BEFORE THE STATE CORPORATION COMMISSION

OF THE STATE OF KANSAS

In the Matter of the Application of Evergy Kansas Central, Inc. and Evergy Kansas South, Inc. for Approval to Make Certain Changes in their Charges for Electric Service.

Docket No. 25-EKCE-294-RTS

Direct Testimony and Exhibits of

Michael P. Gorman

On behalf of

Associated Purchasing Services, Cargill, Incorporated, CVR Refining CVL, LLC, Goodyear Tire & Rubber Company, Kansas Agribusiness Retailers Association, Kansas Biofuels Association, Kansas Grain and Feed Association, Lawrence Paper Company, Occidental Chemical Corporation, and Spirit AeroSystems, Inc.

June 6, 2025



Project 11807

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Docket No. 25-EKCE-294-RTS

STATE OF MISSOURI

COUNTY OF ST. LOUIS

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Affidavit of Michael P. Gorman

Michael P. Gorman, being first duly sworn, on his oath states:

1. My name is Michael P. Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Associated Purchasing Services, Cargill, Incorporated, CVR Refining CVL, LLC, Goodyear Tire & Rubber Company, Kansas Agribusiness Retailers Association, Kansas Biofuels Association, Kansas Grain and Feed Association, Lawrence Paper Company, Occidental Chemical Corporation, and Spirit AeroSystems, Inc.

2. Attached hereto and made a part hereof for all purposes is my direct testimony and exhibits which were prepared in written form for introduction into evidence in the Kansas State Corporation Commission Docket No. 25-EKCE-294-RTS.

3. I hereby swear and affirm that the testimony and exhibits are true and correct and that it shows the matters and things that it purports to show.

Michael P. Gorman

Subscribed and sworn to before me this 6th day of June, 2025.



Klosoner Notary Public

Direct Testimony of Michael P. Gorman Page i

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Direct Testimony of Michael P. Gorman

1		INTRODUCTION
2	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	А	Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
4		Chesterfield, MO 63017.
5	Q	WHAT IS YOUR OCCUPATION?
6	А	I am a consultant in the field of public utility regulation and a Managing Principal of
7		Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.
8	Q	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.
9	А	This information is included in Appendix A to my testimony.
10	Q	ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?
11	А	I am appearing in this proceeding of multiple Commercial Intervenors and Kansas
12		Agricultural Associations in this Docket, including Associated Purchasing Services,

1 Cargill, Incorporated, CVR Refining CVL, LLC, Goodyear Tire & Rubber Company, 2 Kansas Agribusiness Retailers Association, Kansas Biofuels Association, Kansas 3 Grain and Feed Association, Lawrence Paper Company, Occidental Chemical 4 Corporation, and Spirit AeroSystems, Inc. These parties are referenced throughout 5 this testimony as "Commercial Intervenors." These Commercial customers purchase substantial amounts of retail electric service from Kansas Central, Inc. and Evergy 6 7 Kansas South, Inc. (collectively referred to as "Evergy Kansas Central" or "EKC") and 8 Evergy Kansas Metro Inc. ("EKM"). The companies collectively will be referred to as 9 "Evergy" or "Company".

10 Q WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

11 A My testimony will address adjustments to EKC's proposed revenue requirements and 12 overall rate of return including return on equity, embedded debt cost of EKC, and 13 analysis of EKC's testimony on these subjects.

14 Q ARE YOU SPONSORING ANY EXHIBITS IN CONNECTION WITH YOUR 15 TESTIMONY?

- 16 A Yes, Exhibit MPG-1 through Exhibit MPG-23.
- 17

II. SUMMARY

18QPLEASESUMMARIZEYOURADJUSTMENTSTOEKC'SREVENUE19REQUIREMENT AS PRESENTED IN YOUR TESTIMONY.

A I recommend several adjustments to EKC's claimed revenue deficiency. As outlined
 in Table 1 below, the Company's claimed revenue deficiency is \$197.630 million after
 the March 2025 true-up. As outlined in Table 1 below, I estimate that the Company's

- 1 claimed revenue deficiency for the March 2025 true-up year is overstated by at least
- 2 \$62.898 million.

	TABLE 1		
	Revenue Requirement Issues		
	(\$000)		
Line	Description		Amount
1	Claimed Revenue Deficiency	\$	192.087
2	March 2025 True-Up	Ψ	5,543
3	March 2025 Revenue Deficiency	\$	197,630
	Adjustments:		
4	Return on Equity	\$	49,597
5	Capital Structure		3,959
6	Rate of Return	\$	53,556
7	Non-Labor Maintenance Expense		6,565
8	Storm Reserve		472
9	Incentive Compensation (Power Marketing)		1,819
10	Directors & Officers Insurance		486
11	Total Adjustments	\$	62,898
12	Adjusted Net Increase	\$	134,732

3 EKC calculated a revenue deficiency of \$192.087 million in its direct testimony 4 based on a July 2023 to June 2024 test year. In discovery the Company provided a 5 true-up based on the 12 months ending March 31, 2025. The true-up increased EKC's 6 claimed revenue deficiency by approximately \$5.543 million. All my adjustments are 7 made to the true-up period, or EKC's actual costs for the 12 months ending March 31, 8 2025. My silence on any other aspect of EKC's testimony in this case should not be 9 interpreted as agreement with EKC's testimony. In addition, other parties may offer 10 reasonable adjustments to EKC's revenue deficiency.

1 Q SHOULD THE COMMISSION WEIGH EVERGY'S OBLIGATION TO MANAGE RATE

2 AFFORDABILITY DURING ITS CLAIM COST OF SERVICE IN THIS PROCEEDING?

3 А Yes. The Commission should be mindful that the impact on customers' bills are 4 impacted by more than just the changes in base tariff rates that Evergy is proposing in 5 this proceeding. In this case, Evergy proposed an approximate 13.6% increase to its non-fuel base tariff rate revenue. This increase is in addition to changes in Evergy's 6 7 transmission delivery charge which has been steadily increasing over time, and 8 changes in Retail Energy Cost Adjustment ("RECA") which reflects the volitivity of the 9 fuel market and power market energy prices. The combined impact of all of these 10 changes in Evergy charges results in a material increase in electric service monthly 11 costs to customers.. Neither of these two increments are embodied in the Company's 12 claim change in its cost of service for modifying its proposed base tariff rates. Further, 13 regulatory procedures also allow for the Company to implement charges for current 14 return on Construction Work in Progress ("CWIP") to support the Company's cashflows 15 during major construction programs. These are estimated in other proceedings at a 16 current return on CWIP could impact the service of 4.0%.

17 Q ARE THE POTENTIALLY OFFSET TO EVERGY'S COST OF SERVICE WHICH HAD 18 NOT YET BEEN REFLECTED IN ITS PROJECTED COST OF SERVICE IN THIS 19 PROCEEDING?

20 A Yes. Evergy witness Melissa Hardesty outlines the potential for production tax credits 21 related to nuclear generation. SPTC's will offset the income tax expense paid by 22 Evergy and ultimately might be appropriate for including end cost of service in this 23 proceeding. Ms. Hardesty outlines the uncertainty whether the nuclear PTC's will 24 actually be adopted and used by Evergy to lower its income tax expense. She states at page 14 of her testimony that this uncertainty the nuclear PTC's have not been
 reflected in its cost of service in this proceeding.

In order to protect customers however, the Company proposes to book nuclear
PTC's in a regulatory liability account, ultimately will be passed on to customers in
future rate adjustments, to the extent the nuclear PTC credits are actually implemented
by the federal government.

7

8

Q IS THE COMPANY'S PROPOSED DEFERRED NUCLEAR PTC'S A REGULATORY LIABILITY ACCOUNT?

9 No. To the extent nuclear PTC's are implemented, rates determined in this proceeding А 10 are in effect, PTC credits are adjusted for income tax effects on the Company's cost of 11 service, should be passed on to customers through offsets to nuclear fuel expense 12 amortizations in the Company's energy cost adjustment. Rather than defer these in a 13 regulatory asset for customers later, PTC's should be passed on to customers 14 immediately via Evergy's RECA so that customers that actually pay the nuclear fuel 15 expense incurred to produce the nuclear PTC's receive the tax credit produced through 16 that nuclear generation.

17 Q PLEASE SUMMARIZE YOUR RECOMMENDATIONS AND CONCLUSIONS FOR 18 EKC'S RATE OF RETURN.

A I recommend the KCC award a return on common equity in the range of 9.20% to
 9.60%, with a midpoint estimate of 9.40%. This return on equity reflects EKC's current
 market cost of equity. I recommend the Commission approve a return on equity that
 provides fair compensation based on EKC's investment risk while limiting charges to

customers no higher than necessary to provide fair compensation and, maintain EKC's
 financial integrity and access to capital.

3 I propose adjustments to the Company's proposed ratemaking capital structure 4 to reasonable costs that maintain its financial integrity. The Company proposes a 5 ratemaking capital structure composed of a 52.05% common equity ratio as updated 6 for actual data as of March 31, 2025. In its last rate case, the Commission approved a 7 ratemaking capital structure composed of a 51.25% common equity ratio. Since, its 8 last rate case. Evergy has maintained its investment grade bond rating and attracted 9 significant amount of capital to fund rate base investments. I recommend maintaining 10 the same ratemaking capital structure the Commission previously approved for setting 11 rates be used again in this case, that is a ratemaking capital structure composed of 12 51.25% common equity to total capital. This adjusted ratemaking capital structure 13 reduces EKC claimed test year cost of service but continues to support its credit rating 14 and access to capital over the rate effective period in this case.

15 Q PLEASE SUMMARIZE YOUR OVERALL RATE OF RETURN RECOMMENDATION 16 AND ESTIMATE THE IMPACT ON EVERGY'S CLAIMED TEST YEAR COST OF 17 SERVICE.

A As shown on my Exhibit MPG-1, my recommended overall rate of return is 7.07%,
which reflects my proposed return on equity and capital structure.

20 My recommended reduction to EKC authorized return on equity from 10.50% to 21 9.40% will lower its claimed revenue deficiency by \$49.6 million. My proposed 22 adjustment to EKC proposed ratemaking capital structure, reducing the common equity 23 ratio from 52.05% to 51.25% lowers the Company's claimed revenue deficiency by an 24 additional \$4.0 million. The combined reduction in EKC claimed revenue deficiency by 1 my recommended overall rate of return lowers the Company's claimed revenue 2 deficiency by \$53.6 million as shown on page 2 of my Exhibit MPG-1.

Q PLEASE SUMMARIZE YOUR RECOMMENDATION REGARDING EKC'S NON 4 LABOR MAINTENANCE EXPENSES.

5 А EKC estimates its ongoing non-labor maintenance expenses using a three-year 6 average in its March 2025 true-up despite the Company's direct testimony 7 recommending using the most recent 12 months of actual expenses to estimate an 8 appropriate level of ongoing expense to include in rates. EKC's direct testimony states 9 that the Company's maintenance levels have remained consistent over the last few 10 years and that EKC expects them to remain consistent going forward. These non-labor 11 maintenance expenses were lower in the 12 months ending March 2025 than they were 12 in the test year. I recommend the ongoing level of these costs be calculated in a 13 method consistent with EKC's direct testimony and using the actual costs from the 12 14 months ending March 2025. This adjustment lower EKC's revenue requirement by 15 approximately \$6.565 million.

16QPLEASESUMMARIZEYOURRECOMMENDATIONREGARDINGEKC'S17INSURANCE EXPENSES.

A EKC includes directors and officers liability insurance as part of its insurance expense
 and proposes to recover the full amount of EKC's share of these costs from customers.
 However, these costs benefit both shareholders and customers and should be shared
 equally. Therefore, I recommend 50% of these costs be shared with shareholders and
 removed from cost of service. This adjustment lower EKC's revenue requirement by
 approximately \$519,000.

1 Q PLEASE SUMMARIZE YOUR RECOMMENDATION REGARDING EKC'S STORM 2 RESERVE.

3 А The settlement in EKC's last rate case established a \$10 million cap for the Company's 4 storm reserve and called for the cap to reviewed in this case. EKC provides no 5 evidence that the \$10 million cap established in the settlement is the best target for the storm reserve. I recommend the storm reserve cap be lowered from the currently 6 7 authorized \$10 million to \$7 million. The current balance of the storm reserve as of 8 March 2025 is below \$10 million but above \$7 million. Lowering the cap will still allow 9 EKC to smooth extraordinary storm costs year over year while providing customers a 10 refund of the amount in the storm reserve above \$7 million. I recommend this refund 11 be return to customers over three years. This adjustment lower EKC's revenue 12 requirement by approximately \$472,000.

13 Q PLEASE SUMMARIZE YOUR RECOMMENDATION REGARDING EKC'S 14 INCENTIVE COMPENSATION.

A I recommend the Commission disallow all incentives tied to Power Marketing incentive
 plan as these costs are already funded by shareholders and there is no need for
 ratepayer to fund these incentives. This adjustment lower EKC's revenue requirement
 by approximately \$1.819 million.

III. NON-LABOR MAINTENANCE EXPENSES

2 Q DID EKC'S NON-LABOR MAINTENANCE EXPENSE CHANGE SINCE THE 3 COMPANY'S DIRECT FILING?

4 A Yes. The transmission, distribution, and generation non-labor maintenance expense
5 totaled \$72,007,356 in the April 2024 to March 2025 true-up year. This is \$6,154,569
6 less than the \$78,161,925 EKC in the July 2023 to June 2024 test year.

7 Q DID EKC MAKE AN ADJUSTMENT TO LOWER ITS COST OF SERVICE IN THE

8 MARCH 2025 TRUE-UP AS A RESULT OF THE DECREASE IN NON-LABOR

9 MAINTENANCE COSTS?

1

10 A No. Rather than make an adjustment to reduce cost of service, the Company changed
11 how it estimated the amount of ongoing expense to include in cost of service.

