Capital	NA	2.5%	4.0%	4.0%
Pub Sv Enterprise Grp.	3.0%	3.0%	5.0%	4.5%
Sempra Energy	11.5%	7.5%	6.0%	6.5%
Average Excl. Negatives, N/A, and Nil	5.5%	5.2%	4.6%	4.7%
Median Excl. Negatives, N/A, and Nil	4.0%	4.0%	5.0%	4.8%

Source: Value Line Investment Survey

2

3 Historical earnings growth ranges from 4.0% to 5.5%. Historical dividend
4 growth ranges from 4.6% to is 5.0%. Historical growth rates are all significantly
5 lower than the average consensus earnings growth forecasts in this case. Further,
6 the average and median Value Line dividend growth forecasts range from 4.82% to
7 5.50% and are much closer to the historical growth rates.

8 **Q. Did you review KPC's requested capital structure?**

9 A. Yes. KPC witness Messner described the development of KPC's requested capital
10 structure in his Direct Testimony and presented it in his Figure FDM-4, page 7.
11 The Company's requested capital structure consists of 46.13% common equity and
12 53.87% long-term debt.

1 I recommend that the Commission adopt KPC's requested capital structure.

2 **Q. Did you review KPC's requested cost of long-term debt?**

3 A. Yes. Mr. Messner described the development of KPC's requested cost of long-term
4 debt in his Direct Testimony. Based on my review, I recommend the Commission
5 adopt the Company's requested cost of long-term debt of 5.49%.

6 **Q. What is the current treatment for the ROE that is applied to KPC's**
7 **Decommissioning Rider (Tariff D.R.) and Environmental Surcharge rider**
8 **(Tariff D.R.)?**

9 A. Pursuant to past Commission Orders, these riders are calculated with a 10 basis
10 point reduction to KPC's Commission-approved ROE. This approach continues to
11 be appropriate and applicable for these KPC riders and is consistent with
12 Commission precedent. For example, the Commission recently authorized a 10
13 basis point reduction to its allowed ROE for Duke Energy Kentucky's
14 Environmental Surcharge Mechanism (ESM) in Case No. 2024-00354. The
15 Commission's Order in that case lowered the ROE for the ESM from 9.80% to
16 9.70%.²⁷

17 Consistent with past Commission practice and precedent, I recommend that
18 the Commission apply a 10 basis point reduction to my recommended ROE of
19 9.50%, making the Tariff D.R. and Tariff E.S. ROE equal to 9.40%.

20 **IV. RESPONSE TO KENTUCKY POWER TESTIMONY**

21 **Q. Have you reviewed the Direct Testimony of Mr. McKenzie?**

²⁷ Commission Order in Case No. 2024-00354, page 51, dated October 2, 2025.

1 A. Yes.

2 **Q. Please summarize the results of Mr. McKenzie's ROE analyses.**

3 A. Mr. McKenzie summarized his ROE results on his Exhibit AMM-2. He used five
4 methods to estimate the ROE for KPC: the DCF model, the CAPM, the Empirical
5 CAPM ("ECPAM"), the Utility Risk Premium method, and the Expected Earnings
6 method. His average DCF results ranged from 9.1% to 10.8%. His CAPM results
7 ranged from 10.5% to 11.0%. His ECAPM results ranged from 10.9% to 11.4%.
8 His Utility Risk Premium model yielded 10.7%. Finally, his Expected Earnings
9 method produced an 11.1% ROE.

10 Exhibit AMM-2 also presents Mr. McKenzie's recommended range of
11 10.0% - 11.0%. This midpoint of this range is 10.5%, which is Mr. McKenzie's
12 ROE recommendation for KPC. KPC's requested ROE in this case of 10.0% is at
13 the low end of Mr. McKenzie's range.

14 **Q. Please summarize your conclusions with respect to his testimony and return**
15 **on equity recommendation.**

16 A. Mr. McKenzie's recommended ROE range is overstated. I will present my critique
17 of his approaches in the following subsections of my testimony.

18 **DCF Model**

19 **Q. Briefly summarize Mr. McKenzie's approach to the DCF model.**

20 A. Mr. McKenzie used several sources of growth rate forecasts, which included IBES,
21 Zacks, and Value Line as well as an estimate of sustainable growth. I agree to some

1 extent with Mr. McKenzie's use of analysts' forecasts for growth, although I did
2 not use the sustainable growth calculation.

3 In his Exhibit AMM-5, page 3 Mr. McKenzie adjusted his DCF ROE results
4 by excluding certain company ROE results that in his view were either too low or
5 too high. The excluded low ROE results ranged from 5.9% to 7.5%. The excluded
6 high ROE results ranged from 16.1% to 20.4%. After making these exclusions, his
7 resulting average DCF range was 9.1% to 10.8% and his midpoint DCF range was
8 9.9% to 11.4%.

9 **Q. Please comment on Mr. McKenzie's approach to formulating his DCF**
10 **recommendation to the Commission.**

11 A. Mr. McKenzie conducted a biased approach in formulating his DCF
12 recommendations. He applied a test for excluding ROE results that, in his view,
13 were too low but also included ROE results that are still very high. Mr. McKenzie
14 excluded ROE estimates above 13.1%, but did not provide any analysis or
15 justification as to why that high end estimate was used. To his credit, Mr.
16 McKenzie did exclude excessive ROE values that I mentioned earlier.

17 Based on my review of commission-allowed ROEs, one could plausibly
18 argue that ROEs over 11.0% are too high as well. The average commission-allowed
19 ROE for vertically integrated utilities was 9.84% in 2024 and 9.71% for the first
20 nine months of 2025. These recent ROEs are far below 11.0%. My review of
21 commission-allowed ROEs contained in Mr. McKenzie's Exhibit AMM-9 revealed
22 the following:

- 2003 was the last year that allowed ROEs were near 11.0% (10.96%). The average utility bond yield in that year was 6.61%. The current October 2025 average utility bond yield of 5.53% is 108 basis points, or 1.08%, lower.
- The last average commission-allowed return near 12% was in 1992 (12.09%).. In 1992, the average utility bond yield was 8.57%. Compared to the October 2025 utility bond yield of 5.53%, the 1992 yield is 304 basis points, or 3.05% higher than the current yield.

Altogether, Mr. McKenzie excluded eleven ROE results, eight being too low and three being too high. Thirteen ROE results were included that were 11.0% or above.

Rather than simply excluding individual low-end DCF results and keeping implausibly high results, I recommend that the median be used as an alternative measure of central tendency. The median is not affected by extremely high or low ROE results but instead represents the middle value of the data set. If there are concerns about results that are either too high or too low, the median may be used as an additional reference for the investor required ROE. This is the approach I took in my DCF analyses, which uses the proxy group average and median growth rates.

Q. Did Mr. McKenzie consider forecasted dividend growth from Value Line?

A. No, he did not. I demonstrated in Section III of my testimony that current consensus analysts' forecasts from S&P Capital IQ and Zacks are unsustainable in the long run. At this time, it is of critical importance to consider and include lower and more

1 reasonable dividend growth forecasts from Value Line to at least partially offset the
2 excessive earnings growth forecasts from S&P Capital IQ and Zacks. Omitting the
3 Value Line dividend growth forecast and solely relying on earnings growth
4 forecasts will lead to overstated DCF ROE results.

5 **CAPM and ECAPM**

6 **Q. Beginning on page 51 of his Direct Testimony, Mr. McKenzie described the**
7 **Empirical CAPM ("ECAPM") analysis he employed as an alternative to the**
8 **traditional CAPM. Is this a reasonable method to use to estimate the investor**
9 **required ROE for KPC?**

10 A. No. The ECAPM is designed to account for the possibility that the CAPM
11 understates the return on equity for companies with betas less than 1.0. Mr.
12 McKenzie explained the basis for this idea on pages 51 through 53 of his Direct
13 Testimony and how he applied the adjustment to his CAPM data based on the
14 formula included in *New Regulatory Finance* by Dr. Roger Morin.

15 The argument that an adjustment factor is needed to “correct” the CAPM
16 results for companies with betas less than 1.0 is further evidence of the lack of
17 accuracy inherent in the CAPM itself and with beta in particular, as I pointed out
18 earlier in my Direct Testimony. The ECAPM adjustment also suggests that
19 published betas by such sources as Value Line are incorrect and that investors
20 should not rely on them in formulating their estimates using the CAPM. In fact,
21 Mr. McKenzie testified on page 49, lines 11 through 12 of his Direct Testimony
22 that in his experience Value Line is “the most widely referenced source for beta in

1 regulatory proceedings.” Finally, although Mr. McKenzie cited the source of the
2 ECAPM formula he used, he provided no evidence that investors favor this version
3 of the ECAPM over the standard CAPM.

4 **Q. Please continue your evaluation of the results of Mr. McKenzie’s CAPM and**
5 **ECAPM analysis.**

6 A. I disagree with Mr. McKenzie’s general formulation of the CAPM and ECAPM
7 and in particular with his estimate of the expected market return. He estimated the
8 market return portion of the CAPM and ECAPM by estimating the current market
9 return for dividend paying stocks in the S&P 500. The market return portion of the
10 CAPM should represent the most comprehensive estimate of the total return for all
11 investment alternatives, not just a small subset of publicly traded stocks that pay
12 dividends. In practice, of course, finding such an estimate is difficult and is one of
13 the thornier problems in estimating an accurate ROE when using the CAPM.