12 Q PLEASE EXPLAIN HOW EKC CALCULATED ITS ONGOING LEVEL OF NON-

13 LABOR TRANSMISSION, DISTRIBUTION, GENERATION, AND NUCLEAR

14 MAINTENANCE EXPENSE IN THE MARCH 2025 TRUE-UP?

A In the March 2025 true-up, EKC relied on a three-year average of transmission,
 distribution, and generation non-labor maintenance expense to determine the amount
 of ongoing expense to include in cost of service.¹

18 Q IS THIS APPROACH CONSISTENT WITH EKC'S DIRECT TESTIMONY?

A No. EKC initially relied on the test year level of expense for each category of non-labor
 maintenance expense to determine the amount of ongoing expense to include in cost

¹ Non-labor transmission, distribution, generation, and nuclear maintenance expense are included as Adjustments CS-40, CS-41, CS-42, and CS-43, respectively.

- 1 of service. EKC witness Mr. Ronald A. Klote discusses the Company's approach in his
- 2 direct testimony.

3 "These non-labor adjustments are for the purpose of including an
appropriate level of transmission, distribution, generation, and nuclear
maintenance expense in this case. Since the maintenance levels have
remained fairly consistent over the last few years and are expected to
remain consistent as we move forward, EKC included test year nonlabor maintenance expense in its direct case as being the most
representative level for ongoing expense."²

10 Mr. Klote proposes an adjustment of \$0 for each in his direct testimony. The 11 workpapers for each adjustment include a comparison of the test year amount to a 12 three-year average of expense. Workpapers for the March 2025 true-up were provided 13 in discovery.³

14 Q DID EKC EXPLAIN WHY IT CHANGED HOW IT ESTABLISHED ITS ONGOING

15 FORWARD EXPENSE IN ITS UPDATE FILING RELATIVE TO ITS DIRECT FILING?

16 А No. EKC simply provided updated workpapers that changed how Adjustments CS-40, 17 CS-41, and CS-42 were calculated. The Company stated in its direct that it estimated 18 the ongoing transmission, distribution, and generation non-labor maintenance expense 19 using the most recent 12 months of actual costs. However, in the Company's March 20 2025 true-up, EKC estimated the ongoing expense using a three-year historical 21 average. It did not revise its direct testimony that the ongoing expense what was 22 expected to be relatively consistent has changed and that it is better to rely on a 23 historical average expense.

² Klote Direct at 11.

³ Relevant discovery responses are included as part of Exhibit MPG-2.

1 Q IS EKC'S PROPOSAL TO CHANGE THE METHODOLOGY IT USES TO 2 ESTABLISH ITS GOING FORWARD EXPENSE JUSTIFIED?

3 А No. EKC has not provided any testimony on its decision to rely on a three-year average 4 for these costs in the March 2025 true-up. In its initial application, EKC's workpapers 5 showed that relying on a three-year average would result in a lower level of ongoing costs than what the Company experienced in the test year.⁴ EKC did not describe why 6 7 the three year average expense is nor lower than the expected ongoing expense. 8 Therefore, when EKC believed that relying on a three-year average would lower its cost 9 of service the Company proposed to utilize the actual test year costs and Mr. Klote 10 argued, "the maintenance levels have remained fairly consistent over the last few years 11 and are expected to remain consistent as we move forward."⁵ Mr. Klote proposed \$0 12 for Adjustments CS-40, CS-41, CS-42, and CS-43 in its initial application.

13 However, the most recent 12 months of actual non-labor maintenance expense 14 (the 12 months ending March 2025) shows these costs are \$6,154,569 lower than they 15 were in the test year (the 12 months ending June 2024). Now that it is beneficial to the 16 Company, EKC relied on a three-year average for these costs to set rates. After 17 switching to a three-year average in its March 2025 true-up, EKC now proposes a 18 \$545,456 adjustment for CS-40 (transmission maintenance), a \$(1,405,481) 19 adjustment for CS-41 (distribution maintenance) and a \$1,270,294 adjustment for CS-20 42 (generation maintenance).

⁴ This is due to an error in Adjustment CS-42. The adjustment included costs associated with the Western Plains Wind Farm and the Persimmon Creek Wind Farm. Without this correction the generation maintenance expense in the test year was \$3,750,320 higher than the three-year average (as shown on Column (3), Line 3, of Exhibit MPG-3). The March 2025 true-up for Adjustment CS-42 now excludes Western Plains Wind Farm and Persimmon Creek Wind Farm costs. ⁵ Klote Direct at 11.

I believe EKC should continue using the methodology consistent with its initial
 application and consistent with Mr. Klote's direct testimony, or the most recent 12
 months of actual data.

4 Q IS EKC PROPOSING A CHANGE IN ADJUSTMENT CS-43 (NUCLEAR 5 MAINTENANCE) AS A RESULT OF THE MARCH 2025 TRUE-UP?

6 No. EKC states in the workpapers supporting the true-up for Adjustment CS-43 that in А 7 April 2024 the Company recorded a correcting entry to nuclear maintenance that was 8 applicable to months prior to April 2024 but still within the July 2023 to June 2024 test 9 year.⁶ However, when looking at the April 2024 to March 2025 true-up year the 10 correction distorts the results. EKC shows \$6,036,605 of non-labor nuclear 11 maintenance for the test year but \$2,704,127 of expense for the true-up year. EKC 12 uses the test year's \$6,036,605 to set the ongoing level of expense included in rates.

13 Q HOW DO YOU PROPOSE CALCULATING AN APPROPRIATE LEVEL OF 14 ONGOING NON-LABOR TRANSMISSION, DISTRIBUTION, GENERATION, AND 15 NUCLEAR MAINTENANCE EXPENSE IN THIS CASE?

A I recommend the ongoing level of these expenses be set using the same methodology Mr. Klote proposed in his direct testimony, using the most recent 12-months of actual expense. Based on the March 2025 true-up workpapers for Adjustments CS-40, CS 41, and CS-42, transmission maintenance expenses increased slightly relative to the test year and distribution and generation maintenance expenses decreased.

21 My adjustment is included on lines 9 to 12 of Exhibit MPG-3. Relying on actual 22 expenses in the April 2024 to March 2025 true-up year results in \$72,007,356 of

⁶ Adjustment CS-43 Nuclear Maintenance – KS Central – True-up.

ongoing non-labor maintenance expenses compared to \$78,161,925 in the July 2023
 to June 2024 test year. This is a difference of \$6,154,569. If EKC has been successful
 in managing these costs since the test year, then I recommend these savings be
 passed on to customers.

I propose an adjustment of \$6,564,837 which is the difference between the April
2024 to March 2025 true-up year expenses I relied on and the three-year average
expenses the Company proposed to use in its March 2025 true-up. My adjustment is
calculated relative to EKC's March 2025 true-up revenue requirement.

9 I am not proposing any adjustment to EKC's nuclear maintenance expense due
10 to the correcting entry issue discussed above and recommend the same ongoing level
11 of non-labor nuclear maintenance expense as the Company.

12

IV. INSURANCE EXPENSE

13 Q PLEASE DESCRIBE EKC'S INSURANCE EXPENSE ADJUSTMENT.

14 EKC's adjustment to insurance expense is shown on Adjustment CS-70. Ms. Darcie А 15 G. Kramer supports the adjustment in her direct testimony. The adjustment annualizes 16 EKC's insurance costs based on the premiums forecasted to be in effect on March 31, 17 2025. EKC makes the adjustment to ensure the rate-effective period accurately reflects 18 the Company's insurance costs. In its initial application EKC proposes a \$3,011,737 19 increase in insurance costs. In its March 2025 true-up the Company revised the 20 adjustment using the actual annualized insurance premiums in effect on March 31, 21 2025. This resulted in a \$2,708,521 Adjustment CS-70 (approximately a \$300,000 22 decrease from what the Company initially forecasted).

1 Q DO YOU HAVE ANY CONCERNS WITH THE ANNUALIZED INSURANCE EXPENSE 2 EKC INCLUDES IN ITS COST OF SERVICE?

A Yes. EKC includes directors and officers liability insurance as part of its insurance expense and proposes to recover the full amount of these costs from customers. The workpapers supporting Adjustment CS-70 shows that EKC included in cost of service \$1,037,083 of directors and officers insurance in the Company's initial filing. Based on updated data through March 31, 2025, the actual directors and officers insurance EKC seeks to include in rates and recover from customers is \$972,209.

9 While I do not oppose including a portion of this expense in cost of service, I
10 recommend the Commission direct EKC to share these costs evenly between
11 shareholders and customers.

Q WHAT IS DIRECTORS AND OFFICERS LIABILITY INSURANCE AND WHY DO YOU RECOMMEND HAVING SHAREHOLDERS PAY A PORTION OF THESE COSTS?

15 A Directors and officers liability insurance is insurance that protects the directors and 16 officers from liability for claims based on decisions they make as employees of the 17 Company. The insurance protects these employees when a party sues the directors 18 and officers of a public company, such as EKC's parent company, Evergy, Inc. and 19 these costs relate to all aspects of Energy not just regulated operations.

These costs also benefit both shareholders and customers and should be shared equally. Shareholders benefit in the event they sue the Company because the insurance payouts reimburse the Company for the cost of a shareholder lawsuit. Customers benefit because the insurance helps attract and retain talented executives and directors by protecting the directors and officers from personal liability while
 managing the company.

3 Q PLEASE DESCRIBE YOUR ADJUSTMENT.

A EKC provided details on its insurance premiums as part of the Adjustment CS-70
workpapers. As stated above, the March 2025 true-up year level of directors and
officers liability insurance is \$972,209. I recommend a 50/50 sharing of these costs
between customers and shareholders. As noted above, both parties benefit from these
expenses and, therefore both parties should pay an equal share of these costs.
Sharing these costs between shareholders and customers lowers EKC's insurance
expense by \$486,105 (or 50% of \$972,209).

11

V. STORM RESERVE

12 Q PLEASE EXPLAIN EKC'S STORM RESERVE.

A EKC witness Mr. Ryan P. Mulvany discusses EKC's storm reserve in Section V of his
 direct testimony. He states that over 20 years ago the Commission approved a storm
 reserve to collect revenues for extraordinary storm expenses and that the reserve is
 reviewed in each rate case.

17 Q HOW WAS THE STORM RESERVE ADDRESSED IN EKC'S LAST RATE CASE?

- A In Docket No. 23-EKCE-775-RTS, EKC's last rate case, the Settlement Agreement
 approved by the Commission capped the storm reserve at \$10 million and required the
 Company to return to customers the excess amount in the storm reserve over three
 years.
- 22 "25. Storm Reserve. The Parties agree that the annual accrual amount
 23 for storm costs for EKC's Storm Reserve should be set using a three-

1 year average as proposed by Staff and setting a targeted cap for the 2 storm reserve of \$10 million. The Parties agree that the amount in 3 EKC's Storm Reserve as of June 30, 2023, in excess of \$10 million 4 should be amortized back to customers over a three-year period. The 5 targeted cap for the Storm Reserve will be assessed and addressed in the next general rate case. (November 21, 2023 Order Approving 6 7 Unanimous Settlement Agreement, Docket No. 23-EKCE-775-RTS, 8 Attachment 1, page 9.)"

- 9 As a result of the settlement, EKC made a \$26,406,730 adjustment to move the amount
- 10 in the storm reserve above the new \$10 million cap at the time to the Excess Storms
- 11 Program Regulatory Liability. EKC's Adjustment CS-130 is the adjustment to
- 12 amortization expense in this case because of the settlement.
- 13 As stated above, the settlement states the \$10 million cap should be reviewed
- 14 in this proceeding. Mr. Klote states that EKC reviewed the cap and that no change is
- 15 warranted.⁷

16 Q DID EKC SUPPORT ITS ASSERTION THAT THE CAP SHOULD NOT CHANGE?

- 17 A No. Mr. Mulvany supports the Company's request to not change the \$10 million cap
- 18 but he offers no evidence the \$10 million cap is the best target for the storm reserve.

19 EKC is not requesting any change to the targeted cap for the storm 20 reserve. The Company has reviewed the storm reserve and the 21 targeted cap as established in the 23-775 Docket, and EKC believes the 22 reserve with the targeted cap of \$10 million has appropriately served its 23 purposes as described above. It has adequately covered the costs 24 associated with storm related damage and related restoration efforts. At 25 the established levels, it has adequately allowed for establishment of a 26 fund to serve the stated purposes of smoothing major storm expenses 27 year-over-year and helping to stabilize the costs of these events as shown through customer rates.⁸ 28

⁷ Klote Direct at 31.

⁸ Mulvany Direct at 21-22.

1 The benefits that Mr. Mulvany describes above could also be achieved with a 2 lower cap on the storm reserve. EKC's annual extraordinary storm costs were 3 \$3,438,039 in the test year and \$2,564,192 in the true-up year.

4 Q WHAT IS THE CURRENT BALANCE OF THE STORM RESERVE?

5 A The current balance of the storm reserve as of the March 2025 true-up is \$8,415,749.
6 The balance was \$10,166,187 at the end of the test year.

7 Q IS EKC PROPOSING AN INCREASE IN THE ANNUAL ACCRUAL FOR THE STORM

8 **RESERVE?**

9 A No. Adjustment CS-72 reduced the annual accrual rate for the storm reserve from 10 \$3,739,763 approved in the last rate case to \$1,220,631. When asked whether the 11 Company would adjust the accrual rate after the March 2025 true-up the Company 12 responded, "Given that EKC's storm reserve has operated closely to the cap set in the 13 2023 Docket, we believe that increasing the reserve is not warranted at this time."⁹ The 14 same data response notes the three-year average of extraordinary storm costs is 15 higher than the proposed accrual rate.

16 Q ARE YOU RECOMMENDING AN ADJUSTMENT TO EKC'S STORM RESERVE?

17 A Yes. EKC has not shown the \$10 million cap is the best target for the storm reserve. I 18 recommend a \$7 million cap. This amount would still provide the Company the 19 opportunity to smooth extraordinary storm expenses year-over-year without harming 20 customers' rates. Similar to the settlement in the last case, I recommend the current 21 amount above my proposed \$7 million cap be placed into the Excess Storms Program

⁹ EKC response to data request KCC-313, provided in Exhibit MPG-2.

Regulatory Liability and amortized over three years. This adjustment, based on the
 current \$8.4 million balance of the storm reserve, lowers EKC's revenue requirement
 by approximately \$471,000 based on a three-year amortization of the \$1.4 million
 difference between the storm reserve's current balance and my proposed cap. My
 adjustment is included as Exhibit MPG-4.