14 **Q. Did Mr. McKenzie overstate the expected market return component of the**
15 **CAPM and ECAPM.**

16 A. In my opinion, he did. A major problem with Mr. McKenzie’s CAPM analysis is
17 the sole reliance on a forward-looking market return for the dividend paying firms
18 from the S&P 500. The projected market return of 12.0% is overstated due to
19 reliance on an average projected growth rate of 10.3% that is unsustainable in the
20 long run.

21 This projected growth rate is unsustainably high in that it vastly exceeds
22 both the historical capital appreciation for the S&P 500 as well as historical and
23 projected GDP growth rates. Kroll’s historical analysis shows that the arithmetic

1 average capital appreciation for the S&P 500 was 7.9% for the historical period
2 1926 to 2022.²⁸ Geometric, or compound growth was 6.1%. This historical
3 experience stands in stark contrast to Mr. McKenzie's average forecasted growth
4 rate of 10.3%.

5 Mr. McKenzie's unsustainable earnings growth forecast is not supportable
6 when one further considers both historical and forecasted GDP growth for the U.S.
7 Based on data from the Bureau of Economic Analysis, U.S. Department of
8 Commerce, I calculated that the compound yearly growth rate for U.S. GDP from
9 1929 - 2024 was 6.1%. It is noteworthy that this growth rate matched the historical
10 compound growth rate for capital appreciation for the S&P 500 of 6.1%.

11 Regarding forecasts of GDP, projections that I referenced in Section II of
12 my testimony show even lower forecasted GDP growth than the historical average
13 I calculated. For example, the Fed projections called for longer-run real GDP
14 growth of 1.8% and PCE inflation of 2.0%. This translates into forecasted nominal
15 GDP of 3.80%. The Congressional Budget Office also projects growth in real GDP
16 through 2035 of 1.80% and CPI inflation of 2.0%. If we assume forecasted long
17 run nominal GDP growth of around 4.0%, then the S&P 500 constant growth rate
18 of 10.3% simply cannot be sustained over the long run. Using this growth rate will
19 inevitably lead to an overstatement in the long-run expected market return, the
20 associated MRP, and the CAPM ROE result.

²⁸ *Summary Statistics of Annual Total Returns, Income Returns, and Capital Appreciation Returns of Basic U.S. Asset Classes, 1926 - 2022, Cost of Capital Navigator: U.S. Cost of Capital Module.*

1 I cited sources in the Conclusions and Recommendations portion of Section
2 III that caution against using growth rates in the constant growth DCF model that
3 exceed long-run growth in the economy. Further, in *Cost of Capital*, Pratt and
4 Grabowski noted the following with respect to growth rates that significantly
5 exceed growth in GDP:

6 The growth rate assumed in calculating the terminal value is a
7 compound growth rate *in perpetuity*, which is a very long time. At
8 a growth rate of 20% compounded annually, the company's revenues
9 would soon exceed the gross domestic product (GDP) of the United
10 States and eventually that of the world. Long-term growth rates
11 exceeding the real growth in GDP plus inflation are generally not
12 sustainable. Most analysts use more conservative growth rates in
13 calculating the terminal value. Generally, the long-term growth rate
14 only applies to the existing enterprise or core business net cash
15 flows, consistent with the net cash flow projections in the discounted
16 cash flow method²⁹

17
18 Since the constant growth DCF requires a sustainable long-run growth rate,
19 Mr. McKenzie's projected market return and MRP estimate are overstated and
20 should be rejected.

21 **Q. Did Mr. McKenzie consider the MRPs from sources that you presented in your**
22 **testimony?**

23 A. No. As I cited earlier in my Direct Testimony, Kroll and KMPG currently
24 recommend an MRP of 5.00%–5.25%, the average of the Damodaran MRPs is
25 4.18%, and the historical MRPs range from 5.31% to 7.31%. The U.S. MRP was
26 5.5% from the IESE Business School Survey for 2025. In comparison, Mr.
27 McKenzie only used a single flawed source for his MRP of 7.2%. The weight of

²⁹ Shannon Pratt and Roger Grabowski, *Cost of Capital* 1195 (Wiley, 5th ed.)

1 the evidence I examined shows that Mr. McKenzie's MRP is near the high end of
2 the range of MRP estimates I presented in my CAPM analyses.

3 Finally, I note that in the authoritative corporate finance textbook by
4 Brealey, Myers, Allen and Edmans, the authors stated: "We have no official
5 position on the issue, but we believe that a range of 5 to 8 percent is reasonable for
6 the risk premium in the United States."³⁰ Mr. McKenzie's recommended MRP is
7 near the top of this range.

8 **Q. Beginning on page 49 of his Direct Testimony, Mr. McKenzie explained that**
9 **he incorporated a size adjustment to his CAPM and ECAPM results. This**
10 **increased his average CAPM and ECAPM results by 50 basis points, or 0.50%.**
11 **Is this size adjustment appropriate?**

12 A. No. The data that Mr. McKenzie relied upon to make this adjustment came from
13 the Kroll 2024 Decile Size Study Data Exhibits in the Cost of Capital Navigator.
14 The groups of companies from which he took this significant upward adjustment to
15 his CAPM and ECAPM results contain many unregulated companies. Further, all
16 of the size adjustments used by Mr. McKenzie came from decile groups that had
17 average betas ranging from 0.92 to 1.18³¹. These betas are significantly greater
18 than my proxy group average beta of 0.73, indicating that the decile groups that Mr.
19 McKenzie used to make his size adjustments are riskier, at least as measured by
20 beta. There is no evidence I am aware of to suggest that the size premium used by

³⁰ Richard A. Brealey, Stewart C. Myers, Franklin Allen and Alex Edmans, *Principles of Corporate Finance*, page 189; McGraw-Hill/Irwin, 14th Edition, 2023.

³¹ Kroll, *CRSP Deciles Size Study Data*, Cost of Capital Navigator.

1 Mr. McKenzie applies to regulated utility companies, which on average are quite
2 different from the group of companies included in the Kroll research on size
3 premiums. I recommend that the Commission reject Mr. McKenzie's size
4 premium in the CAPM and ECAPM ROE.

5 **Q. Has the Commission rejected size adjustments in the past?**

6 A. Yes. Recently, in its Order in Case No. 2024-00354 the Commission stated that "it
7 continues to reject the use of ... flotation cost adjustments, financial risk
8 adjustments and size adjustments in the ROE analyses."³²

9 **Q. On page 51, lines 3 through 7 of his Direct Testimony Mr. McKenzie**
10 **distinguished his CAPM size adjustment from a "general size risk premium"**
11 **applied to KPC based on its relative size. Please comment on this distinction.**

12 A. I agree that Mr. McKenzie did not make an explicit size adjustment to his
13 recommended ROE for KPC based on its size relative to the proxy group.
14 Nevertheless, my critique of size adjustments still stands. His CAPM size
15 adjustment is still based on the relative size of the companies in the proxy group
16 which in turn raises his CAPM and ECAPM ROEs for KPC and, thus, should be
17 rejected by the Commission.

18 **Utility Risk Premium**

19 **Q. Please summarize Mr. McKenzie's utility risk premium approach.**

³² Case No. 2024-00354, October 2, 2025, Duke Energy Kentucky, Inc., page 51.

1 A. Mr. McKenzie developed an historical risk premium using Commission-allowed
2 returns for regulated utility companies from 1974 through 2024. He also used
3 regression analysis to estimate the value of the inverse relationship between utility
4 bond yields and risk premiums during that period. The results of this analysis are
5 summarized on page 1 of Exhibit AMM-9. Mr. McKenzie added the adjusted risk
6 premium of 4.68% to the average Baa utility bond yield of 6.06% to obtain the
7 utility risk premium ROE of 10.74%.

8 **Q. Please respond to Mr. McKenzie's risk premium analysis.**

9 A. Generally, the bond yield plus risk premium approach is imprecise and can only
10 provide very general guidance on the current authorized ROE for a regulated
11 electric utility. Risk premiums can change substantially over time and with varying
12 risk perceptions of investors. As such, this approach is a "blunt instrument", if you
13 will, for estimating the ROE in regulated proceedings. In my view, a properly
14 formulated DCF model using current stock prices and growth forecasts is far more
15 reliable and accurate than the bond yield plus risk premium approach, which relies
16 on an historical risk premium analysis over a certain period of time.

17 This analysis also assumes that investor required ROEs are
18 deterministically based on average commission-allowed ROEs and the risk
19 premium relationship posited by Mr. McKenzie's regression analysis. Mr.
20 McKenzie presented no evidence that investors in public utility stocks adopt this
21 mechanistic approach to their expected returns.

22 Finally, I tested Mr. McKenzie's analysis to see how his risk premium
23 equation matched up with actual historical ROE results. For 2024, the average

1 commission-allowed ROE was 9.78% according to the data Mr. McKenzie
2 presented on AMM-9, page 2. The average utility bond yield for 2024 was 5.57%.
3 Using Mr. McKenzie's formula shown on Exhibit AMM-9, page 1, the predicted
4 risk premium ROE is shown on Table 3.