6

VI. INCENTIVE COMPENSATION

7 Q DOES EKC INCLUDE INCENTIVE COMPENSATION COSTS IN ITS REVENUE 8 REQUIREMENT?

9 А Yes. Mr. Klote supports the Company's incentive compensation programs and its 10 proposal to recover a portion of the three-year average cost of these programs. EKC 11 has four incentive compensation programs. The Annual Incentive Plan ("AIP") which 12 is available to executives only, the Variable Compensation Plan ("VCP") which is 13 available to non-union management personnel and the Wolf Creek Performance 14 Achievement Reward ("PAR") Plan which is available to Wolf Creek union employees. 15 EKC removes, as part of Adjustment CS-51, the costs of these plans tied to Earnings 16 per Share ("EPS").

EKC also has the Power Marketing incentive plan which is available to the employees that manage Evergy Inc's load and its owned assets in the marketplace. Mr. Klote states the employees eligible for the plan also serve a secondary purpose where they, "provides and shares resources and functions to manage assets for customers and other contracting parties in the marketplace, and to execute non-assetbased energy trading."¹⁰ Adjustment CS-51 does not include an adjustment to remove financial metrics for this program because it does not have any financial metrics.

¹⁰ Klote Direct at 14.

1 Q IS IT REASONABLE TO INCLUDE ALL INCENTIVE COMPENSATION COSTS IN A 2 COMPANY'S RATEMAKING COST OF SERVICE?

3 А No. A utility's incentive compensation programs must be evaluated to ensure the 4 incentive compensation programs included in cost of service reflect customer-directed 5 goals such as service reliability, and/or employee safety. If the plans reflect customer-6 directed goals then is it fair and reasonable to recover the costs of those programs from 7 ratepayers, and only if the performance metrics are actually achieved. In contrast, 8 incentive compensation programs that are designed to align the interests of employees 9 with shareholders should be paid for by shareholders. Incentive compensation plans 10 that incentivize the Company's financial performance, such as the EPS metrics in 11 EKC's incentive plans, should be removed from cost of service (as EKC has already 12 done) and be paid for by shareholders.

13 Q DO YOU HAVE ANY CONCERNS WITH EKC'S INCENTIVE COMPENSATION 14 PROGRAMS?

A Yes. The costs of the Power Marketing incentive plan should not be recovered from
retail customers. EKC provided a copy of the Power Marketing incentive plan in
response to CURB data request 60 (provided in Exhibit MPG-2). Based on my review,
the plan largely benefits shareholders because of how the incentives are funded.
Funding for the plan is based on the non-asset based margins (or proceeds the
Company's non-regulated energy trading generates). The Power Marketing incentive
plan document states:

22 Incentive Pool:

23

The Plan's Incentive Pool will be used to reward eligible Participants.

1 Incentive Pool Funding:

- 2 The Incentive Pool will be funded by a percentage of the Net Margin 3 generated from the "Non-Asset" trading book. The Net Margin shall be 4 calculated as Gross Margin less related administrative expense. Gross 5 Margin is revenue less cost of sales, including net change in mark-to-6 market for open positions of the non-asset book. Administrative expense 7 includes Evergy Energy Partners, risk management, legal, and 8 accounting operational cost and applicable overhead cost. Overhead 9 cost includes pension, benefits, payroll tax, and administrative and 10 general loadings such as accounts payable, treasury, and other 11 applicable corporate expense. Administrative expense also includes working capital, bad debt write-offs, and Evergy Energy Partners related 12 13 system costs. The funds in the Incentive Pool will then be allocated on 14 a discretionary dollar basis.¹¹
- 15 While it is my understanding the employees eligible for the Power Marketing
- 16 incentive plan are involved in and support in EKC's regulated energy operation, the
- 17 plan itself is funded by revenues from the non-regulated operations and therefore
- 18 should not be paid for by retail customers. Mr. Klote argues the portion of the Power
- 19 Marketing incentive plan that EKC seeks to include in cost of service only reflects
- 20 metrics which benefit EKC's retail customers.
- "All incentive amounts from the base incentive plan were split according
 to the percentage of asset metrics to non-asset metrics. Only the
 amounts booked above the line and related to asset metrics were
 included in the three-year average. Any additional incentive amounts
 from purely non-asset-based market activity are attributed to non-asset
 metrics at 100%, and therefore not included in cost of service in this
 case."¹²
- First, regarding Mr. Klote's assertion, I will note that this adjustment is not apparent in the workpapers supporting the incentive compensation costs EKC's seeks to include in rates. Unlike the adjustment to remove the portion of incentive compensation tied to financial metrics, the Company's Adjustment CS-51 does not make the adjustment Mr. Klote describes. Rather, the amounts tied to the Power

¹¹ EKC's response to data request CURB 60, provided in Exhibit MPG-2.

¹² Klote Direct at 14.

1 Marketing incentive plan are simply an input (and presumably reflect Mr. Klote's 2 adjustment). Regardless, even if Mr. Klote made an adjustment so EKC's retail rates 3 only include costs tied to certain metrics, the fact remains that the plan is funded by 4 Evergy's non-asset based margins and therefore the plan's primary purpose is to 5 generate these non-regulated sales in order to fund the program. EKC is simply trying 6 to double dip with its Power Marketing incentive plan in this case by seeking to recover 7 costs from customers that the plan already assigns to shareholders. Therefore, I 8 recommend the incentive costs tied to the Power Marketing incentive plan be excluded 9 from rates.

10 Q PLEASE DESCRIBE YOUR ADJUSTMENT.

A My adjustment is included on Exhibit MPG-5. EKC seeks to include approximately
\$1.819 million of costs tied to the Power Marketing incentive plan in Adjustment CS51. I recommend all costs tied to the Power Marketing incentive plan be disallowed.

14

VII. RATE OF RETURN MARKET EVIDENCE

15 Q PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.

A In this section, I will provide observable market evidence and credit metrics to assess the reasonableness of the rate of return positions and a detailed analysis to demonstrate that my recommended rate of return will support EKC's financial integrity and access to capital while promoting reasonable and just rates. I also comment on market-based models used to estimate the current market-required rate of return that investors demand prior to assuming the risk of an investment similar to EKC's. However, this observable data on regulatory approved equity returns, and the resulting impact on utility bond ratings, access to capital and stock prices is relevant in judging
 the accuracy of estimates of market required returns.

3VII.A. Utility Industry Authorized Returns on4Equity, Access to Capital, and Credit Strength

5QPLEASE DESCRIBE THE OBSERVABLE EVIDENCE ON TRENDS IN6AUTHORIZED RETURNS ON EQUITY FOR REGULATED UTILITIES.

7 А Authorized returns on equity are an important part of how utilities produce revenues 8 and cash flows adequate to support their credit standing and to maintain their financial 9 integrity, which supports their access to capital under reasonable terms and prices. 10 Observable data, including data on industry authorized returns on equity, trends and 11 outlooks on credit standing, and the ability of utilities to attract capital to fund large 12 investments, provides clear evidence that industry authorized returns on equity have 13 been judged by market participants to be fair and reasonable. With this as background, 14 it is significant to observe that average authorized returns on equity for regulated 15 utilities have ranged from 9.39% to 9.72% for the period from 2014 through the first 16 quarter of 2025, and that between 2020 and 2025, authorized returns on equity have 17 averaged around 9.60%. These returns are summarized in Figure 1.



1 The distribution of the industry averages is also important in assessing the 2 reasonableness of authorized return on equities in the current market. As shown in 3 Figure 1, in 2024 and the first quarter of 2025, the average return on equity awarded 4 to electric utilities were about 9.78% and 9.72%, respectively, and about half the electric 5 authorized equity returns were above and below the industry average return.

1 Q HAVE UTILITIES BEEN ABLE TO ACCESS EXTERNAL CAPITAL TO SUPPORT

2 CAPITAL EXPENDITURE PROGRAMS?

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- 3 A Yes. Utilities have enjoyed robust access to capital markets under favorable terms and
- 4 costs. This access to capital is in recognition of the return regulatory commissions
- 5 have found to be fair and reasonable. The Regulatory Research Associates' ("RRA's")
- 6 March 26, 2025, Utility Capital Expenditures Report, RRA Financial Focus, made
- 7 several relevant comments about utility investments generally:
 - Projected capital expenditures for 2025 among the 47 energy utilities in Regulatory Research Associates' representative sample of publicly traded, US-based utilities are forecast to reach over \$212 billion. This represents a 22% increase from the \$173 billion spent in 2024, a 29% increase compared with the nearly \$164 billion spent in 2023, and a nearly 50% hike compared to the \$146 billion invested in 2022.
 - Aggregate energy utility investments are projected to hit new highs of \$222 billion in 2026, \$228 billion in 2027 and \$208 billion in 2028.
- 16 * * *
 - While the aggregate energy capex forecast for 2029 drops to \$153 billion, the level is rather likely to rise significantly over time as utility companies solidify their future project plans throughout the remainder of 2025 and in the years ahead. ¹³
- 21 As shown in Figure 2 below, capital expenditures for regulated utilities have
- 22 increased considerably over 2024 and into 2025, and forecasted capital expenditures
- remain elevated through the end of 2027.

¹³ S&P Global Market Intelligence, RRA Financial Focus: "Energy Utility Capex Predicted to Top \$1 trillion from 2025 through 2029, March 26, 2025, at 1.



As outlined in Figure 2 and in the comments made by *RRA S&P Global Market Intelligence*, capital investments for the utility industry continue to stay at elevated levels, and these capital expenditures are expected to fuel utilities' profit growth into the foreseeable future. This is clear evidence that the capital investments are enhancing shareholder value and are attracting both equity and debt capital to the utility industry in a manner that is allowing utilities to fund their elevated capital plans.

7

8

Q HAVE REGULATED UTILITY EQUITY SECURITIES' VALUATIONS SUPPORTED ACCESS TO EQUITY CAPITAL?

9 A Yes. Utility valuation metrics continue to demonstrate that utilities can sell new stock
10 at robust market prices, which illustrates that utilities can access equity capital under
11 reasonable terms and conditions and at relatively low cost.

As shown on my Exhibit MPG-3, utility valuation metrics show robust valuation
 of utility securities more recently compared to the historical period stretching back

1 to 2002. Specifically, The Value Line Investment Survey ("Value Line") tracks and 2 projects various valuation metrics related to regulated utility securities, as well as 3 certain non-regulated companies followed by Value Line. These valuation metrics are 4 considered by market participants in assessing the investment risk characteristics of 5 individual company stocks and industries and are used by market participants to derive 6 their required rates of return for making investments. All of these valuation metrics for 7 utility stocks indicate robust valuations of utility stocks, which in turn supports my finding 8 that utilities' cost of capital is low by historical comparison and utilities are producing 9 competitive returns.

10 For example, the *Value Line* electric utility industry price-to-earnings ratio of 11 17.66x for 2024 aligns with the 23-year average price-to-earnings ratio. 12 (Exhibit MPG-3, page 1). A consistently strong price-to-earnings ratio indicates stock 13 prices valuations are stable, which supports utilities' access to external equity markets.

14 The market price-to-cash flow for electric utilities is currently 8.06x and the 15 market-to-book ratio is 1.77x. These valuation metrics align with the historical average 16 valuation metrics, and indicate utilities continue to have access to equity capital 17 markets.

18 Q PLEASE DESCRIBE GENERAL UTILITY STOCK PRICE PERFORMANCE OVER 19 THE LAST SEVERAL YEARS.

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



1 Over the last several years the Standard & Poor's ("S&P") Utility index has 2 tracked the overall market performance, but it exhibited much less volatility relative to 3 the other market indices.

4 Q HAVE REGULATED UTILITIES MAINTAINED INVESTMENT GRADE CREDIT 5 STRENGTH AND FINANCIAL INTEGRITY?

6 А Yes. Credit ratings are reasonable assessments of the utility industry's financial 7 integrity because they indicate the utility's credit strength, which, in turn, provides 8 strong evidence of the utility's ability to attract capital necessary to make infrastructure 9 investments under reasonable terms and prices. Trends in credit ratings are an 10 indication of whether regulatory decisions have supported utilities' ability to generate 11 adequate revenue to recover their costs, produce adequate cash flows, and maintain 12 strong credit. The primary drivers in these regulatory decisions are the Commissions' 13 awarded returns on equity and development of depreciation rates.

As shown in Table 1 below, electric utilities' credit standing has remained very robust through the Tax Cuts and Jobs Act (2017) changes and impacts on cash flow 1 starting around 2018, through the COVID-19 pandemic, and into the present. As shown

2 below in Table 2, from approximately 2016 through the first quarter of 2025, over 80%

3

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

					т	ABLE 2						
S&P Ratings by Category <u>Electric Utility Subsidiaries</u>												
Description	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
A or higher	13%	13%	10%	10%	8%	14%	14%	10%	10%	11%	9%	7%
A-	26%	34%	43%	52%	54%	54%	53%	37%	37%	37%	33%	35%
BBB+	28%	24%	32%	21%	22%	18%	19%	35%	36%	37%	45%	40%
BBB	23%	18%	4%	7%	13%	12%	3%	16%	16%	15%	12%	14%
BBB-	11%	11%	11%	11%	2%	1%	1%	0%	0%	0%	0%	1%
Below BBB-	<u>0%</u>	<u>0%</u>	0%	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>10%</u>	<u>1%</u>	<u>1%</u>	<u>1%</u>	<u>2%</u>	<u>3%</u>
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	1 00 %

Source: S&P CAPITAL IQ and Market Intelligence, downloaded 5/2/2025. Note: Subsidiary ratings used.

4 Table 2 also illustrates that Regulatory Commission decision have support strong 5 investment grade credit in the face of large capital programs, regulatory initiatives for 6 capital investments, and changes in federal tax laws.

7 Q HOW SHOULD THE COMMISSION USE THIS MARKET INFORMATION IN

8 ASSESSING A FAIR RETURN FOR EKC?

A Observable market evidence is quite clear that capital market costs are relatively low. As
authorized returns have fluctuated around the mid-9% range over the past five years,
utilities continue to have access to large amounts of external capital while still funding
large capital programs. Furthermore, utilities' investment-grade credit ratings are stable
and have improved due, in part, to supportive regulatory treatment. The Commission
should carefully weigh all this important observable market evidence in assessing a fair
return on equity for EKC.