Table 3	
2024 Predicted Risk Premium ROE	
1 Avg. Yield over Study Period	7.74%
2 Average 2024 Utility Bond Yield	<u>5.57%</u>
3 Change in Bond Yield (Line 2 minus Line 1)	-2.17%
4 Risk Premium/Interest Rate Relationship	<u>-0.4212</u>
5 Adjustment to Average Risk Premium (Line 4 times Line 3)	0.91%
6 Average Risk Premium over Study Period	3.90%
7 Adjusted Risk Premium (Line 6 plus Line 5)	4.81%
8 Average 2024 Utility Bond Yield	5.57%
9 Adjusted Equity Risk Premium	<u>4.81%</u>
10 Predicted Risk Premium ROE (Line 8 plus Line 9)	10.38%

5
6 Mr. McKenzie's predicted 2024 ROE is 10.38% compared to the actual
7 2024 average ROE of 9.78%, an excess ROE of 60 basis points, or 0.60%.
8 Obviously, applying Mr. McKenzie's formula could result in highly inaccurate and
9 inflated ROEs.

10 **Expected Earnings Approach**

11 **Q. Beginning on page 56 of his Direct Testimony, Mr. McKenzie presented an**
12 **expected earnings approach based on expected returns on equity using Value**
13 **Line's rates of return on common equity for the companies in the proxy group**
14 **over its forecast horizon. Is this a reasonable method for estimating the**
15 **current required return on equity in this proceeding?**

1 A. No. Forecasted returns from Value Line will not be as reliable or as accurate as a
2 properly specified DCF analysis using current stock prices. Through current stock
3 prices, investors reveal their return requirements through what they are willing to
4 pay in the marketplace for the stocks of regulated electric utilities. Using Value
5 Line's projected returns for a time period several years into the future is highly
6 speculative and I recommend that the Commission give this approach no weight.

7 In addition, Mr. McKenzie overstated the forecasted returns from Value
8 Line by making an adjustment to the average shares outstanding over the forecast
9 period. It should be kept in mind that Value Line's three-year forecasted period
10 already represents an average of shares and ROEs over the period, rendering Mr.
11 McKenzie's share adjustment both unnecessary and incorrect. Further, it is highly
12 unlikely that an investor using Value Line's data would make the adjustment to
13 each utility's forecasted common shares outstanding that Mr. McKenzie proposed
14 in order to calculate a projected ROE. Subtracting out Mr. McKenzie's adjustment
15 results in an average forecasted ROE of 10.8%. However, this number is still
16 grossly in excess of the more reasonable and market based DCF results I presented
17 earlier in my Direct Testimony. It also significantly exceeds the results from my
18 CAPM analyses as well as average commission-allowed ROEs so far in 2025.

19 **Flotation Costs**

20 **Q. Beginning on page 59 of his Direct Testimony, Mr. McKenzie presented**
21 **arguments in favor of a flotation cost adjustment, although he did not**
22 **explicitly add flotation costs to his ROE recommendation. Should the**

1 **Commission consider including a flotation cost adjustment to KPC's allowed**
2 **ROE in this proceeding?**

3 A. No. A flotation cost adjustment attempts to recognize and collect the costs of
4 issuing common stock. Such costs typically include legal, accounting, and printing
5 costs as well as well as broker fees and discounts.

6 In my opinion, it is likely that flotation costs are already accounted for in
7 current stock prices and that adding an adjustment for flotation costs amounts to
8 double counting. A DCF model using current stock prices should already account
9 for investor expectations regarding the collection of flotation costs. Multiplying
10 the dividend yield by a 4% flotation cost adjustment, for example, essentially
11 assumes that the current stock price is wrong and that it must be adjusted downward
12 to increase the dividend yield and the resulting cost of equity. This is an appropriate
13 assumption regarding investor expectations. Current stock prices most likely
14 already account for flotation costs, to the extent that such costs are even accounted
15 for by investors.

16 Finally, as I stated earlier the Commission has rejected flotation cost
17 adjustments in the past. Mr. McKenzie presented no new information in his Direct
18 Testimony that would change this practice.

19 **Non-Utility Benchmark**

20 **Q. Beginning of page 63 of his Direct Testimony, Mr. McKenzie presented the**
21 **results of a low-risk non-utility DCF model. Is it appropriate to use a group**
22 **of unregulated companies to estimate a fair return on equity for KPC?**

1 A. No. Mr. McKenzie's use of unregulated non-utility companies to estimate a fair
2 rate of return for KPC is completely inappropriate and should be rejected by the
3 Commission.

4 Utilities have protected markets, e.g. service territories, and may increase
5 the prices they charge in the face of falling demand or loss of customers. This is
6 contrary to competitive, unregulated companies who often lower their prices when
7 demand for their products decline. Obviously, the non-utility companies face risks
8 that a lower risk electric company like KPC does not face. As a consequence, non-
9 utility companies will likely have higher required returns from their shareholders.
10 The average DCF results for Mr. McKenzie's non-utility group range from 10.1%
11 - 10.5%. The midpoint results range from 11.4% - 11.7%. The midpoint results
12 and the top end of the average ROE results are higher than my proxy group DCF
13 results and higher than my average and midpoint CAPM results as well.

14 In addition, Mr. McKenzie also applied filters to screen out ROE results that
15 he considered to be too low or too high. Indeed, Mr. McKenzie eliminated 35 ROE
16 results from his non-utility benchmark ROE analysis. Including all of his ROE
17 results increases the group average ROE range to 10.8% to 11.8%.

18 Although Mr. McKenzie stated that he did not directly consider the non-
19 utility group DCF results in arriving at his recommended ROE range, he stated that
20 it was "a relevant consideration in evaluating a fair return for the Company's
21 electric utility operations."³³ I disagree. The relevant consideration should be the

³³ McKenzie Direct Testimony, page 63, lines 9 – 13.

1 DCF and CAPM results for the proxy group that I employed in my analysis.

2 **Q. Does this complete your Direct Testimony?**

3 A. Yes.

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

**ELECTRONIC APPLICATION OF KENTUCKY)
POWER COMPANY FOR (1) A GENERAL)
ADJUSTMENT OF ITS RATES FOR)
ELECTRIC SERVICE; (2) APPROVALS OF)
TARIFFS AND RIDERS; (3) APPROVAL OF) CASE NO. 2025-00257
CERTAIN REGULATORY AND)
ACCOUNTING TREATMENTS; AND (4) ALL)
OTHER REQUIRED APPROVALS AND)
RELIEF)**

EXHIBITS

OF

RICHARD A. BAUDINO

**ON BEHALF OF THE
OFFICE OF THE ATTORNEY GENERAL OF THE COMMONWEALTH OF KENTUCKY AND
KENTUCKY INDUSTRIAL UTILITY CUSTOMERS**

**J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA**

NOVEMBER 17, 2025

RESUME OF RICHARD A. BAUDINO

EDUCATION

New Mexico State University, M.A.

Major in Economics

Minor in Statistics

New Mexico State University, B.A.

Economics

English

Forty-two years of experience in utility ratemaking and the application of principles of economics to the regulation of electric, gas, and water utilities. Broad based experience in revenue requirement analysis, cost of capital, rate of return, cost and revenue allocation, and rate design.

REGULATORY TESTIMONY

Preparation and presentation of expert testimony in the areas of:

Cost of Capital for Electric, Gas and Water Companies

Electric, Gas, and Water Utility Cost Allocation and Rate Design

Revenue Requirements

Gas and Electric industry restructuring and competition

Fuel cost auditing

Ratemaking Treatment of Generating Plant Sale/Leasebacks

RESUME OF RICHARD A. BAUDINO

EXPERIENCE

1989 to

Present: Kennedy and Associates: **Director of Consulting, Consultant** - Responsible for consulting assignments in revenue requirements, rate design, cost of capital, economic analysis of generation alternatives, electric and gas industry restructuring/competition and water utility issues.

1982 to

1989: New Mexico Public Service Commission Staff: **Utility Economist** - Responsible for preparation of analysis and expert testimony in the areas of rate of return, cost allocation, rate design, finance, phase-in of electric generating plants, and sale/leaseback transactions.

CLIENTS SERVED

Regulatory Commissions

Louisiana Public Service Commission
Georgia Public Service Commission
New Mexico Public Service Commission

Other Clients and Client Groups

Ad Hoc Committee for a Competitive
Electric Supply System
Air Products and Chemicals, Inc.
Arkansas Electric Energy Consumers
Arkansas Gas Consumers
AK Steel
Armco Steel Company, L.P.
Aqua Large Users Group
Assn. of Business Advocating
Tariff Equity
Atmos Cities Steering Committee
Canadian Federation of Independent Businesses
CF&I Steel, L.P.
Cities of Midland, McAllen, and Colorado City
Cities Served by Texas-New Mexico Power Co.
Cities Served by AEP Texas
City of New York
Climax Molybdenum Company
Connecticut Industrial Energy Consumers
Crescent City Power Users Group
Cripple Creek & Victor Gold Mining Co.
Dearborn Industrial Generation, LLC
General Electric Company
Holcim (U.S.) Inc.
IBM Corporation
Industrial Energy Consumers
Kentucky Industrial Utility Consumers
Kentucky Office of the Attorney General
Lexington-Fayette Urban County Government
Large Electric Consumers Organization
Newport Steel
North Carolina Attorney General's Office
Northwest Arkansas Gas Consumers
Maryland Energy Group

Occidental Chemical
Peoples Industrial Intervenors
PSI Industrial Group
Large Power Intervenors (Minnesota)
Tyson Foods
West Virginia Energy Users Group
The Commercial Group
Wisconsin Industrial Energy Group
South Florida Hospital and Health Care Assn.
PP&L Industrial Customer Alliance
Philadelphia Area Industrial Energy Users Gp.
Philadelphia Large Users Group
West Penn Power Intervenors
Duquesne Industrial Intervenors
Met-Ed Industrial Users Gp.
Penelec Industrial Customer Alliance
Penn Power Users Group
Columbia Industrial Intervenors
U.S. Steel & Univ. of Pittsburg Medical Ctr.
Multiple Intervenors
Maine Office of Public Advocate
Missouri Office of Public Counsel
University of Massachusetts - Amherst
WCF Hospital Utility Alliance
West Travis County Public Utility Agency
Steering Committee of Cities Served by Oncor
Steering Committee of Cities Served by CoServ Gas, Ltd.
Utah Office of Consumer Services
Healthcare Council of the National Capital Area
Vermont Department of Public Service
South Carolina Office of Regulatory Staff
Texas Industrial Energy Consumers

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdct.	Party	Utility	Subject
10/83	1803, 1817	NM	New Mexico Public Service Commission	Southwestern Electric Coop.	Rate design.
11/84	1833	NM	New Mexico Public Service Commission Palo Verde	El Paso Electric Co.	Service contract approval, rate design, performance standards for nuclear generating system
1983	1835	NM	New Mexico Public Service Commission	Public Service Co. of NM	Rate design.
1984	1848	NM	New Mexico Public Service Commission	Sangre de Cristo Water Co.	Rate design.
02/85	1906	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
09/85	1907	NM	New Mexico Public Service Commission	Jornada Water Co.	Rate of return.
11/85	1957	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
04/86	2009	NM	New Mexico Public Service Commission	El Paso Electric Co.	Phase-in plan, treatment of sale/leaseback expense.
06/86	2032	NM	New Mexico Public Service Commission	El Paso Electric Co.	Sale/leaseback approval.
09/86	2033	NM	New Mexico Public Service Commission	El Paso Electric Co.	Order to show cause, PVNGS audit.
02/87	2074	NM	New Mexico Public Service Commission	El Paso Electric Co.	Diversification.
05/87	2089	NM	New Mexico Public Service Commission	El Paso Electric Co.	Fuel factor adjustment.
08/87	2092	NM	New Mexico Public Service Commission	El Paso Electric Co.	Rate design.
10/87	2146	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Financial effects of restructuring, reorganization.
07/88	2162	NM	New Mexico Public Service Commission	El Paso Electric Co.	Revenue requirements, rate design, rate of return.

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdct.	Party	Utility	Subject
01/89	2194	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Economic development.
1/89	2253	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Financing.
08/89	2259	NM	New Mexico Public Service Commission	Homestead Water Co.	Rate of return, rate design.
10/89	2262	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Rate of return.
09/89	2269	NM	New Mexico Public Service Commission	Ruidoso Natural Gas Co.	Rate of return, expense from affiliated interest.
12/89	89-208-TF	AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Rider M-33.
01/90	U-17282	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
09/90	90-158	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Cost of equity.
09/90	90-004-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Cost of equity, transportation rate.
12/90	U-17282 Phase IV	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
04/91	91-037-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Transportation rates.
12/91	91-410-EL-AIR	OH	Air Products & Chemicals, Inc., Armco Steel Co., General Electric Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Cost of equity.
05/92	910890-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Cost of equity, rate of return.
09/92	92-032-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost of equity, rate of return, cost-of-service.
09/92	39314	ID	Industrial Consumers for Fair Utility Rates	Indiana Michigan Power Co.	Cost of equity, rate of return.

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdic.	Party	Utility	Subject
09/92	92-009-U	AR	Tyson Foods	General Waterworks	Cost allocation, rate design.
01/93	92-346	KY	Newport Steel Co.	Union Light, Heat & Power Co.	Cost allocation.
01/93	39498	IN	PSI Industrial Group	PSI Energy	Refund allocation.
01/93	U-10105	MI	Association of Businesses Advocating Tariff Equality (ABATE)	Michigan Consolidated Gas Co.	Return on equity.
04/93	92-1464-EL-AIR	OH	Air Products and Chemicals, Inc., Armco Steel Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Return on equity.
09/93	93-189-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Transportation service terms and conditions.
09/93	93-081-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost-of-service, transportation rates, rate supplements; return on equity; revenue requirements.
12/93	U-17735	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	Historical reviews; evaluation of economic studies.
03/94	10320	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Co.	Trimble County CWIP revenue refund.
4/94	E-015/GR-94-001	MN	Large Power Intervenor	Minnesota Power Co.	Evaluation of the cost of equity, capital structure, and rate of return.
5/94	R-00942993	PA	PG&W Industrial Intervenor	Pennsylvania Gas & Water Co.	Analysis of recovery of transition costs.
5/94	R-00943001	PA	Columbia Industrial Intervenor	Columbia Gas of Pennsylvania charge proposals.	Evaluation of cost allocation, rate design, rate plan, and carrying
7/94	R-00942986	PA	Armco, Inc., West Penn Power Industrial Intervenor	West Penn Power Co.	Return on equity and rate of return.
7/94	94-0035-E-42T	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Return on equity and rate of return.

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdic.	Party	Utility	Subject
8/94	8652	MD	Westvaco Corp. Co.	Potomac Edison	Return on equity and rate of return.
9/94	930357-C	AR	West Central Arkansas Gas Consumers	Arkansas Oklahoma Gas Corp.	Evaluation of transportation service.
9/94	U-19904	LA	Louisiana Public Service Commission	Gulf States Utilities	Return on equity.
9/94	8629	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Transition costs.
11/94	94-175-U	AR	Arkansas Gas Consumers	Arkla, Inc.	Cost-of-service, rate design, rate of return.
3/95	RP94-343- 000	FERC	Arkansas Gas Consumers	NorAm Gas Transmission	Rate of return.
4/95	R-00943271	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Return on equity.
6/95	U-10755	MI	Association of Businesses Advocating Tariff Equity	Consumers Power Co.	Revenue requirements.
7/95	8697	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Cost allocation and rate design.
8/95	95-254-TF U-2811	AR	Tyson Foods, Inc.	Southwest Arkansas Electric Cooperative	Refund allocation.
10/95	ER95-1042 -000	FERC	Louisiana Public Service Commission	Systems Energy Resources, Inc.	Return on Equity.
11/95	I-940032	PA	Industrial Energy Consumers of Pennsylvania	State-wide - all utilities	Investigation into Electric Power Competition.
5/96	96-030-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Revenue requirements, rate of return and cost of service.
7/96	8725	MD	Maryland Industrial Group	Baltimore Gas & Electric Co., Potomac Electric Power Co. and Constellation Energy Corp.	Return on Equity.
7/96	U-21496	LA	Louisiana Public Service Commission	Central Louisiana Electric Co.	Return on equity, rate of return.
9/96	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdicit.	Party	Utility	Subject
1/97	RP96-199-000	FERC	The Industrial Gas Users Conference	Mississippi River Transmission Corp.	Revenue requirements, rate of return and cost of service.
3/97	96-420-U	AR	West Central Arkansas Gas Corp.	Arkansas Oklahoma Gas Corp.	Revenue requirements, rate of return, cost of service and rate design.
7/97	U-11220	MI	Association of Business Advocating Tariff Equity	Michigan Gas Co. and Southeastern Michigan Gas Co.	Transportation Balancing Provisions.
7/97	R-00973944	PA	Pennsylvania American Water Large Users Group	Pennsylvania-American Water Co.	Rate of return, cost of service, revenue requirements.
3/98	8390-U	GA	Georgia Natural Gas Group and the Georgia Textile Manufacturers Assoc.	Atlanta Gas Light	Rate of return, restructuring issues, unbundling, rate design issues.
7/98	R-00984280	PA	PG Energy, Inc. Intervenor	PGE Industrial	Cost allocation.
8/98	U-17735	LA	Louisiana Public Service Commission	Cajun Electric Power Cooperative	Revenue requirements.
10/98	97-596	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric Co.	Return on equity, rate of return.
10/98	U-23327	LA	Louisiana Public Service Commission	SWEPCO, CSW and AEP	Analysis of proposed merger.
12/98	98-577	ME	Maine Office of the Public Advocate	Maine Public Service Co.	Return on equity, rate of return.
12/98	U-23358	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity, rate of return.
3/99	98-426	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co	Return on equity.
3/99	99-082	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Return on equity.
4/99	R-984554	PA	T. W. Phillips Users Group	T. W. Phillips Gas and Oil Co.	Allocation of purchased gas costs.
6/99	R-0099462	PA	Columbia Industrial Intervenor	Columbia Gas of Pennsylvania	Balancing charges.
10/99	U-24182	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Cost of debt.

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdic.	Party	Utility	Subject
10/99	R-00994782	PA	Peoples Industrial Intervenors	Peoples Natural Gas Co.	Restructuring issues.
10/99	R-00994781	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Restructuring, balancing charges, rate flexing, alternate fuel.
01/00	R-00994786	PA	UGI Industrial Intervenors	UGI Utilities, Inc.	Universal service costs, balancing, penalty charges, capacity Assignment.
01/00	8829	MD	Maryland Industrial Gr.	Baltimore Gas & Electric Co.	Revenue requirements, cost allocation, rate design.
02/00	R-00994788	PA	Penn Fuel Transportation	PFG Gas, Inc., and	Tariff charges, balancing provisions.
05/00	U-17735	LA	Louisiana Public Service Comm.	Louisiana Electric Cooperative	Rate restructuring.
07/00	2000-080	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric Co.	Cost allocation.
07/00	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket E)	LA	Louisiana Public Service Commission	Southwestern Electric Power Co.	Stranded cost analysis.
09/00	R-00005654	PA	Philadelphia Industrial And Commercial Gas Users Group.	Philadelphia Gas Works	Interim relief analysis.
10/00	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket B)	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Restructuring, Business Separation Plan.
11/00	R-00005277 (Rebuttal)	PA	Penn Fuel Transportation Customers	PFG Gas, Inc. and North Penn Gas Co.	Cost allocation issues.
12/00	U-24993	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
03/01	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Stranded cost analysis.
04/01	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket B) (Addressing Contested Issues)	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Restructuring issues.