1

VII.B. Federal Reserve's Impact on Cost of Capital

Q ARE THE MONETARY POLICY DECISIONS AND ACTIONS OF THE FEDERAL
 RESERVE ("FED"), AND OF THE FEDERAL RESERVE SYSTEM'S FEDERAL
 OPEN MARKET COMMITTEE ("FOMC"), KNOWN TO MARKET PARTICIPANTS,
 AND IS IT REASONABLE TO BELIEVE THOSE DECISIONS AND ACTIONS ARE
 REFLECTED IN THE MARKET'S VALUATION OF BOTH DEBT AND EQUITY
 SECURITIES?

A Yes. The Fed has been transparent in its efforts to support the economy to achieve
maximum employment, and to manage long-term inflation to around a 2% level. In a
May 7, 2025, press release, the Fed noted that economic activity has been expanding
at a solid pace, while labor market conditions remain solid, and the unemployment rate
has stabilized. Meanwhile, inflation is still slightly elevated.

13 More recently, in its December 2024 meeting the Committee lowered the target 14 rate to a range of 4.25%-4.50%. However, after the administration change, the Fed 15 decided to maintain the current target rate in its March meeting. The Fed also stated 16 that it will continue to closely monitor economic activity before making any adjustments aimed at achieving the target 2% inflation rate. The Committee also noted that it will 17 18 continue reducing its holdings of Treasury securities, agency debt securities and 19 agency mortgage-backed securities. In its May 7, 2025, press release, the Fed 20 reiterated its strong commitment to returning inflation toward the 2% target.¹⁴

21 The trend in the Fed's monetary actions on the FFR is shown in Figure 4.

¹⁴ Federal Reserve Press Release, Federal Reserve Issues FOMC Statement, May 7, 2025.



As shown in Figure 4 above, the FFR is currently in the 4.25% to 4.50% range and continues to remain higher than the rate prior to the economic effects of the worldwide pandemic starting around March/April of 2020.

-

4 Q DO INDEPENDENT ECONOMISTS' OUTLOOKS FOR FUTURE INTEREST RATES

5 **REFLECT THE FED'S CURRENT MONETARY POLICY?**

- 6 A Yes. Blue Chip Financial Forecast tracked consensus economist that expected the
- 7 Fed would reduce Federal Fund interest rates throughout 2025. That consensus
- 8 economist outlook proved to be correct as illustrated in Figure 4 above.

1 These consensus economists' outlooks and projections of short-term FFR 2 levels and of the U.S. economic outlook includes an expectation that inflation and 3 interest rates will continue to decline in 2025, as illustrated below in Table 3.

TABLE 3											
Blue Chin Financial Forecasts											
Projected Federal	Fund	s Rate	e, 30-Y	ear Tre	easury	Bond	Yields	s, and	GDP F	Price I	ndex
	10	20	20	40	10	20	20	40	10	20	20
Publication Date	2024	2024	2024	2024	2025	2025	2025	2025	2026	2026	2026
Federal Funds Rate											
May-24	5.3	5.4	5.2	4.9	4.6	4.3	4.0				
Jun-24	5.3	5.4	5.2	5.0	4.7	4.4	4.1				
Jul-24		5.3	5.3	5.0	4.7	4.4	4.1	3.9			
Aug-24		5.3	5.3	5.0	4.7	4.4	4.1	3.9			
Sep-24		5.3	5.2	4.8	4.4	4.0	3.8	3.6			
Oct-24			5.3	4.6	4.1	3.8	3.5	3.3	3.3		
Nov-24			5.3	4.6	4.1	3.8	3.5	3.3	3.2		
Dec-24			5.3	4.6	4.2	3.9	3.7	3.6	3.5		
Jan-25				4.7	4.3	4.1	3.9	3.8	3.7	3.5	
Feb-25				4.7	4.3	4.2	4.0	3.9	3.8	3.6	
Mar-25				4.7	4.4	4.3	4.1	4.0	3.9	3.8	
Apr-25					4.3	4.3	4.2	4.0	3.8	3.7	3.6
May-25					4.3	4.3	4.1	3.9	3.6	3.4	3.3
<u>T-Bond, 30 yr.</u>											
May-24	4.3	4.6	4.5	4.4	4.3	4.2	4.2				
Jun-24	4.3	4.6	4.5	4.5	4.4	4.3	4.3				
Jul-24		4.6	4.5	4.4	4.4	4.3	4.3	4.2			
Aug-24		4.6	4.5	4.4	4.4	4.3	4.3	4.3			
Sep-24		4.6	4.2	4.2	4.1	4.1	4.1	4.1			
Oct-24			4.2	4.1	4.0	4.0	4.0	4.1	4.0		
Nov-24			4.2	4.3	4.2	4.2	4.2	4.2	4.2		
Dec-24			4.2	4.5	4.5	4.4	4.4	4.4	4.4		
Jan-25				4.5	4.6	4.5	4.5	4.5	4.5	4.4	
FeD-25				4.5	4.7	4.7	4.7	4.7	4.0	4.6	
Mai-25				4.5	4.7	4.7	4.7	4.0	4.0	4.0	4 5
Apr-25 May 25					4.7	4.0	4.0	4.5	4.5 1 1	4.5 1 1	4.5
iviay-25					4.7	4.0	4.5	4.5	4.4	4.4	4.4
GDP Price Index											
May-24	3.1	2.7	2.4	2.3	2.3	2.2	2.2				
Jun-24	3.0	2.8	2.5	2.3	2.3	2.3	2.2	0.4			
Jui-24		2.8	2.3	2.3	2.4	2.2	2.2	2.1			
Aug-24		2.3	2.3	2.3	2.3	2.2	2.2	2.1			
Oct-24		2.5	2.2	2.2	2.3	2.2	2.2	2.1	21		
Nov-24			1.8	2.0	2.2	2.2	2.1	2.1	2.1		
Dec-24			1.0	2.1	2.2	2.1	2.1	2.1	2.2		
Jan-25			1.0	2.2	2.3	2.4	2.4	2.5	2.6	2.1	
Feb-25				2.2	2.5	2.5	2.5	2.5	2.5	2.1	
Mar-25				2.4	2.7	2.5	2.5	2.5	2.5	2.2	
Apr-25					2.7	2.7	2.7	2.5	2.5	2.1	2.2
May-25					3.7	3.4	3.2	2.9	2.6	2.3	2.3
Source and Note											
Blue Chip Financial Forecasts, May 2024 through May 2025											
Actual Yields in Bol	ld.	,,	,			,					
	Actual fields in Dold.										

1 Moreover, the current outlook for long-term interest rates in the intermediate to 2 longer-term is also impacted by the Fed's current actions and the expectation that 3 eventually the Fed's monetary actions will return to more normal levels. Long-term 4 interest rate projections are illustrated in Table 4.

TABLE 4											
30-Year Treasury Bond Yield Actual Vs. Projection											
2-Year 5- to 10-Year Descriptior <u>Actual Projected*</u> Projected											
2019 Q1 Q2 Q3 Q4	3.01% 2.78% 2.30% 2.30%	3.50% 3.17% 2.70% 2.50%	3.6% - 3.8% 3.2% - 3.7%								
2020 Q1 Q2 Q3 Q4	1.88% 1.38% 1.36% 1.62%	2.57% 1.90% 1.87% 1.97%	3.0% - 3.8% 2.8% - 3.6%								
2021 Q1 Q2 Q3 Q4	2.07% 2.26% 1.93% 1.95%	2.23% 2.77% 2.63% 2.70%	3.5% - 3.9% 3.4% - 3.8%								
2022 Q1 Q2 Q3 Q4	2.25% 3.04% 3.26% 3.90%	2.87% 3.47% 3.63% 3.87%	3.8% - 3.9% 3.9% - 4.0%								
2023 Q1 Q2 Q3 Q4	3.74% 3.80% 4.24% 4.58%	3.77% 3.70% 3.83% 4.17%	3.8% - 3.9% 4.1% - 4.2%								
2024 Q1 Q2 Q3 Q4	4.33% 4.57% 4.22% 4.50%	4.03% 4.17% 4.20% 4.20%	4.3% - 4.4% 4.3% - 4.2%								
Source and Note: Blue Chip Financial Forecasts, January 2019 through March 2025. *Average of all 3 reports in Quarter.											
VII.C. Utility Industry Credit Outlook 1 2 PLEASE DESCRIBE THE CREDIT RATING OUTLOOK FOR REGULATED Q 3 UTILITIES. 4 А In S&P's, Industry Credit Outlook 2025, (dated January 14, 2025), it comments that 5 North American regulated utilities' credit quality remains under pressure. In that report, 6 it makes the following points: 7 1. Credit quality remains pressured due to natural disaster risks to 8 infrastructure and record levels of capital spending. 9 2. S&P's outlook reflects its expectation of continued large capital 10 spending, with consistent access to capital markets supported by 11 continued supportive utility regulatory treatment. 12 3. The expectation that utilities will manage credit metrics by funding large capital spending with balanced amounts of debt and equity 13 14 funding; and 15 4. Managing regulatory risk is especially highlighted during the large capital spending periods because utilities must prioritize rate 16 17 affordability and the impacts on customer bills through this period. 18 S&P notes that around 71% of the industry has stable credit rating outlooks. 19 and the industry median credit rating remains in the BBB+ category. 20 S&P emphasizes the importance of effective "management of customer 21 bill.^{*15} From that standpoint, the credit rating agency provides a clear description 22 of its assessment of regulatory treatment of utilities across the various jurisdictions. 23 S&P's regulatory risk rating of U.S. jurisdictions is copied below.

¹⁵ S&P Global, Ratings Industry Credit Outlook 2025: North American Regulated Utilities, January 14, 2025, at 11.



FIGURE 5

Source: S&P Global Ratings.

As outlined in Figure 5 above, the Kansas jurisdiction is regarded as "Highly Credit Supportive." This rating reflects the KCC's constructive mechanisms to mitigate regulatory lag. The Commission's favorable regulatory procedures and rules provide EKC an efficient and economic means of adjusting rates and charges to fully recover its cost of service even during major capital expenditure periods.

6 More recently, the Commission allowed EKC to recover costs tied to Plant in 7 Service Accounting ("PISA"). PISA was approved in the Kansas legislature pursuant 8 to House Bill 2527 ("HB 2527") and it allowed EKC to begin deferring, as of July 2024, 9 90% of both depreciation expense and return associated with qualifying plant additions 10 since the last rate case. This legislation allows the utilities to recover costs while 11 shifting the risk to customers.

1QHAVE CREDIT RATING AGENCIES STATED CONCERN ABOUT RATE2AFFORDABILITY AS A CREDIT RISK TO UTILITIES?

- A Yes. Credit rating agencies have been emphasizing rate affordability, maintaining
 adequate financial coverage of debt obligations, and supporting utilities' overall
- 5 investment grade bond ratings.
- 6 In a recent industry report, Moody's Investor Service ("Moody's") explained that
- 7 the regulated electric and gas utilities' outlook remains "negative" largely due to
- 8 increased pricing pressures on customers. Moody's stated that it changed its outlook
- 9 from "stable" to "negative" due to the following:
- 10 "We have revised our outlook on the US regulated utilities sector to 11 negative from stable. We changed the outlook because of increasingly 12 challenging business and financial conditions stemming from higher 13 natural gas prices, inflation, and rising interest rates. These 14 developments raise residential <u>customer affordability issues</u>, increasing 15 the level of uncertainty with regard to the timely recovery of costs for fuel 16 and purchased power, as well as for rate cases more broadly."¹⁷
- 17 Finally, Fitch Ratings ("Fitch") opined that the regulated electric and gas utilities'
- 18 outlook is deteriorating due to elevated capex, which puts pressure on credit metrics.
- 19 Fitch also notes the bill affordability concerns for ratepayers, generally, and regulators'
- 20 ability to balance the rate requests with increasing customer bills.
- 21 Specifically, Fitch states:
- 22 "Fitch Ratings' deteriorating outlook for the North American Utilities,
 23 Power & Gas sector reflects continuing return on equity headwinds and
 24 elevated capex that are putting pressure on credit metrics in the
 25 high-cost funding environment. Bill affordability concerns for ratepayers
 26 continue to persist despite the pull back in natural gas prices and
 27 inflationary pressures."¹⁸

¹⁷ *Moody's Investors Service Outlook*: "Regulated Electric and Gas Utilities – US 2023 outlook negative due to higher natural gas prices, inflation and rising interest rates," November 10, 2022, at 1 (emphasis added).

¹⁸ Fitch Ratings, *North American Utilities, Power & Gas Outlook 2024* December 6, 2023, at 1 (emphasis added).

1 As outlined by Moody's, S&P and Fitch above, credit analysts are focusing on 2 rate affordability as an important factor needed to support strong credit standing. This 3 is simply because customers must be able to afford to pay their utility bills in order for 4 utilities to maintain their financial integrity and strong investment grade credit standing. 5 For this reason, the Commission should carefully assess the reasonableness of cost of 6 service in this proceeding, including an appropriate overall rate of return and a return 7 on equity that represents fair compensation but also maintains competitive, just and 8 reasonable rates.

9

VII.D. EKC's and Investment Risk

10 Q PLEASE DESCRIBE THE INVESTMENT RISK CHARACTERISTICS OF EKC.

- 11 A The market's assessment of EKC's investment risk is described by credit rating
- 12 analysts' reports. EKC's current corporate bond ratings from S&P and Moody's are
- 13 BBB+ and Baa1, respectively.¹⁹ The Company's outlook is "stable" from both S&P and
- 14 Moody's.
- 15 S&P states the following in regard to EKC's credit profile:

16 Outlook

17Our stable outlook
which incorporates our expectation that its financial measures, specifically
funds from operations (FFO) to debt, will remain consistently above our
downgrade threshold, albeit with a minimal financial cushion. Our base-
case forecast assumes Evergy's funds from operations (FFO) to debt will
be in the 13%-15% range through 2026.

23 Business Risk

24Our assessment of EKC's business profile reflects its lower-risk, regulated25utility operations26cities of Topeka and Wichita. Given the substantial barriers to entry, we view27EKC and the overall regulated utility industry as insulated from competitive

¹⁹Bulkley Direct Testimony at 57.

market challenges. This supports our view of regulated utilities' very low industry risk compared to other industries.