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdic.	Party	Utility	Subject
04/01	R-00006042	PA	Philadelphia Industrial and Commercial Gas Users Group	Philadelphia Gas Works	Revenue requirements, cost allocation and tariff issues.
11/01	U-25687	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
03/02	14311-U	GA	Georgia Public Service Commission	Atlanta Gas Light	Capital structure.
08/02	2002-00145	KY	Kentucky Industrial Utility Customers	Columbia Gas of Kentucky	Revenue requirements.
09/02	M-00021612	PA	Philadelphia Industrial And Commercial Gas Users Group	Philadelphia Gas Works	Transportation rates, terms, and conditions.
01/03	2002-00169	KY	Kentucky Industrial Utility Customers	Kentucky Power	Return on equity.
02/03	02S-594E	CO	Cripple Creek & Victor Gold Mining Company	Aquila Networks – WPC	Return on equity.
04/03	U-26527	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
10/03	CV020495AB	GA	The Landings Assn., Inc.	Utilities Inc. of GA	Revenue requirement & overcharge refund
03/04	2003-00433	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric	Return on equity, Cost allocation & rate design
03/04	2003-00434	KY	Kentucky Industrial Utility Customers	Kentucky Utilities	Return on equity
4/04	04S-035E	CO	Cripple Creek & Victor Gold Mining Company, Goodrich Corp., Holcim (U.S.) Inc., and The Trane Co.	Aquila Networks – WPC	Return on equity.
9/04	U-23327, Subdocket B	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Fuel cost review
10/04	U-23327 Subdocket A	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on Equity
06/05	050045-EI	FL	South Florida Hospital and Health Care Assoc.	Florida Power & Light Co.	Return on equity
08/05	9036	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Revenue requirement, cost allocation, rate design, Tariff issues.
01/06	2005-0034	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Return on equity.

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdic.	Party	Utility	Subject
03/06	05-1278-E-PC-PW-42T	WV	West Virginia Energy Users Group	Appalachian Power Company	Return on equity.
04/06	U-25116 Commission	LA	Louisiana Public Service	Entergy Louisiana, LLC	Transmission Issues
07/06	U-23327 Commission	LA	Louisiana Public Service	Southwestern Electric Power Company	Return on equity, Service quality
08/06	ER-2006-0314	MO	Missouri Office of the Public Counsel	Kansas City Power & Light Co.	Return on equity, Weighted cost of capital
08/06	06S-234EG	CO	CF&I Steel, L.P. & Climax Molybdenum	Public Service Company of Colorado	Return on equity, Weighted cost of capital
01/07	06-0960-E-42T Users Group	WV	West Virginia Energy	Monongahela Power & Potomac Edison	Return on Equity
01/07	43112	AK	AK Steel, Inc.	Vectren South, Inc.	Cost allocation, rate design
05/07	2006-661	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric	Return on equity, weighted cost of capital.
09/07	07-07-01	CT	Connecticut Industrial Energy Consumers	Connecticut Light & Power	Return on equity, weighted cost of capital
10/07	05-UR-103	WI	Wisconsin Industrial Energy Group, Inc.	Wisconsin Electric Power Co.	Return on equity
11/07	29797	LA	Louisiana Public Service Commission	Cleco Power :LLC & Southwestern Electric Power	Lignite Pricing, support of settlement
01/08	07-551-EL-AIR	OH	Ohio Energy Group	Ohio Edison, Cleveland Electric, Toledo Edison	Return on equity
03/08	07-0585, 07-0585, 07-0587, 07-0588, 07-0589, 07-0590, (consol.)	IL	The Commercial Group	Ameren	Cost allocation, rate design
04/08	07-0566	IL	The Commercial Group	Commonwealth Edison	Cost allocation, rate design
06/08	R-2008-2011621	PA	Columbia Industrial Intervenors	Columbia Gas of PA	Cost and revenue allocation, Tariff issues

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdct.	Party	Utility	Subject
07/08	R-2008-2028394	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy	Cost and revenue allocation, Tariff issues
07/08	R-2008-2039634	PA	PPL Gas Large Users Group	PPL Gas	Retainage, LUFG Pct.
08/08	6680-UR-116	WI	Wisconsin Industrial Energy Group	Wisconsin P&L	Cost of Equity
08/08	6690-UR-119	WI	Wisconsin Industrial Energy Group	Wisconsin PS	Cost of Equity
09/08	ER-2008-0318	MO	The Commercial Group	AmerenUE	Cost and revenue allocation
10/08	R-2008-2029325	PA	U.S. Steel & Univ. of Pittsburgh Med. Ctr.	Equitable Gas Co.	Cost and revenue allocation
10/08	08-G-0609	NY	Multiple Intervenors	Niagara Mohawk Power	Cost and Revenue allocation
12/08	27800-U	GA	Georgia Public Service Commission	Georgia Power Company	CWIP/AFUDC issues, Review financial projections
03/09	ER08-1056	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Capital Structure
04/09	E002/GR-08-1065	MN	The Commercial Group	Northern States Power	Cost and revenue allocation and rate design
05/09	08-0532	IL	The Commercial Group	Commonwealth Edison	Cost and revenue allocation
07/09	080677-EI	FL	South Florida Hospital and Health Care Association	Florida Power & Light	Cost of equity, capital structure, Cost of short-term debt
07/09	U-30975	LA	Louisiana Public Service Commission	Cleco LLC, Southwestern Public Service Co.	Lignite mine purchase
10/09	4220-UR-116	WI	Wisconsin Industrial Energy Group	Northern States Power	Class cost of service, rate design
10/09	M-2009-2123945	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities	Smart Meter Plan cost allocation
10/09	M-2009-2123944	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Company	Smart Meter Plan cost allocation
10/09	M-2009-2123951	PA	West Penn Power Industrial Intervenors	West Penn Power	Smart Meter Plan cost allocation
11/09	M-2009-2123948	PA	Duquesne Industrial Intervenors	Duquesne Light Company	Smart Meter Plan cost allocation

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdic.	Party	Utility	Subject
11/09	M-2009-2123950	PA	Met-Ed Industrial Users Group Penelec Industrial Customer Alliance, Penn Power Users Group	Metropolitan Edison, Pennsylvania Electric Co., Pennsylvania Power Co.	Smart Meter Plan cost allocation
03/10	09-1352-E-42T	WV	West Virginia Energy Users Group	Monongahela Power	Return on equity, rate of return Potomac Edison
03/10	E015/GR-09-1151	MN	Large Power Intervenor	Minnesota Power	Return on equity, rate of return
04/10	2009-00459	KY	Kentucky Industrial Utility Consumers	Kentucky Power	Return on equity
04/10	2009-00548 2009-00549	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric, Kentucky Utilities	Return on equity.
05/10	10-0261-E-GI	WV	West Virginia Energy Users Group	Appalachian Power Co./ Wheeling Power Co.	EE/DR Cost Recovery, Allocation, & Rate Design
05/10	R-2009-2149262	PA	Columbia Industrial Intervenor	Columbia Gas of PA	Class cost of service & cost allocation
06/10	2010-00036	KY	Lexington-Fayette Urban County Government	Kentucky American Water Company	Return on equity, rate of return, revenue requirements
06/10	R-2010-2161694	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities	Rate design, cost allocation
07/10	R-2010-2161575	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Return on equity
07/10	R-2010-2161592	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Co.	Cost and revenue allocation
07/10	9230	MD	Maryland Energy Group	Baltimore Gas and Electric	Electric and gas cost and revenue allocation; return on equity
09/10	10-70	MA	University of Massachusetts-Amherst	Western Massachusetts Electric Co.	Cost allocation and rate design
10/10	R-2010-2179522	PA	Duquesne Industrial Intervenor	Duquesne Light Company	Cost and revenue allocation, rate design
11/10	P-2010-2158084	PA	West Penn Power Industrial Intervenor	West Penn Power Co.	Transmission rate design
11/10	10-0699-E-42T	WV	West Virginia Energy Users Group	Appalachian Power Co. & Wheeling Power Co.	Return on equity, rate of Return
11/10	10-0467	IL	The Commercial Group	Commonwealth Edison	Cost and revenue allocation and rate design

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdic.	Party	Utility	Subject
04/11	R-2010-2214415	PA	Central Pen Gas Large Users Group	UGI Central Penn Gas, Inc.	Tariff issues, revenue allocation
07/11	R-2011-2239263	PA	Philadelphia Area Energy Users Group	PECO Energy	Retainage rate
08/11	R-2011-2232243	PA	AK Steel	Pennsylvania-American Water Company	Rate Design
08/11	11AL-151G	CO	Climax Molybdenum	PS of Colorado	Cost allocation
09/11	11-G-0280	NY	Multiple Intervenors	Corning Natural Gas Co.	Cost and revenue allocation
10/11	4220-UR-117	WI	Wisconsin Industrial Energy Group	Northern States Power	Cost and revenue allocation, rate design
02/12	11AL-947E	CO	Climax Molybdenum, CF&I Steel	Public Service Company of Colorado	Return on equity, weighted cost of capital
07/12	120015-EI	FL	South Florida Hospitals and Health Care Association	Florida Power and Light Co.	Return on equity, weighted cost of capital
07/12	12-0613-E-PC	WV	West Virginia Energy Users Group	American Electric Power/APCo	Special rate proposal for Century Aluminum
07/12	R-2012-2290597	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities Corp.	Cost allocation
09/12	05-UR-106	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Class cost of service, cost and revenue allocation, rate design
09/12	2012-00221 2012-00222	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric, Kentucky Utilities	Return on equity.
10/12	9299	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design Cost of equity, weighted cost of capital
10/12	4220-UR-118	WI	Wisconsin Industrial Energy Group	Northern States Power Company	Class cost of service, cost and revenue allocation, rate design
10/12	473-13-0199	TX	Steering Committee of Cities Served by Oncor	Cross Texas Transmission, LLC	Return on equity, capital structure
01/13	R-2012-2321748 et al.	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Cost and revenue allocation
02/13	12AL-1052E	CO	Cripple Creek & Victor Gold Mining, Holcim (US) Inc.	Black Hills/Colorado Electric Utility Company	Cost and revenue allocations
06/13	8009	VT	IBM Corporation	Vermont Gas Systems	Cost and revenue allocation, rate design
07/13	130040-EI	FL	WCF Hospital Utility Alliance	Tampa Electric Co.	Return on equity, rate of return

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdic.	Party	Utility	Subject
08/13	9326	MD	Maryland Energy Group	Baltimore Gas and Electric	Cost and revenue allocation, rate design, special rider
08/13	P-2012-2325034	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities, Corp.	Distribution System Improvement Charge
09/13	4220-UR-119	WI	Wisconsin Industrial Energy Group	Northern States Power Co.	Class cost of service, cost and revenue allocation, rate design
11/13	13-1325-E-PC	WV	West Virginia Energy Users Group	American Electric Power/APCo	Special rate proposal, Felman Production
06/14	R-2014-2406274	PA	Columbia Industrial Intervenor	Columbia Gas of Pennsylvania	Cost and revenue allocation, rate design
08/14	05-UR-107	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Cost and revenue allocation, rate design
10/14	ER13-1508 et al.	FERC	Louisiana Public Service Comm.	Entergy Services, Inc.	Return on equity
11/14	14AL-0660E	CO	Climax Molybdenum Co. and CFI Steel, LP	Public Service Co. of Colorado	Return on equity, weighted cost of capital
11/14	R-2014-2428742	PA	AK Steel	West Penn Power Company	Cost and revenue allocation
12/14	42866	TX	West Travis Co. Public Utility Agency	Travis County Municipal Utility District No. 12	Response to complain of monopoly power
3/15	2014-00371 2014-00372	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric, Kentucky Utilities	Return on equity, cost of debt, weighted cost of capital
3/15	2014-00396	KY	Kentucky Industrial Utility Customers	Kentucky Power Co.	Return on equity, weighted cost of capital
6/15	15-0003-G-42T	WV	West Virginia Energy Users Gp.	Mountaineer Gas Co.	Cost and revenue allocation, Infrastructure Replacement Program
9/15	15-0676-W-42T	WV	West Virginia Energy Users Gp.	West Virginia-American Water Company	Appropriate test year, Historical vs. Future
9/15	15-1256-G-390P	WV	West Virginia Energy Users Gp.	Mountaineer Gas Co.	Rate design for Infrastructure Replacement and Expansion Program
10/15	4220-UR-121	WI	Wisconsin Industrial Energy Gp.	Northern States Power Co.	Class cost of service, cost and revenue allocation, rate design
12/15	15-1600-G-390P	WV	West Virginia Energy Users Gp.	Dominion Hope	Rate design and allocation for Pipeline Replacement & Expansion Prog.

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdct.	Party	Utility	Subject
12/15	45188	TX	Steering Committee of Cities Served by Oncor	Oncor Electric Delivery Co.	Ring-fence protections for cost of capital
2/16	9406	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design, proposed Rider 5
3/16	39971	GA	GA Public Service Comm. Staff	Southern Company / AGL Resources	Credit quality and service quality issues
04/16	2015-00343	KY	Kentucky Office of the Attorney General	Atmos Energy	Cost of equity, cost of short-term debt, capital structure
05/16	16-G-0058 16-G-0059	NY	City of New York	Brooklyn Union Gas Co., KeySpan Gas East Corp.	Cost and revenue allocation, rate design, service quality issues
06/16	16-0073-E-C	WV	Constellium Rolled Products Ravenswood, LLC	Appalachian Power Co.	Complaint; security deposit
07/16	9418	MD	Healthcare Council of the National Capital Area	Potomac Electric Power Co.	Cost of equity, cost of service, Cost and revenue allocation
07/16	160021-EI	FL	South Florida Hospital and Health Care Association	Florida Power and Light Co.	Return on equity, cost of debt, capital structure
07/16	16-057-01	UT	Utah Office of Consumer Svcs.	Dominion Resources, Questar Gas Co.	Credit quality and service quality issues
08/16	8710	VT	Vermont Dept. of Public Service	Vermont Gas Systems	Return on equity, cost of debt, cost of capital
08/16	R-2016-2537359	PA	AK Steel Corp.	West Penn Power Co.	Cost and revenue allocation
09/16	2016-00162	KY	Kentucky Office of the Attorney General	Columbia Gas of Ky.	Return on equity, cost of short-term debt
09/16	16-0550-W-P	WV	West Va. Energy Users Gp.	West Va. American Water Co.	Infrastructure Replacement Program Surcharge
01/17	46238	TX	Steering Committee of Cities Served by Oncor	Oncor Electric Delivery Co.	Ring fencing and other conditions for acquisition, service quality and reliability
02/17	45414	TX	Cities of Midland, McAllen, and Colorado City	Sharyland Utilities, LP and Sharyland Dist. and Transmission Services, LLC	Return on equity
02/17	2016-00370 2016-00371	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric, Kentucky Utilities	Return on equity, cost of debt, weighted cost of capital
03/17	10580	TX	Atmos Cities Steering Committee	Atmos Pipeline Texas	Return on equity, capital structure, weighted cost of capital

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdiction	Party	Utility	Subject
03/17	R-3867-2013	Quebec, Canada	Canadian Federation of Independent Businesses	Gaz Metro	Marginal Cost of Service Study
05/17	R-2017-2586783	PA	Philadelphia Industrial and Commercial Gas Users Gp.	Philadelphia Gas Works	Cost and revenue allocation, rate design, Interruptible tariffs
08/17	R-2017-2595853	PA	AK Steel	Pennsylvania American Water Co.	Cost and revenue allocation, rate design
8/17	17-3112-INV	VT	Vt. Dept. of Pubic Service	Green Mountain Power	Return on equity, cost of debt, weighted cost of capital
9/17	4220-UR-123	WI	Wisconsin Industrial Energy Group	Northern States Power	Cost and revenue allocation, rate design
10/17	2017-00179	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Return on equity, cost of short-term debt
12/17	2017-00321	KY	Office of the Attorney General	Duke Energy Kentucky, Inc.	Return on equity
1/18	2017-00349	KY	Office of the Attorney General	Atmos Energy	Return on equity, cost of debt, weighted cost of capital
5/18	Fiscal Years 2019-2021 Rates	PA	Philadelphia Large Users Group	Philadelphia Water Department	Cost and revenue allocation
8/18	18-0974-TF	VT	Vt. Dept. of Public Service	Green Mountain Power	Return on equity, cost of debt, weighted cost of capital
8/18	48401	TX	Cities Served by Texas-New Mexico Power Company	Texas-New Mexico Power Co.	Return on equity, capital structure
8/18	18-05-16	CT	Connecticut Industrial Energy Consumers	Connecticut Natural Gas Co.	Cost and revenue allocation
9/18	9484	MD	Maryland Energy Group	Baltimore Gas & Electric	Cost and revenue allocation, rate design
9/18	2017-370-E	SC	South Carolina Office of Regulatory Staff	South Carolina Electric & Gas, Dominion Resources, SCANA	Return on equity, service quality standards, credit quality conditions
10/18	18-1115-G-390P	WV	West Va. Energy Users Group	Mountaineer Gas Company	Customer protections for Infrastructure Replacement and Expansion Program
12/18	R-2018-3003558, R-2018-3003561	PA	Aqua Large Users Group	Aqua Pennsylvania, Inc.	Cost and revenue allocation
02/19	UD-18-07	CCNO	Crescent City Power Users' Gp.	Entergy New Orleans, LLC	Return on equity, Reliability Incentive Mechanism, other proposed riders
03/19	2018-00358	KY	Office of the Attorney General	Kentucky American Water Co.	Return on equity, Qualified Infrastructure Program rider