* * *

4 Financial Risk

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5 Under our base-case scenario, we assume EKC's stand-alone S&P Global 6 Ratings-adjusted FFO to debt remains in the 16%-18% range through 2026. 7 which is close to the midpoint of our benchmark range. We expect that the 8 company will continue to benefit from the timely recovery of its invested 9 capital. Our base case also assumes elevated capital spending of about \$7 10 billion over the 2024-2028 period. We expect this elevated capital spending will cause EKC to generate negative discretionary cash flow over the 11 12 forecast period, requiring external funding including debt issuances and 13 group capital infusions. Therefore, we forecast the company's S&P Global 14 Ratings-adjusted debt to EBITDA will be in the 4.0x-5.0x range after 15 incorporating the incremental debt issuances to fund its rising spending. Over the same period, we assume our supplemental ratio of FFO cash 16 17 interest coverage will be in the 4.5x-5.5x range.

18We assess EKC's financial risk profile using our medial volatility19benchmarks, which are more relaxed than the benchmarks we use for20typical corporate issuers. This reflects its lower-risk utility operations and21effective regulatory risk management. 20

22 VII.E. EKC's Proposed Capital Structure

23 Q WHAT IS EKC'S PROPOSED CAPITAL STRUCTURE?

- A EKC's proposed capital structure is shown below in Table 4. The Company's witness
- 25 Mr. Ley sponsors EKC capital structure components for the period, ending March 31,
- 26 2025. The proposed capital structure in his direct testimony filed on January 31, 2025,
- 27 reflected projected capital structure weights with a common equity ratio of 51.97%.
- However, in response to CURB-92, the Company provided the actual March 31, 2025,
- 29 capital structure weights, which are shown below in Table 5.

²⁰Standard & Poor's RatingsDirect®: "Evergy Kansas Central Inc.," December 16, 2024, at 2, 4-6. (emphasis added).

TABLE 5 <u>EKC's Proposed Capital Structure</u> (March 31, 2025)				
Description	Weight			
Long-Term Debt Common Equity Total Regulatory Capital Structure	47.95% <u>52.05%</u> 100.00%			
Source: QCURB-92_2025 KS CENTRAL TRUE-UP.	Rate Model –			

As indicated in the table above, the Company is proposing a regulatory capital
 structure with a 52.05% common equity ratio for EKC.

3 Q WHAT WAS THE RATEMAKING CAPITAL STRUCTURE APPROVED BY THE

4 COMMISSION IN THE COMPANY'S LAST REGULATORY PROCEEDINGS?

A In EKC's last regulatory proceeding (23-EKCE-775-RTS), the Commission approved a
stipulation with a return on equity of 9.3% but the regulatory common equity ratio was
not disclosed. In the prior rate case (18-WSEE-328-RTS), the Commission approved
a capital structure containing a 51.24% common equity ratio and a return on equity of
9.4%.

10 Q IS THE COMPANY'S PROPOSED CAPITAL STRUCTURE REASONABLE FOR

11

RATEMAKING PURPOSES?

A No. Increasing the common equity ratio as proposed by the Company increases the cost
 of service and is not needed to support its bond rating or financial integrity. EKC witness
 Mr. Ley has not proven that the increased common equity ratio is fair and reasonable for

ratemaking purposes and needed in order to support the Company's bond rating and credit
 standing. Hence, this increased common equity ratio has not been justified and should not
 be approved.

The Commission should consider the recently approved regulatory mechanisms such as PISA, discussed above. These mechanisms support EKC's cash flows during its large capital program. Therefore, it is important to approve a ratemaking capital structure that supports the Company's financial integrity and access to capital but at the lowest possible cost to customers.

- 9 The Company's proposed ratemaking capital structure is more expensive than 10 necessary to support EKC's investment grade credit standing. I propose a rate making 11 capital structure which contains adequate amounts of common equity, to manage the 12 Company's overall leverage risk, both on balance sheet and off-balance sheet, while 13 also minimizing cost to customers. Towards this objective, I recommend developing a 14 rate making capital structure with the following observable factors:
 - 1. The ratemaking capital structure common equity ratio should be competitive with the observed utility industry average ratemaking common equity ratio. If the industry has proven access to capital, investment grade credit, then its financial integrity is being supported.
 - 2. The ratemaking capital structure should support the utility's ability to earn credit metrics that support investment grade credit standing.
- 21 Q HOW DOES EKC'S PROPOSED RATEMAKING CAPITAL STRUCTURE COMMON

22 EQUITY RATIO COMPARE TO THE INDUSTRY AVERAGE AUTHORIZED

23 **RATEMAKING CAPITAL STRUCTURE COMMON EQUITY RATIO?**

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- 24 A EKC's proposed ratemaking capital structure with a 52.05% is not competitive and
- 25 more expensive than the industry authorized ratemaking capital structure. The industry
- 26 authorized ratemaking capital structure equity ratio is illustrated in Table 6 below.

		(Industry)	
		Ele	ctric ¹
<u>.ine</u>	<u>Year</u> (1)	Average (2)	<u>Median</u> (3)
1	2013	50.12%	51.03%
2	2014	50.28%	50.00%
3	2015	49.89%	50.47%
1	2016	49.70%	49.99%
2	2017	50.02%	49.85%
3	2018	50.60%	50.23%
4	2019	51.55%	51.37%
5	2020	50.93%	51.17%
6	2021	51.01%	52.00%
7	2022	51.57%	51.92%
8	2023	51.59%	52.27%
9	2024	51.07%	52.10%
10	2025	50.53%	51.12%
11	Average	50.68%	51.04%
12	Median	50.60%	51.12%
So	urce and Notes:		
1	S&P Global Marke	t Intelligence data thro	ugh March 31, 2025

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As shown above in Table 6, the industry average and median common equity ratios for electric utilities over the last 10 years have been consistently around 50.0%- 51.0%. EKC's proposed ratemaking common equity ratio of 52.05% is in excess of the industry average and median authorized ratemaking capital structures equity ratio. As noted above, the industry has enjoyed strong access to capital under reasonable terms and prices, that has supported robust rate base investment and growth. Also, the industry has exhibited strong investment grade credit ratings, and stock prices have been stable and robust. This is observable evidence that the regulated utility industry's authorized capital structure is fair and reasonable to all stakeholders.

6 Q WHAT IS YOUR PROPOSED CAPITAL STRUCTURE FOR EKC?

A My proposed capital structure reflects a common equity ratio of 51.25%, which is
consistent with the capital structure authorized by the Commission in EKC's last rate

9 case. My proposed capital structure is summarized below in Table 7.

TABLE 7 <u>KIC Proposed Capital Structure</u> (March 31, 2025)					
Description	Weight				
Long-Term Debt Common Equity Total Regulatory Capital Structure Source: Exhibit MPG-1.	48.75% <u>51.25%</u> 100.00%				

10I propose a more balanced capital structure that contains a common equity ratio11that aligns with the industry common equity ratio as discussed above. Importantly, this12capital structure will support the Company's financial integrity and access to capital but at13more reasonable costs to customers than EKC's proposal.

1QIF EKC RATEMAKING CAPITAL STRUCTURE IS ADJUSTED TO INCLUDE A251.25% COMMON EQUITY RATIO, WOULD ITS TOTAL LEVERAGE SUPPORT ITS3INVESTMENT GRADE CREDIT RATING.

4 А Yes. Credit rating agencies consider the total investment risk of corporate issuers, 5 including utilities. This includes the Company's on balance sheet and off-balance sheet 6 ("OBS") contractual obligations that are considered by credit rating agencies as debt 7 equivalents. These types of contractual payments can include various contractual 8 obligations including PPAs, leases, pension obligations and asset retirement 9 obligations. In reflecting a utility's total leverage risk, credit analysts measure an 10 "adjusted debt" ratio, which reflects both balance sheet debt and contractual debt 11 equivalent obligations. The adjusted debt ratio is designed to measure the utility's total 12 leverage risk.

13 Q HOW DOES EKC'S TOTAL LEVERAGE BASED ON EPE'S PROPOSED CAPITAL 14 STRUCTURE COMPARED TO THE TOTAL LEVERAGE BASED ON THE 15 COMMISSION APPROVED COMMON EQUITY RATIO?

A Based on EKC's ratemaking capital structure with a 52.05% equity ratio, and reflecting EKC contractual OBS debt equivalents obtained from S&P, EKC's adjusted debt ratio would be approximately 53.05% as shown on page 3 of Exhibit MPG-18. If EKC ratemaking capital structure continues to reflect a 51.25% equity ratio rather than the 52.05% proposed by the Company, its adjusted debt ratio would change to 53.76% (equity weight at 46.24%). The adjusted debt ratio at a 51.25% ratemaking equity ratio reasonably aligns with the adjusted debt ratio reflected in S&P credit metric projections.

1 Q HAS S&P PUBLISHED CREDIT METRICS FOR EKC ALIGNED WITH ITS 2 CURRENT INVESTMENT BOND RATING BASED ON THE COMMISSION 3 **APPROVED COMMON EQUITY RATIO?**

4 А In the December 2024 report, S&P provided its evaluation and financial data that 5 supports its stable credit outlook on EKC's current BBB+ corporate credit rating. In that 6 report, S&P projected core credit metrics for EKC and provided details on its adjusted 7 debt ratio relative to total capital. As shown in the table below, S&P measured EKC's 8 credit metrics using an approximate 52% to 54% adjusted debt ratio. In its forecasted 9 core credit metrics for years 2023-2026, S&P made projections of EKC's cashflow 10 (Funds From Operations "FFO") to a total adjusted debt, and debt to earnings before 11 income taxes, depreciation and amortization ("EBITDA"), which are core credit metrics 12 used to determine credit ratings.

TABLE 8								
S&P Credit Metrics								
				Actual			Proje	cted ²
Line	Core Ratios	2020	<u>2021</u>	2022	2023	2024	2025	2026
1	Debt/EBITDA	4.4x	4.0x	4.5x	4.6x	4.2x	4.0x - 5.0x	4.0x - 5.0x
2	FFO/Debt	19.1%	21.2%	17.4%	16.8%	19.5%	17% - 18%	16% - 18%
3	Debt to Capital	52.7%	52.2%	54.2%	52.6%	53.3%		
	Source: ¹ Standard & Poor's C ² Standard & Poor's R	Capital IQ® , c RatingsDirect®	lownloaded o ∂∶"Evergy Ka	n May 22, 20 ansas Central	25 <i>.</i> Inc.," Decem	ber 16, 2024.		

13

As outlined in its projections, S&P was expecting EKC's FFO to total debt to be 14 in the range of 16% to 18% and Debt to EBITDA in the range of 4.0x to 5.0. As developed below, at my recommended ratemaking capital structure with a 51.25% 15 16 common equity ratio, and a 9.40% return on equity, EKC retail cost of service would 17 earn an FFO/total adjusted debt, and debt to EBITA of 19.0% and 3.5x, respectively. These credit metrics are for retail operations only and they show improvement relative
 to S&P projections.

These credit metrics projections, and the stable outlook for EKC disputes EKC's belief that an increase in its equity ratio is needed to stabilize its investment grade bond rating. Rather, the increase in the equity ratio would simply create an unnecessary increase in customers' rates and permit the utility to either pay larger dividends up to its parent company or fund more rate base growth using ratepayer revenue based funding sources (retained earnings, depreciation expense, deferred income taxes).

9 Q WHY WILL ADJUSTING EKC EQUITY RATIO OF ITS RATEMAKING CAPITAL 10 STRUCTURE LOWER ITS COST OF SERVICE, WHILE ALSO SUPPORTING ITS 11 CREDIT RATING AND FINANCIAL INTEGRITY?

12 А Using an equity-thick capital structure increases EKC's rate of return and revenue 13 requirement because common equity is the most expensive form of capital and is 14 subject to income tax expense. For example, customers will pay a return of 12.07% 15 for the revenue requirement to produce a 9.50% return on equity (9.50% x 1.27 16 gross-up). In comparison, customers will pay around 5.70% on debt capital because it 17 is not subject to income tax expense. In this example, common equity capital is more 18 than twice as expensive as debt capital; but it will always be more expensive due to the 19 gross-up for taxes.

Because of the significantly greater cost, a utility should finance its utility plant investments with a reasonable mix of debt and equity. Equity is needed to manage the level of financial risk to support strong investment grade credit. However, too much common equity will increase a utility's rates above that necessary to support strong investment credit and reasonable access to capital markets. Conversely, a balanced capital structure will produce reasonable cost to customers, which still supports a strong
 investment grade credit standing and in turn allows a utility to fund necessary plant
 investment to maintain service quality and reliability. As such, a capital structure
 composed of a reasonable mix of debt and equity capital, such as my proposed capital
 structure will support EKC's financial integrity and credit standing at the most
 reasonable and just prices to retail customers.

7 8

VII.F. Embedded Cost of Debt

9 Q WHAT IS THE COMPANY'S EMBEDDED COST OF LONG-TERM DEBT?

A The cost of debt is supported by EKC witness Mr. G. Ley and developed on the Errata
Exhibit GTL-2. I used EKC's proposed cost of long-term debt of 4.64% in the
development of my overall rate of return.

13 VIII. RETURN ON EQUITY

14 Q PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON 15 EQUITY."

A utility's cost of common equity is the expected return that investors require on an
investment in the utility. Investors expect to earn their required return from receiving
dividends and through stock price appreciation.

19QPLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED20UTILITY'S COST OF COMMON EQUITY.

A In general, determining a fair cost of common equity for a regulated utility has been
framed by two hallmark decisions of the U.S. Supreme Court: *Bluefield Water Works*& *Improvement Co. v. Pub. Serv. Comm'n of W. Va.*, 262 U.S. 679 (1923) and *Fed.*

1 Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944). In these decisions, the 2 U.S. Supreme Court found that just compensation depends on many circumstances 3 and must be determined by fair and enlightened judgments based on relevant facts. 4 The U.S. Supreme Court found that a utility is entitled to such rates as were permitted 5 to earn a return on its property devoted to the convenience of the public that is generally 6 consistent with the same returns available in other investments of corresponding risk. 7 The Court continued that the utility has no constitutional rights to profits such as those 8 realized or anticipated in highly profitable enterprises or speculative ventures, and 9 defined the ratepayer/investor balance as follows: "The return should be reasonably sufficient to assure confidence in the 10 11 financial soundness of the utility and should be adequate, under efficient 12 and economical management, to maintain and support its credit and enable 13 it to raise the money necessary for the proper discharge of its public duties".21 14 15 As such, a fair rate of return is based on the expectation that the utility's costs 16 reflect efficient and economical management, and the return will support its credit 17 standing and access to capital, without being in excess of this level. From these 18 standards, rates to customers will be just and reasonable, and under economic 19 management, compensation to the utility will be fair and support its financial integrity 20 and credit standing.