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdct.	Party	Utility	Subject
05/19	19-E-0065 19-G-0066	NY	City of New York	Consolidated Edison Co.	Cost and revenue allocation, rate design, tariff issues, fast-charging station incentives
05/2019	19-0513-TF	VT	Vt. Dept. of Public Service	Vermont Gas Systems	Return on equity, capital structure
06/2019	5-TG-100	WI	Wisconsin Industrial Energy Group	WEPCO, Wisconsin Gas, Wisconsin PS	Transportation and balancing issues
07/2019	49494	TX	Cities Served by AEP Texas	AEP Texas, Inc.	Return on equity, capital structure
08/2019	19-G-0309 19-G-0310	NY	City of New York	Brooklyn Union Gas Co., KeySpan Gas East Corp.	Cost and revenue allocation, rate design, tariff issues and modifications
08/2019	19-0316-G-42T	WV	West Virginia Energy Users Gp.	Mountaineer Gas Company	Cost and revenue allocation
8/2019	5-UR-109	WI	Wisconsin Industrial Energy Gp.	Wisconsin Electric Power Co., Wisconsin Gas, LLC	Cost Allocation, Class cost of service study
8/2019	6690-UR-126	WI	Wisconsin Industrial Energy Gp.	Wisconsin Public Service Corp.	Cost Allocation, Class cost of service study
9/2019	9610	MD	Maryland Energy Group	Baltimore Gas and Electric Co.	Cost and revenue allocation, rate design
12/2019	2019-00271	KY	Office of the Attorney General	Duke Energy Kentucky, Inc.	Return on equity
2/2020	49831	TX	Texas Industrial Energy Consumers	Southwestern Public Service Co.	Return on equity, capital structure, rate of return
2/2020	E-7. Sub 1214	NC	NC Attorney General's Office	Duke Energy Carolinas	Return on equity, capital structure, rate of return, economic conditions
2/2020	E-2. Sub 1219	NC	NC Attorney General's Office	Duke Energy Progress	Return on equity, capital structure, rate of return, economic conditions
5/2020	R-2019-3015162	PA	Industrial Energy Consumers of Pennsylvania	UGI Utilities, Inc.	Return on equity, cost of debt, revenue allocation, rate design
6/2020	20-G-0101	NY	Multiple Intervenors	Corning Natural Gas Corp.	Cost and revenue allocation
9/2020	R-2020-2019369	PA	AK Steel	Pennsylvania-American Water Company	Cost and revenue allocation, rate design
9/2020	20-035-04	UT	The Kroger Co.	Rocky Mountain Power	Cost and revenue allocation, rate design
10/2020	2020-00174	KY	Ky. Office of the Attorney General, Ky. Industrial Utility Customers	Kentucky Power Co.	Return on equity
3/2021	2020-00349	KY	Ky. Office of the Attorney General, Ky. Industrial Utility Customers	Kentucky Utilities Co.	Return on equity

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdct.	Party	Utility	Subject
3/2021	2020-00350	KY	Ky. Office of the Attorney General, Ky. Industrial Utility Customers	Louisville Gas and Electric Co.	Return on equity
3/2021	20-0746-G-42T	WV	West Va. Energy Users Group	Dominion Energy West Va.	Cost and revenue allocation, cost of equity
4/2021	17-12-03RE11	CT	Connecticut Industrial Energy Consumers	PURA Investigation Into Distribution System Planning	Economic development rates
6/2021	U-20940	MI	Dearborn Industrial Generation, LLC	DTE Gas Company	Cost and revenue allocation, rate design
7/2021	21-0043-G-PC	WV	West Va. Energy Users Group	Mountaineer Gas Co., UGI Corporation	Hold harmless conditions for utility acquisition
07/2021	U-35441	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on equity, cost of capital, service quality
08/2021	51802	TX	Texas Industrial Energy Consumers	Southwestern Public Service Company	Return on equity
09/21	2021-00190	KY	Kentucky Office of the Attorney General	Duke Energy Kentucky, Inc.	Return on equity, cost of debt
09/21	2021-00183	KY	Kentucky Office of the Attorney General	Columbia Gas of Kentucky, Inc.	Return on equity, cost of debt, capital structure
09/21	21-0369-W-42T	WV	West Va. Energy Users Group	West Virginia-American Water Company	Revenue stabilization mechanism
09/21	2021-00185	KY	Kentucky Office of the Attorney General	Delta Natural Gas Company, Inc.	Return on equity, cost of debt, capital structure
09/21	2021-00214	KY	Kentucky Office of the Attorney General	Atmos Energy Corporation	Return on equity, common equity ratio
11/21	R-2021-3027385, R-2021-3027386	PA	Aqua Large Users Group	Aqua Pennsylvania, Inc.	Cost and revenue allocation, Rate design
11/21	21-G-0394	NY	Multiple Intervenors	Corning Natural Gas Corp.	Cost and revenue allocation
06/22	21-G-0577	NY	Multiple Intervenors	Liberty Utilities (St. Lawrence Gas) Corp.	Cost of revenue allocation, rate design
07/22	2022-89-G	SC	South Carolina Office of Regulatory Staff	Piedmont Natural Gas Co.	Return on equity, capital structure cost of capital
07/22	R-2022-3031672, R-2022-3031673	PA	Cleveland-Cliffs Steel	Pennsylvania American Water Company	Cost and revenue allocation, rate design

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdct.	Party	Utility	Subject
10/22	2022-00147	KY	Kentucky Office of the Attorney General and the City of Clinton	Water Service Corporation of Kentucky	Cost of equity
12/22	2022-254-E	SC	South Carolina Office of Regulatory Staff	Duke Energy Progress	Cost of equity
12/22	22-08-08	CT	Connecticut Industrial Energy Consumers	United Illuminating Co.	Cost and revenue allocation, rate design, economic development rates
03/23	2022-00372	KY	Kentucky Office of the Attorney General	Duke Energy Kentucky, Inc.	Cost of equity, capital structure, weighted cost of capital
08/23	23-0280-G-42-T	WV	West Va. Energy Users Group	Mountaineer Gas Co.	Cost and revenue allocation, Rate design
09/23	6680-UR-124	WI	Wisconsin Industrial Energy Group	Wisconsin Power and Light Co.	Cost and revenue allocation, rate design
09/23	6690-UR-127	WI	Wisconsin Industrial Energy Group	Wisconsin Public Service Corp.	Revenue allocation, rate design
09/23	5-UR-110	WI	Wisconsin Industrial Energy Group	Wisconsin Electric Power Co.	Cost and revenue allocation, rate design
09/23	2023-00191	KY	Kentucky Office of the Attorney General	Kentucky-American Water Co.	Return on equity, capital structure, and weighted cost of capital
10/23	2023-00159	KY	Ky. Office of the Attorney General, Kentucky Industrial Utility Customers	Kentucky Power Co.	Return on equity
11/23	23-0460-E-42T	WV	West Virginia Energy Users Group	Monongahela Power Co. and The Potomac Edison Company	Return on equity, cost of capital
02/24	R-2023-3043189 C-2023-3044289 C-2023-3044375 PA		Cleveland-Cliffs Steel	Pennsylvania American Water Co.	Cost and revenue allocation, rate design, revenue decoupling rider
03/24	R-2023-3044549 PA		Peoples Industrial Intervenor	Peoples Natural Gas Company	Cost and revenue allocation, rate design
08/24	2024-00092	KY	Kentucky Office of the Attorney General	Columbia Gas of Kentucky	Return on equity, Cost of capital
09/2024	R-2024-3047822 R-2024-3047824 PA		Aqua Large Users Group	Aqua Pennsylvania, Inc.	Revenue allocation
01/2025	2024-00276	KY	Kentucky Office of the Attorney General	Atmos Energy Corp.	Return on equity, capital structure
02/2025	2024-00346	KY	Kentucky Office of the Attorney General	Delta Natural Gas Co.	Return on equity, capital structure

**Expert Testimony Appearances
of
Richard A. Baudino
As of November 2025**

Date	Case	Jurisdct.	Party	Utility	Subject
03/25	2024-00354	KY	Kentucky Office of the Attorney General	Duke Energy Kentucky, Inc.	Cost of equity, capital structure, cost of debt
05/25	Fiscal Years 2026-2027	PA	Philadelphia Large Users Group	Philadelphia Water Department	Cost of service and revenue allocations, rate design
6/25	57568	TX	Freeport-McMoRan	El Paso Electric Co.	Return on equity, common equity ratio
8/25	2025-00122	KY	Kentucky Office of the Attorney General	Kentucky-American Water Co.	Cost of equity, capital structure, cost of capital
8/25	2025-00113 2025-00114	KY	Kentucky Office of the Attorney General, KIUC	Louisville Gas and Electric Co., Kentucky Utilities Co.	Cost of equity, capital structure, cost of debt
9/25	2025-00125	KY	Kentucky Office of the Attorney General	Duke Energy Kentucky, Inc.	Cost of equity, cost of debt, capital structure
9/25	2025-154-E	SC	South Carolina Office of Regulatory Staff	Duke Energy Progress, LLC	Cost of equity, capital structure, cost of debt
10/25	2025-172-E	SC	South Carolina Office of Regulatory Staff	Duke Energy Carolinas, LLC	Cost of equity, capital structure, cost of debt
11/25	2025-00257	KY	Kentucky Office of the Attorney General, KIUC	Kentucky Power Company,	Cost of equity, capital structure, cost of debt