²¹ Bluefield, 262 U.S. 679, 693 (1923), emphasis added.

1

VIII.A. Risk Proxy Group

2 Q PLEASE DESCRIBE HOW YOU IDENTIFIED A PROXY UTILITY GROUP THAT 3 COULD BE USED TO ESTIMATE EKC'S CURRENT MARKET COST OF EQUITY.

A I relied on Ms. Bulkley's proxy group that consist of 17 regulated utility holding
companies followed by *Value Line*. I believe this proxy group has reasonably
comparable total investment risk to EKC.

Q PLEASE DESCRIBE WHY YOU BELIEVE YOUR PROXY GROUP IS REASONABLY 8 COMPARABLE IN INVESTMENT RISK TO EKC.

- 9 A My proxy group is shown in Exhibit MPG-5. The proxy group has an average credit 10 rating from S&P of BBB+, which is identical to EKC's credit rating from S&P-. The 11 proxy group has an average Moody's credit rating of Baa2, which is also a notch below 12 EKC's credit rating from Moody's of Baa1.
- The proxy group has an average common equity ratio of 39.6% from S&P (including short-term debt) and a 43.6% equity ratio from *Value Line* (excluding short-term debt). My proposed ratemaking capital structure equity ratio of 51.0% is higher than that of the proxy group average common equity ratio, reflecting low financial risk. Therefore, my proxy group will produce conservative return on equity results.
- 18

VIII.B. DCF Model

19 Q PLEASE DESCRIBE THE DCF MODEL.

A The DCF model posits that a stock price is valued by summing the present value of expected future cash flows discounted at the investor's required rate of return or cost of capital. This model is expressed mathematically as follows:

1 2	$P_{0} = \frac{D_{1}}{(1+K)^{1}} + \frac{D_{2}}{(1+K)^{2}} \dots \frac{D_{\infty}}{(1+K)^{\infty}} $ (Equation 1)
3 4 5	P_0 = Current stock price D = Dividends in periods 1 - ∞ K = Investor's required return
6	This model can be rearranged to estimate the discount rate or investor-required
7	return, known as "K." If it is reasonable to assume that earnings and dividends will
8	grow at a constant rate, then Equation 1 can be rearranged as follows:
9	$K = D_1/P_0 + G $ (Equation 2)
10 11 12 13	K = Investor's required return $D_1 =$ Dividend in first year $P_0 =$ Current stock price G = Expected constant dividend growth rate

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

Q PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL. 15

- 16 А As shown in Equation 2 above, the DCF model requires a current stock price, expected
- 17 dividend, and expected growth rate in dividends.

WHAT STOCK PRICE DID YOU USE IN YOUR CONSTANT GROWTH DCF 18 Q

19 MODEL?

20 А I relied on the average of the weekly high and low stock prices of the utilities in the 21 proxy group over a 13-week period ending on May 2, 2025. An average stock price is 22 less susceptible to market price variations than a price at a single point in time. 23 Therefore, an average stock price is less susceptible to aberrant market price 24 movements, which may not reflect the stock's long-term value.

25 A 13-week average stock price reflects a period that is still short enough to 26 contain data that reasonably reflects current market expectations, but the period is not so short as to be susceptible to market price variations that may not reflect the stock's
long-term value. In my judgment, a 13-week average stock price is a reasonable
balance between the need to reflect current market expectations and the need to
capture sufficient data to smooth out aberrant market movements.

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

6 A I used the most recently paid quarterly dividend as reported in *Value Line*.²² This 7 dividend was annualized (multiplied by 4) and adjusted for next year's growth to 8 produce the D_1 factor for use in Equation 2 above. In other words, I calculate D_1 by 9 multiplying the annualized dividend (D_0) by (1+G).

10 Q WHAT DIVIDEND GROWTH RATES DID YOU USE IN YOUR CONSTANT GROWTH 11 DCF MODEL?

- 12 A There are several methods that can be used to estimate the expected growth in 13 dividends. However, regardless of the method, to determine the market-required return 14 on common equity, one must attempt to estimate investors' consensus about what the 15 dividend, or earnings growth rate, will be and not what an individual investor or analyst 16 may use to make individual investment decisions.
- As predictors of future returns, securities analysts' growth estimates have been shown to be more accurate than growth rates derived from historical data.²³ That is, assuming the market generally makes rational investment decisions, analysts' growth projections are more likely to influence investors' decisions, which are captured in observable stock prices, than growth rates derived only from historical data.

²² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

²³ See, e.g., David Gordon, Myron Gordon & Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.

For my constant growth DCF analysis, I relied on a consensus, or mean, of professional securities analysts' earnings growth estimates as a proxy for investor consensus dividend growth rate expectations. I used the average of analysts' growth rate estimates from three sources: Zacks, MI, and I/B/E/S, provided by LSEG Workspace. All such projections were available on May 2, 2025, and all were reported online.

7 Each consensus growth rate projection is based on a survey of securities 8 analysts. There is no clear evidence whether a particular analyst is most influential on 9 general market investors. Therefore, a single analyst's projection does not predict 10 consensus investor outlook as reliably as does a consensus of market analysts' 11 projections. The consensus estimate is a simple arithmetic average, or mean, of 12 surveyed analysts' earnings growth forecasts. A simple average of the growth 13 forecasts gives equal weight to all surveyed analysts' projections. Therefore, a simple 14 average, or arithmetic mean, of analyst forecasts is a good proxy for market consensus 15 expectations.

16 Q WHAT ARE THE GROWTH RATES YOU USED IN YOUR CONSTANT GROWTH 17 DCF MODEL?

A The growth rates I used in my DCF analysis are shown in Exhibit MPG-6. The average
growth rate for my proxy group is 6.76%.

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

A As shown in Exhibit MPG-7, the average and median constant growth DCF returns for my electric proxy group for the 13-week analysis are 10.51% and 10.67%, respectively.

1 Q DO YOU HAVE ANY COMMENTS ON THE RESULTS OF YOUR CONSTANT 2 GROWTH DCF ANALYSIS?

3 А Yes. The constant growth DCF analysis for my proxy groups is based on an average 4 long-term sustainable growth rate of 6.76%. The three- to five-year growth rate is 5 higher than my estimate of a maximum long-term sustainable growth rate of 4.10%. As 6 discussed in detail below, the DCF model requires a growth rate that can be sustained 7 in perpetuity. It is unreasonable to assume that utilities in general, can grow at a rate 8 above the growth rate of the U.S. economy. Therefore, applying a DCF model that 9 captures various growth rate outlooks as I have done is more reasonable in the current 10 market environment.

11 Q HOW DID YOU ESTIMATE A MAXIMUM LONG-TERM SUSTAINABLE GROWTH 12 RATE?

13 А The long-term sustainable growth rate for a utility stock cannot exceed the growth rate 14 of the economy in which it sells its goods and services. The long-term maximum 15 sustainable growth rate for a utility investment is, accordingly, best proxied by the 16 projected long-term Gross Domestic Product ("GDP") growth rate as that reflects the 17 projected long-term growth rate of the economy as a whole. While growth rates over 18 shorter periods can exceed the GDP growth rate, those short-term growth periods are 19 likely followed by other periods where the growth rate is below the GDP. On average, 20 over long periods of time, the growth rate is most accurately approximated by the 21 long-term growth rate outlooks of the U.S. GDP.

Blue Chip Economic Indicators projects that over the next 5 to 10 years, the
 U.S. nominal GDP will grow at an annual rate of approximately 4.1%. These GDP
 growth projections reflect a real growth outlook of around 1.9% and an inflation outlook

of around 2.2% going forward. As such, the average nominal growth rate over the next
 5 to 10 years is around 4.1%, which I believe is a reasonable proxy of long-term
 sustainable growth.²⁴

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

5 GDP GROWTH AS A MAXIMUM SUSTAINABLE GROWTH RATE?

A Yes. In my multi-stage growth DCF analysis, I discuss academic and investment
 practitioner support for using the projected long-term GDP growth outlook as a
 maximum sustainable growth rate projection. However, using the long-term GDP
 growth rate as a conservative projection for the maximum sustainable growth rate is
 logical and is generally consistent with academic and economic practitioners' accepted
 practices.

Q WOULD IT BE REASONABLE TO EXPECT THAT THE SHORT-TERM GROWTH RATE CAN BE SUSTAINED INDEFINITELY, IF THE UTILITY HAS A SUSTAINED LEVEL OF LARGE CAPITAL EXPENDITURES?

15 А No. The growth rate largely tracks the percentage growth in rate base, which is a 16 source of net income the utility earns from providing utility service. While capital 17 investments are expected to be at elevated levels for the foreseeable future, the growth 18 in rate base will start to slow over time, as elevated capital expenditures produce a 19 lower base growth rate over time because the elevated capital addition will become a 20 lower percentage of embedded rate base. That is, utility elevated capital expenditures 21 cannot reasonably be expected to expand above general inflation levels because 22 utilities have limited amounts of qualified engineers and contractors, and limited major

²⁴ Blue Chip Economic Indicators, March 10, 2025, at 14.

1 equipment suppliers to provide the materials needed to replace and expand 2 infrastructure assets or rate base. As embedded rate base grows, the percent growth 3 in rate base starts to slow over time. For example, assume an elevated annual capital 4 addition to rate base of \$100 and an embedded rate base of \$1,000. This would 5 produce a rate base growth of 10% (\$100/\$1,000). However, if the embedded base 6 grows from \$1,000 to \$2,000 over time, then the continued elevated capital addition to 7 rate base of \$100 would slow the embedded rate base growth to 5% (\$100/\$2,000). 8 Hence, growth of rate base and growth of earnings will start to slow over time as 9 embedded rate base grows even while annual capital additions to rate base stay 10 elevated. As such, three- to five-year growth rate projections may be reasonable for 11 the next three to five years, but they are not reasonable indicators of long-term, 12 sustainable growth.

13

VIII.C. Sustainable Growth DCF

14 Q PLEASE DESCRIBE HOW YOU ESTIMATED A SUSTAINABLE LONG-TERM
 15 GROWTH RATE FOR YOUR SUSTAINABLE GROWTH DCF MODEL.

A sustainable growth rate is based on the percentage of the utility's earnings that is retained and reinvested in utility plant and equipment. These reinvested earnings increase the earnings base ("rate base"). Earnings grow when plant funded by reinvested earnings is put into service, and the utility is allowed to earn its authorized return on such additional rate base investments.

The internal growth methodology is tied to the percentage of earnings retained by the utility and not paid out as dividends. The earnings retention ratio is 1 minus the dividend payout ratio. As the payout ratio declines, the earnings retention ratio increases. An increased earnings retention ratio will fuel stronger growth as the
 business funds more investments with retained earnings.

The payout ratios of the proxy group are shown in my Exhibit MPG-8. These dividend payout ratios and earnings retention ratios then can be used to develop a sustainable long-term earnings retention growth rate. A sustainable long-term earnings retention ratio will help gauge whether analysts' current three- to five-year growth rate projections can be sustained over an indefinite period of time.

8 The data used to estimate the long-term sustainable growth rate is based on 9 EKC's current market-to-book ratio and on *Value Line*'s three- to five-year projections 10 of earnings, dividends, earned returns on book equity, and stock issuances.

As shown in Exhibit MPG-9, the average sustainable growth rate using this internal growth rate model is 5.29% for my proxy group. However, I would point out that prior to accounting for the external sale of additional shares, the internal growth rate for the proxy group is 4.62%, which demonstrates that my sustainable growth rate of 4.10% is reasonable.

16 Q WHAT IS THE DCF ESTIMATE USING THESE SUSTAINABLE LONG-TERM 17 GROWTH RATES?

A DCF estimate based on these sustainable growth rates is developed in
 Exhibit MPG-10. As shown there, the sustainable growth DCF analysis produces proxy
 group average and median DCF results for the 13-week period of 8.99% and 8.98%,
 respectively.

VIII.D. Multi-Stage Growth DCF Model

2 Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?

1

A Yes. My first constant growth DCF is based on consensus analysts' growth rate projections, so it is a reasonable reflection of rational investment expectations over the next three to five years. The limitation on this constant growth DCF model is that it cannot reflect the rational expectation that a period of high or low short-term growth can be followed by a change in growth to a rate that better reflects long-term sustainable growth. Therefore, I performed a multi-stage growth DCF analysis to reflect this outlook of changing growth expectations.

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

A Analyst-projected growth rates over the next three to five years will change as utility earnings growth outlooks change. Utility companies go through cycles in making investments in their system. When utility companies are making large investments, their rate base grows rapidly, which in turn accelerates earnings growth. Once a major construction cycle is completed or levels off, growth in the utility rate base slows and its earnings growth slows from an abnormally high three- to five-year rate to a lower sustainable growth rate.

As major construction cycles extend over longer periods of time, even with an accelerated construction program, the growth rate of the utility will slow simply because the pace of rate base growth will slow and because the utility has limited human and capital resources available to expand its construction program. Therefore, the three- to five-year growth rate projection should only be used as a long-term sustainable growth rate in concert with a reasonable, informed judgment as to whether it reflects the current 1 market environment, the industry, and whether the three- to five-year growth outlook is 2 actually sustainable.

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

4 А The multi-stage growth DCF model reflects the possibility of non-constant growth for a 5 company over time. The multi-stage growth DCF model reflects three growth periods: 6 (1) a short-term growth period consisting of the first five years; (2) a transition period, 7 consisting of the next five years (years 6 through 10); and (3) a long-term growth period 8 starting in year 11 through perpetuity.

9 For the short-term growth period, I relied on the consensus analysts' growth 10 projections I used above in my constant growth DCF model. For the transition period, 11 the growth rates were reduced or increased by an equal factor reflecting the difference 12 between the analysts' growth rates and the long-term sustainable growth rate. For the 13 long-term growth period, I assumed each company's growth would converge to the 14 maximum sustainable long-term growth rate, which is the projected long-term GDP 15 growth rate.

Q

16

17

WHY IS THE GDP GROWTH PROJECTION A REASONABLE PROXY FOR THE MAXIMUM SUSTAINABLE LONG-TERM GROWTH RATE?

18 А Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the 19 economy in which they sell services. Utilities' earnings/dividend growth is fueled by 20 increased utility investment or rate base. Such investment, in turn, is driven by service 21 area economic growth and demand for utility service. In other words, utilities invest in 22 plants to meet sales demand growth. Sales growth, in turn, is tied to economic growth 23 in their service areas.

1 The U.S. Department of Energy, Energy Information Administration ("EIA") has 2 observed utility sales growth tracks via U.S. GDP growth, albeit at a lower level, as 3 shown in Exhibit MPG-11. Utility sales growth, which is a proxy for revenue growth, 4 has lagged behind GDP growth for more than a decade. As a result, nominal GDP 5 growth, which tracks economic revenue changes via sales and price changes, is a very 6 conservative proxy for utility financial growth - revenue growth, rate base growth, and 7 earnings growth. Therefore, the U.S. GDP nominal growth rate is a reasonable proxy 8 for the highest sustainable long-term growth rate of a utility.

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

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

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

- 12 A Yes. This concept is supported in published analyst literature and academic work.
- 13 Specifically, in "Fundamentals of Financial Management," a textbook published by
- 14 Eugene Brigham and Joel F. Houston, the authors state:
- 15 "The constant growth model is most appropriate for mature companies
 16 with a stable history of growth and stable future expectations. Expected
 17 growth rates vary somewhat among companies, but <u>dividends for</u>
 18 <u>mature firms are often expected to grow in the future at about the same</u>
 19 rate as nominal gross domestic product (real GDP plus inflation)."²⁵
- 20 The use of the economic growth rate is also supported by investment
- 21 practitioners as outlined as follows:
- 22 Estimating Growth Rates
- 23 One of the advantages of a three-stage discounted cash flow model is 24 that it fits with life cycle theories with regard to company growth. In these 25 theories, companies are assumed to have a life cycle with varying 26 growth characteristics. Typically, the potential for extraordinary growth

²⁵ *"Fundamentals of Financial Management*," Eugene F. Brigham & Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298 (emphasis added).

1 in the near-term eases over time and eventually growth slows to a more 2 stable level.

3 * * *

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

11 Q ARE THERE ACTUAL INVESTMENT RESULTS THAT SUPPORT THE THEORY

12 THAT THE GROWTH ON STOCK INVESTMENTS WILL NOT EXCEED THE

13 NOMINAL GROWTH OF THE U.S. GDP?

- A Yes. This is evident by a comparison of the compound annual growth of the U.S. GDP to the geometric growth of the U.S. stock market. Kroll measures the historical geometric growth of the U.S. stock market over the period 1926-2023 to be approximately 6.2%.²⁷ During this same time period, the U.S. nominal compound annual growth of the U.S. GDP was approximately 6.1%.²⁸
- As such, over the past 95 years, the geometric average growth of the U.S. nominal GDP has been slightly higher than, but comparable to, the geometric average growth of the U.S. stock market capital appreciation. This historical relationship indicates that the U.S. GDP growth outlook is a reasonable estimate of the long-term sustainable growth of U.S. stock investments.

²⁶ Morningstar, Inc., Ibbotson SBBI 2013 Valuation Yearbook at 51 and 52.

²⁷ Kroll, 2023 SBBI Yearbook at 137, Market Direct.

²⁸ U.S. Bureau of Economic Analysis, Table 1.1.5 Gross Domestic Product, Revised March 27, 2025.

1QWHAT IS THE GEOMETRIC AVERAGE AND WHY IS IT APPROPRIATE TO USE2THIS MEASURE TO COMPARE GDP GROWTH TO CAPITAL APPRECIATION IN3THE STOCK MARKET?

A The terms geometric average growth rate and compound annual growth rate are used
interchangeably. The geometric average growth rate is the calculated growth rate, or
return, which measures the magnitude of growth from start to finish. The geometric
average is best, and most often, used as a measurement of performance or growth
over a long period of time.²⁹ Because I am comparing achieved growth in the stock
market to achieved growth in U.S. GDP over a long period of time, the geometric
average growth rate is most appropriate.

11QHOW DID YOU DETERMINE A LONG-TERM GROWTH RATE THAT REFLECTS12THE CURRENT CONSENSUS MARKET PARTICIPANT OUTLOOK?

A I relied on the economic consensus of long-term GDP growth projections. *Blue Chip Economic Indicators* publishes the consensus for GDP growth projections twice a year.
 These consensus GDP growth outlooks are the best available measure of the market's
 assessment of long-term GDP growth because the analysts' projections reflect all
 current outlooks for GDP. They are, therefore, likely the most influential on investors'
 expectations of future growth outlooks. The consensus projections published for the
 GDP growth rate outlook is 4.1% over the next five to ten years.³⁰

I propose to use the consensus for projected five-year average GDP growth
 rates of 4.1%, as published by *Blue Chip Economic Indicators*, as an estimate of
 long-term sustainable growth. *Blue Chip Economic Indicators*' projections provide real

²⁹ New Regulatory Finance, Roger Morin, PhD, at 133-134.

³⁰ Blue Chip Economic Indicators, March 10, 2025, at 14.

GDP growth projections of 1.9% and inflation of approximately 2.2% over the next fiveto ten-year (2026-2035) period, resulting in an average projected nominal annual GDP growth projection of 4.1%.³¹ These GDP growth forecasts most accurately reflect the expectations of market participants because they are based on published economic consensus projections.

6 Q DO YOU CONSIDER OTHER SOURCES OF PROJECTED LONG-TERM GDP 7 GROWTH?

8 A Yes, and these alternative sources corroborate the consensus analysts' projections I
9 relied on. Various, commonly relied upon analysts' projections are shown in Table 9
10 below.

	TABLE 9				
GDP Forecasts					
Source	Projected <u>Period</u>	Real <u>GDP</u>	Inflation	Nominal <u>GDP</u>	
Blue Chip Economic Indicators ¹	5-10 Yrs	1.9%	2.2%	4.1%	
EIA - Annual Energy Outlook ²	26 Yrs	1.8%	2.1%	3.9%	
Congressional Budget Office ³	30 Yrs	1.6%	2.0%	3.7%	
Moody's Analytics ⁴	31 Yrs	2.0%	2.1%	4.1%	
Social Security Administration ⁵	76 Yrs	1.6%	2.4%	4.0%	
Economist Intelligence Unit ⁶	31 Yrs	1.6%	2.3%	3.9%	
Annual Energy Outlook 2025, April 15, 2025. ³ Congressional Budget Office, Long-Term Budget Outlook, March 27, 2025. ⁴ Moody's Analytics Forecast, last updated January 13, 2025. ⁵ Social Security Administration, "2024 OASDI Trustees Report," Table VI.G6. May 6, 2024. ⁶ S&P MI, Economist Intelligence Unit, downloaded on March 4, 2025.					
As shown in Table 9, the real 2.0% to 2.4% respectively. The transmission of the table 2.0% to 2.4% respectively.	al GDP and ir	nflation f	all in the rai	nge of 1.6%	
110 2.070 to 2.470, respectively. The				ne range or	
.1%.					
.1%. Therefore, the nominal GD	P growth pr	ojection	s made by	these inde	

6 expectations for long-term GDP growth.

Q WHAT STOCK PRICE, DIVIDEND, AND GROWTH RATES DID YOU USE IN YOUR MULTI-STAGE GROWTH DCF ANALYSIS?

3 А I relied on the same 13-week average stock prices and the most recent quarterly 4 dividend payment data discussed above. For stage one growth, I used the consensus 5 analysts' growth rate projections discussed above in my constant growth DCF model. The first stage covers the first five years, consistent with the time horizon of the 6 7 securities analysts' growth rate projections. The second stage, or transition stage, 8 begins in year six and extends through year ten. The second stage growth transitions 9 the growth rate from the first stage to the third stage using a straight linear trend. For 10 the third stage, or long-term sustainable growth stage, starting in year 11, I used a 4.1% 11 long-term sustainable growth rate based on the consensus economists' long-term 12 projected nominal GDP growth rate.

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

A As shown in Exhibit MPG-12, the average and median DCF returns on equity for my proxy group using the 13-week average stock price are 8.40% and 8.29%, respectively.

16 VIII.E. DCF Summary Results

17 Q PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSES.

18 A The results from my DCF analyses are summarized in Table 10 below.

TABLE 10					
Summary of DCF Result	s				
Description	<u>Average</u>	<u>Median</u>			
Constant Growth DCF Model (Analysts' Growth)	10.51%	10.67%			
Constant Growth DCF Model (Sustainable Growth)	8.99%	8.98%			
Multi-Stage Growth DCF Model	8.40%	8.29%			
Average	9.30%	9.31%			

Based on the current market conditions, my DCF studies indicate a fair return on equity for EKC in the range of 9.00% to 9.30%, with an approximate midpoint of 9.20%. This point estimate includes the unsustainably high growth estimates based on current analysts' unsustainably high three-five year growth rate outlooks, and also gives consideration to my sustainable growth and multi-stage growth DCF models that reflect more reasonable and accurate estimates of long-term sustainable growth outlooks.

7

VIII.F. Risk Premium Model

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

9 A This model is based on the principle that investors require a higher return to assume 10 greater risk. Common equity investments have greater risk than bonds because bonds 11 have more security of payment in bankruptcy proceedings than common equity and the 12 coupon payments on bonds represent contractual obligations. In contrast, companies 13 are not required to pay dividends or guarantee returns on common equity investments. 14 Therefore, common equity securities are considered to be riskier than bond securities. 1 This risk premium model is based on two estimates of an equity risk premium. 2 First, I quantify the difference between regulatory commission-authorized returns on 3 common equity and contemporary U.S. Treasury bonds. The difference between the 4 authorized return on common equity and the Treasury bond yield is the risk premium. 5 I estimated the risk premium on an annual basis for each year from 1986 through march 6 31, 2025. The authorized returns on equity were based on regulatory 7 commission-authorized returns for utility companies. Authorized returns are typically 8 based on expert witnesses' estimates of the investor-required return at the time of the 9 proceeding.

10 The second equity risk premium estimate is based on the difference between 11 regulatory commission-authorized returns on common equity and contemporary "A" 12 rated utility bond yields by Moody's. I selected the period 1986 through March 31, 2025 13 because public utility stocks have consistently traded at a premium to book value during 14 that period. This is illustrated in Exhibit MPG-13, which shows the market-to-book ratio 15 since 1986 for the utility industry was consistently above a multiple of 1.0x. Over this 16 period, an analyst can infer that authorized returns on equity were sufficient to support 17 market prices that at least exceeded book value. This is an indication that 18 Commission-authorized returns on common equity supported a utility's ability to issue 19 additional common stock without diluting existing shares. It further demonstrates that 20 utilities were able to access equity markets without a detrimental impact on existing 21 shareholders.

Based on this analysis, as shown in Exhibit MPG-14, the average indicated equity risk premium over U.S. Treasury bond yields has been 5.68%. Since the risk premium can vary depending upon market conditions and changing investor risk perceptions, I believe using an estimated range of risk premiums provides the best method to measure the current return on common equity for a risk premium
 methodology.

l incorporated five- and ten-year rolling average risk premiums over the study
period to gauge the variability over time of risk premium. These rolling average risk
premiums mitigate the impact of anomalous market conditions and skewed risk
premiums over an entire business cycle. As shown on my Exhibit MPG-14, the
five-year rolling average risk premium over Treasury bonds ranged from 4.25% to
7.09%, with an average of 5.74%. The ten-year rolling average risk premium ranged
from 4.38% to 6.91%, with an average of 5.77%.

As shown on my Exhibit MPG-15, the average indicated equity risk premium
over contemporary "A" rated Moody's utility bond yields was 4.33%. The five-year
rolling average risk premiums ranged from 2.88% to 5.90%, with an average of 4.39%.
The ten-year rolling average electric risk premiums ranged from 3.20% to 5.73%, with
an average of 4.42%.

15QDO YOU BELIEVE THAT THE TIME PERIOD USED TO DERIVE THESE EQUITY16RISK PREMIUM ESTIMATES IS APPROPRIATE TO FORM ACCURATE17CONCLUSIONS ABOUT CONTEMPORARY MARKET CONDITIONS?

A Yes. Contemporary market conditions can change during the period that the rates determined in this proceeding will be in effect. A relatively long period of time where stock valuations reflect premiums to book value indicates that the authorized returns on equity and the corresponding equity risk premiums were supportive of investors' return expectations and provided utilities access to the equity markets under reasonable terms and conditions. Further, this time period is long enough to smooth any abnormal market movement that might distort equity risk premium. While market conditions and risk premiums do vary over time, this historical time period is a
 reasonable period to estimate contemporary risk premium.

3 Alternatively, some studies, such as Kroll, have recommended that the use of 4 "actual achieved investment return data" in a risk premium study should be based on 5 long historical time periods. The studies find that achieved returns over short time 6 periods may not reflect investors' expected returns due to unexpected and abnormal 7 stock price performance. Short-term, abnormal actual returns would be smoothed over 8 time and the achieved actual investment returns over long time periods would 9 approximate investors' expected returns. Therefore, it is reasonable to assume that 10 averages of annual achieved returns over long time periods will generally converge on 11 the investors' expected returns.

12 My risk premium study is based on data that inherently relied on investor 13 expectations, not actual investment returns, and, thus, need not encompass a very long 14 historical time period.