PROXY GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD

Company Name	Average Price				Current Dividend	Dividend Yield			
	1-month	2-month	3-month	6-month		1-month	2-month	3-month	6-month
Alliant Energy Corporation	67.91	66.41	66.15	64.05	2.03	2.99%	3.06%	3.07%	3.17%
American Electric Power Company	117.19	113.07	112.98	108.75	3.72	3.17%	3.29%	3.29%	3.42%
Avista Corp.	37.98	37.31	37.28	37.76	1.96	5.16%	5.25%	5.26%	5.19%
CenterPoint Energy	39.34	38.77	38.62	37.83	0.88	2.24%	2.27%	2.28%	2.33%
CMS Energy Corp.	73.83	72.60	72.72	71.74	2.17	2.94%	2.99%	2.98%	3.02%
Dominion Energy	60.70	60.24	60.48	58.42	2.67	4.40%	4.43%	4.41%	4.57%
DTE Energy Co.	140.81	138.87	139.00	136.99	4.36	3.10%	3.14%	3.14%	3.18%
Duke Energy Corp.	126.12	124.02	124.00	120.79	4.26	3.38%	3.43%	3.44%	3.53%
Entergy Corp.	95.91	92.79	91.80	87.64	2.40	2.50%	2.59%	2.61%	2.74%
Eversource Energy	72.88	69.56	68.19	66.18	3.01	4.13%	4.33%	4.41%	4.55%
FirstEnergy Corp.	46.59	45.26	44.70	42.95	1.78	3.82%	3.93%	3.98%	4.14%
IDACORP, Inc.	134.26	130.49	128.98	122.95	3.52	2.62%	2.70%	2.73%	2.86%
Otter Tail Corp.	77.88	80.40	80.93	79.46	2.10	2.70%	2.61%	2.59%	2.64%
Pinnacle West Capital	91.41	89.55	90.18	90.43	3.58	3.92%	4.00%	3.97%	3.96%
Pub Sv Enterprise Grp.	82.36	82.05	83.19	82.45	2.52	3.06%	3.07%	3.03%	3.06%
Sempra Energy	91.86	88.07	86.08	81.37	2.58	2.81%	2.93%	3.00%	3.17%
						3.32%	3.39%	3.40%	3.49%

Sources: Current dividend reported by the Value Line Investment Survey reports for each company
Closing daily stock prices from S&P Capital IQ, May 1 through October 31, 2025

PROXY GROUP
DCF Growth Rate Analysis

<u>Company</u>	(1) Value Line <u>DPS</u>	(2) Value Line <u>EPS</u>	(3) S&P IQ <u>EPS</u>	(4) Zacks <u>EPS</u>
1 Alliant Energy Corporation	6.00%	6.00%	7.04%	6.60%
2 American Electric Power Company	5.50%	6.50%	7.33%	6.80%
3 Avista Corp.	4.00%	5.50%	6.35%	7.10%
4 CenterPoint Energy	5.50%	7.00%	8.74%	7.90%
5 CMS Energy Corp.	7.50%	8.50%	7.35%	7.30%
6 Dominion Energy	0.00%	6.00%	6.97%	8.10%
7 DTE Energy Co.	3.00%	4.50%	7.42%	6.50%
8 Duke Energy Corp.	3.50%	6.00%	6.63%	6.40%
9 Entergy Corp.	5.50%	3.00%	11.12%	10.20%
10 Evergy Inc.	7.00%	7.50%	6.21%	5.40%
11 Eversource Energy	5.50%	5.50%	5.28%	5.90%
12 FirstEnergy Corp.	4.50%	4.50%	7.32%	6.50%
13 IDACORP, Inc.	4.50%	5.00%	8.20%	8.00%
14 Otter Tail Corp.	7.00%	4.50%	8.20%	8.20%
15 Pinnacle West Capital	1.50%	5.00%	7.04%	2.10%
16 Pub Sv Enterprise Grp.	6.00%	7.00%	7.57%	8.10%
17 Sempra Energy	5.50%	5.00%	8.32%	7.20%
Average	4.82%	5.71%	7.48%	6.96%
Median	5.50%	5.50%	7.33%	7.10%

Sources: Value Line Investment Survey, September 5, October 17, and November 7, 2025
S&P Capital IQ and Zacks estimates accessed October 31, 2025
S&P IQ growth rate used in place of missing Zacks growth rate for Otter Tail Corp.

PROXY GROUP
DCF RETURN ON EQUITY

	(1) Value Line <u>Dividend Gr.</u>	(2) Value Line <u>Earnings Gr.</u>	(3) S&P IQ <u>EPS</u>	(4) Zacks <u>EPS</u>	(5) Average of <u>All Gr. Rates</u>
<u>Method 1:</u>					
Dividend Yield	3.49%	3.49%	3.49%	3.49%	3.49%
Proxy Group Average Growth Rate	4.82%	5.71%	7.48%	6.96%	6.24%
Expected Dividend Yield	<u>3.57%</u>	<u>3.59%</u>	<u>3.62%</u>	<u>3.61%</u>	<u>3.60%</u>
DCF Return on Equity	8.39%	9.30%	11.10%	10.57%	9.84%
<u>Method 2:</u>					
Dividend Yield	3.49%	3.49%	3.49%	3.49%	3.49%
Proxy Group Median Growth Rate	5.50%	5.50%	7.33%	7.10%	6.36%
Expected Dividend Yield	<u>3.58%</u>	<u>3.58%</u>	<u>3.62%</u>	<u>3.61%</u>	<u>3.60%</u>
DCF Return on Equity	9.08%	9.08%	10.95%	10.71%	9.96%

PROXY GROUP
Capital Asset Pricing Model Analysis

Value Line Forward-Looking MRP

Line No.	<u>Value Line</u>
1 Market Required Return Estimate	10.88%
2 Risk-free Rate of Return, 30-Year Treasury Bond	4.83%
3 Risk Premium	
4 (Line 1 minus Line 2)	6.05%
5 Proxy Group Beta	0.73
6 Proxy Group Beta * Risk Premium	
7 (Line 4 * Line 5)	4.39%
8 CAPM Return on Equity	
9 (Line 2 plus Line 7)	9.21%

Supporting Data for CAPM Analyses

<u>30 Year Treasury Bond Data</u>		<u>Proxy Group Betas:</u>	<u>Adjusted S&P IQ</u>	<u>Value Line</u>
	<u>Avg. Yield</u>	Alliant Energy Corporation	0.69	0.75
May-25	4.90%	American Electric Power Company	0.64	0.65
Jun-25	4.89%	Avista Corp.	0.58	0.75
Jul-25	4.92%	CenterPoint Energy	0.71	0.85
Aug-25	4.87%	CMS Energy Corp.	0.60	0.70
Sep-25	4.74%	Dominion Energy	0.74	0.80
Oct-25	<u>4.64%</u>	DTE Energy Co.	0.61	0.80
6 month average	4.83%	Duke Energy Corp.	0.61	0.65
		Entergy Corp.	0.74	0.75
Source: Federal Reserve data		Eversource Energy	0.70	0.75
		FirstEnergy Corp.	0.79	0.85
<u>Value Line Projected Return Data:</u>		IDACORP, Inc.	0.67	0.75
Median Estimated Div. Yield	2.10%	Otter Tail Corp.	0.70	0.65
		Pinnacle West Capital	0.69	0.90
3 - 5 Year Price Appreciation	40.00%	Pub Sv Enterprise Grp.	0.64	0.75
		Sempra Energy	0.69	0.85
Estimated Annualized Price Appreciation	8.78%		0.77	0.90
		Average	0.68	0.77
Est. Annual Total Return	10.88%	Average of S&P IQ and Value Line		0.73

Sources: Value Line Investment Survey, S&P Capital IQ

Source: Value Line Summary and Index,
October 31, 2025

PROXY GROUP
Capital Asset Pricing Model Analysis
Historic Market Premium

	Arithmetic Mean	Supply Side MRP	Supply Side Less WWII Bias
Historical Market Risk Premium	7.31%	6.26%	5.31%
Proxy Group Beta	<u>0.73</u>	<u>0.73</u>	<u>0.73</u>
Beta * Market Premium	5.30%	4.54%	3.85%
Risk-free Rate of Return	<u>4.83%</u>	<u>4.83%</u>	<u>4.83%</u>
CAPM Cost of Equity, Value Line Beta	10.13%	9.37%	8.68%

Source: Kroll Cost of Capital Navigator, historical period 1926 - 2024

PROXY GROUP
Capital Asset Pricing Model Analysis
Other Market Risk Premium Sources


	IESE Survey 2024	KMPG	Kroll	Damodaran Average MRP
Market Risk Premium	5.50%	5.25%	5.00%	4.18%
Proxy Group Beta	0.73	0.73	0.73	0.73
Beta times MRP	3.99%	3.81%	3.63%	3.03%
Risk-free Rate of Return	<u>4.83%</u>	<u>4.83%</u>	<u>4.83%</u>	<u>4.83%</u>
CAPM Cost of Equity	8.81%	8.63%	8.45%	7.86%

AFFIDAVIT

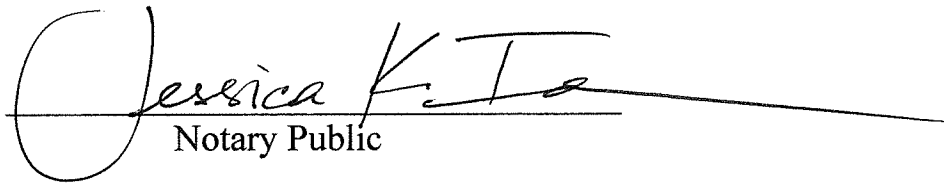
STATE OF GEORGIA)

COUNTY OF FULTON)

RICHARD A. BAUDINO, being duly sworn, deposes and states: that the attached is his sworn testimony and that the statements contained are true and correct to the best of his knowledge, information and belief.


Richard A. Baudino

Sworn to and subscribed before me on this
17th day of November 2025.


Notary Public

Jessica K Inman
NOTARY PUBLIC
Cherokee County, GEORGIA
My Commission Expires 07/31/2027