15 Q WHAT DOES CURRENT OBSERVABLE MARKET DATA SUGGEST ABOUT 16 INVESTOR PERCEPTIONS OF UTILITY INVESTMENTS?

17 А The equity risk premium should reflect the relative market perception of risk today in 18 the utility industry. I have gauged investor perceptions in utility risk today in 19 Exhibit MPG-16, where I show the yield spread between utility bonds and Treasury 20 bonds over the last 45 years. As shown in this exhibit, the average utility bond yield 21 spreads over Treasury bonds for "A" and "Baa" rated utility bonds for this historical 22 period are 1.47% and 1.88%, respectively. The utility bond yield spreads over Treasury 23 bonds for "A" and "Baa" rated utilities in 2022 were 1.61% and 1.91%, respectively. In 24 2023, the spreads have declined to 1.45% for "A" rated utilities and 1.75% for "BBB"

utilities. More recently, in 2024, the spreads have decreased even further to 1.14% for
 "A" rated utilities and 1.36% for "BBB" utilities.

3 Historically, I relied on the 13-week average bond yields. However, Moody's 4 stopped publishing those on its website, so I started using the Mergent Bond Record, which reports the utility yields on a monthly basis. The current 3-month average "A" 5 6 rated utility bond yield of 5.79% when compared to the current Treasury bond yield of 7 4.66%, as shown in Exhibit MPG-17, implies a yield spread of 1.13%. This current 8 utility bond yield spread is lower than the 45-year average spread for "A" rated utility 9 bonds of 1.47%. The current spread for the "Baa" rated utility bond yield of 1.31% is 10 also lower than the 45-year average spread of 1.88%.

11 Q IS THERE OBSERVABLE MARKET EVIDENCE TO HELP GAUGE MARKET RISK 12 PREMIUMS?

A Yes. Market data illustrates how the market is pricing investment risk and gauging the
 current demands for returns based on securities of varying levels of investment risk.
 This market evidence includes bond yield spreads for different bond return ratings as
 implied by the yield spreads for Treasury, corporate and utility bonds. These spreads
 provide an indication of the market's return requirement for securities of different levels
 of investment risk and required risk premium.

Table 11 summarizes the utility and corporate bond spreads relative to Treasurybond yields.

TABLE 11							
Electric Yield Spreads - Risk Premium							
Utility Bonds ¹ Utility Stock Spreads ² Forwar							
Year	A - T	Baa - T	30-Year Treasury	Α	Inflation		
	(1)	(2)	(3)	(4)	(5)		
Average Historical Spread	1.31%	1.80%	-0.40%	0.91%	2.17%		
2022	1.61%	1.91%	-0.31%	1.32%	2.64%		
2023	1.45%	1.75%	0.24%	1.69%	2.48%		
2024	1.14%	1.36%	0.59%	1.73%	2.39%		
3-Month Current Spreads: ³							
Utility Bond	1.13%	1.31%					
Utility Stock			1.37%	2.50%			
Sources:		_					
Average Historical Spread perio							
¹ Exhibit MPG-18.							
² Exhibit MPG-6, page 5.							
³ Exhibit MPG-19, page 1.							

As outlined in Table 11 above, the 2024 A and Baa rated utility bonds to Treasuries spread is lower than the spread over the last several years and the historical average. This indicates the market is demanding a lower return risk premium for investing in higher risk securities, utility bonds vs. Treasury bonds. Utility stock yields relative to treasury and A rated utility bonds are also very low. This indicates very low equity risk premium in the current market, relative to past periods.

7 The historical stock and utility/treasury bond yields spreads remain distorted 8 because utility stock yields are very low relative to bond yields. This is likely due to the 9 fact that bond investments have greater risk for unexpected inflation relative to stock 10 investments. Hence, current market stock required returns are low relative to bond 11 required returns, and equity risk premiums continue to be below historical average 12 levels.
Finally, the current market inflation outlooks are now closer to 2.40%. This is lower than inflation has been over the past several years and also has declined to align with the long-term historical average. This indicates the market is becoming more comfortable with the Fed's ability to control inflation, which impacts market required returns for both bond and equity securities. This moderation in inflation outlook is causing equity risk premiums to move back toward historical averages.

Based on this assessment of observable risk premiums in the market, I
conclude that equity risk premiums in the current marketplace remain below historical
averages.

10 Q WHAT IS YOUR RECOMMENDED RETURN FOR EKC BASED ON YOUR RISK 11 PREMIUM STUDY?

A As outlined above, the current market data reflects risk premiums between securities
 of greater levels of investment risk near normal levels, but still below normal risk
 premium. For these reasons, I recommend a risk premium near the historical average
 to reflect the observable market evidence of the equity risk premiums reflected in utility
 stock, bond and Treasury bond valuations.

For Treasury bond yields, I considered the five-year rolling average historical risk premium of 5.74%. The average utility risk premium is 5.68% based on current market observable risk premium spreads. I will use a Treasury bond risk premium of 5.10%, which is about 90% of the historical average risk premium (5.68% x 0.90), or slightly below the normal risk premium suggested to be reasonable based on market evidence. This risk premium and a projected 30-year Treasury bond yield of 4.40% produces an indicated equity risk premium of 9.50% (5.10% plus 4.40%).

A risk premium based on utility bond yields reflects current observable bond 1 2 yields as measured by the five-year rolling average risk premium estimate of 4.39%, 3 with an average of 4.33%, as shown on Exhibit MPG-15. The 3-month average A-rated 4 utility bond yield is 5.79%, as shown on my Exhibit MPG-17, page 1. As outlined above, 5 the current equity risk premium relative to utility bond yields is below historical 6 averages. The observable evidence shows that current equity risk premiums are very 7 low in relation to bond risk premiums. A risk premium for the current market is about 8 3.90% which is about 90% of the historical utility risk premium, (4.33% x 0.90). This 9 risk premium combined with the A-rated utility bond yield of 5.79% produces a risk 10 premium return of approximately 9.70% (3.90% plus 5.79%).

11 Therefore, a risk premium estimate based on observable risk premiums in the 12 marketplace, and the expected outlook for moderation in long-term interest rates over 13 the next couple years, support a risk premium-based return on equity for EKC in the 14 range of 9.50% to 9.70%, with a midpoint of 9.60%.

15

VIII.G. Capital Asset Pricing Model ("CAPM")

16 Q PLEASE DESCRIBE THE CAPM.

17 A The CAPM method of analysis is based upon the theory that the market-required rate 18 of return for a security is equal to the risk-free rate, plus a risk premium associated with 19 the specific security. This relationship between risk and return can be expressed 20 mathematically as follows:

 $R_i = R_f + B_i x (R_m - R_f)$ where: $R_i = Required return for stock i$ $R_f = Risk-free rate$ $R_m = Expected return for the market portfolio$ $B_i = Beta - Measure of the risk for stock$ 1 The stock-specific risk term in the above equation is beta. Beta represents the 2 investment risk that cannot be diversified away when the security is held in a diversified 3 portfolio. When stocks are held in a diversified portfolio, stock-specific risks can be 4 eliminated by balancing the portfolio with securities that react in the opposite direction 5 to firm-specific risk factors (e.g., business cycle, competition, product mix, and 6 production limitations).

7 Risks that cannot be eliminated when held in a diversified portfolio are 8 non-diversifiable risks. Non-diversifiable risks are related to the market and referred to 9 as systematic risks. In contrast, risks that can be eliminated by diversification are 10 non-systematic risks. In a broad sense, systematic risks are market risks and 11 non-systematic risks are business risks. The CAPM theory suggests the market will 12 not compensate investors for assuming risks that can be diversified away. Therefore, 13 the only risk investors will be compensated for are systematic, or non-diversifiable, 14 risks. The beta is a measure of these systematic, or non-diversifiable risks.

15 Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

A The CAPM requires an estimate of the market risk-free rate, EKC's beta, and the
market risk premium.

18 Q WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE RATE?

A As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury bond
 yield is 4.40%.³² The current 30-year Treasury bond yield is 4.66% as shown in
 Exhibit MPG-17.

³² Blue Chip Financial Forecasts, May 1, 2025, at 2.

1 Q WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE 2 OF THE RISK-FREE RATE?

3 А Treasury securities are backed by the full faith and credit of the United States 4 government. Therefore, long-term Treasury bonds are considered to have negligible 5 credit risk. Also, long-term Treasury bonds have an investment horizon similar to that 6 of common stock. As a result, investors' long-run inflation expectations are reflected 7 in both common stocks' required returns and long-term bond yields. Therefore, the 8 nominal risk-free rate (or expected inflation rate and real risk-free rate) included in a 9 long-term bond yield is a reasonable estimate of the nominal risk-free rate included in 10 common stock returns.

11 Treasury bond yields, however, do include risk premiums related to 12 unanticipated future inflation and interest rates. In this regard, a Treasury bond yield 13 is not a risk-free rate. Risk premiums related to unanticipated inflation and interest 14 rates reflect systematic market risks. Consequently, for companies with betas less than 15 1.0, using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis 16 can produce an overstated estimate of the CAPM return.

17

Q

WHAT BETA DID YOU USE IN YOUR ANALYSIS?

A I relied on the *Value Line* Investment Survey beta methodology. The *Value Line* Investment Survey publishes betas for companies included in its Investment Survey across various industries, including the electric utility industry. For purposes of my analysis, I relied on the actual published *Value Line* betas and betas calculated using the *Value Line* beta methodology over both a five-year historical period and a three-year historical period. The *Value Line's* published beta is based on a five-year historical period, however, currently betas calculated based on five years of market data are skewed. Market data that existed during the early onset years of the
 COVID-19 pandemic, around March/April of 2020, significantly skewed the estimate of
 betas for low risk companies like utilities. Betas measured over a three-year historical
 period excludes this aberrant market period and produces a forward looking beta that
 more reasonably aligns with the risk of utilities versus that of the overall market.

6 Shown in my Exhibit MPG-18 at page 1, I showed the published Value Line 7 data, and betas measured over a five and three year period using the Value Line beta 8 adjustment methodology. Value Line's beta adjustment methodology is based on a 9 regression of the weekly percent change in the subject Company's stock price, versus 10 the weekly's percent change in the New York Stock Exchange Index over a five-year 11 period. This regression study produces raw beta estimates. The raw beta estimates 12 are then adjusted to reflect a forward outlook that raw betas tend to regress towards 13 the market beta of 1.0 over time. This forward looking adjustment to the raw beta is 14 based on the following formula, 0.67 x raw beta plus 0.25 x the market beta of 1. The 15 forward beta adjustment converts the raw historical beta to a forward looking beta 16 estimate.

17 As shown on my Exhibit MPG-18, up until recently the published Value Line 18 beta of 0.90 (Col. 1) aligns with the five-year calculated adjusted beta estimate of 0.90 19 (Col. 2) over the same period used to calculate the Value Line published betas. 20 Notably, as shown in column 3 of this exhibit, Value Line betas that were published after my study was conducted exclude the anomalous market data that existed in the 21 22 first quarter of 2020. The more recent published value line betas have declined to 0.68 23 from the 0.9 published beta for my study period. This update to value line published 24 beta confirm my analyses that betas measures using data in the first half of 2020 are skewed and overstate the investment risk of utility companies. Market data in the first 25

1 half of 2020 was impacted by the COVID 19 worldwide pandemic. The most recent 2 betas are reverting to the historical mean, or the beta estimates observed prior to the 3 onset of COVID-19. Similarly, the adjusted beta calculated using the Value Line 4 methodology over a three-year period is 0.71. This more recent published beta 5 excludes the aberrant market data during the onset of the COVID-19 pandemic. The 6 adjusted beta during my study period using the Value Line methodology but based on 7 only a three-year period (also excluding the COVID-19 pandemic market aberration 8 data) is 0.71. This three-year calculated beta reasonably aligns with the Value Line 9 electric utility industry beta after the COVID-19 pandemic.

I will rely on a proxy group beta estimate of 0.70, which is supported by all beta
estimates that exclude the aberrant market data experienced at the initial onset of the
COVID-19 pandemic.

13 Q HAVE YOU PERFORMED ANY ANALYSIS TO SUPPORT YOUR POSITION THAT 14 VALUE LINE BETAS ARE ABNORMALLY HIGH IF COMPUTED USING 15 ANOMOLIOUS DATA FROM THE FIRST PART OF 2020?

16 А Yes. Above, I discuss beta variability based on published Value Line information. 17 However, using the S&P 500 utility index, relative to the New York Stock Exchange, 18 shows that beta estimates like those in Value Line are skewed due to two extraordinary 19 months within the 60-month time period used to measure beta. The two months that 20 skew the betas are March and April of 2020, the time period that coincides with the start of the worldwide COVID-19 pandemic. Removing these two months to derive a 21 22 more normal level of beta has the effect of reducing utility beta estimates from the very 23 high levels of around 0.90, down to more normalized betas in the range of 0.65 to 0.79. 24 This beta regression study is summarized in Table 12 below.

3&P 500 <i>Reg</i>	ression Betas		
	Raw	Adjusted	
Period	Beta	Beta	R^2
5-Yr Ending Feb 2020	0.45	0.65	0.18
May 2020 - Current	0.65	0.79	0.35
Most Recent 5Yr Period	0.65	0.79	0.35

1 Q HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?

A I derived two market risk premium estimates: a forward-looking estimate and one based on a long-term historical average. The forward-looking estimate was derived by estimating the expected return on the market (as represented by the S&P 500) and subtracting the risk-free rate from this estimate. I estimated the expected return on the S&P inflation rate to the long-term historical arithmetic average real return on the market. The real return on the market represents the achieved return above the rate of inflation.

Historically, I relied on Kroll's 2023 SBBI Yearbook to estimate the market real
return. However, Kroll's SBBI Yearbook has been discontinued. Therefore, using the
same methodology to estimate the historical real return on the market over the period
1926-2023, I relied on data from Morningstar Direct. The historical arithmetic average
real market return over the period 1926-2023 is 9.02%.³³ A current consensus for

³³ Morningstar Direct.

projected inflation, as measured by the GDP Deflator, is 2.30%.³⁴ Using these
 estimates, the expected market return is 11.53%.³⁵ The market risk premium then is
 the difference between the 11.53% expected market return and my 4.40% risk-free rate
 estimate, or 7.13%, which I referred to as a normalized market risk premium.

5 A historical estimate of the market risk premium was also calculated by using 6 data provided by Morningstar Direct. Over the period 1926-2023, Morningstar Direct 7 estimated that the arithmetic average of the achieved total return on the S&P 500 was 8 12.16% and the total return on long term Treasury bonds was 5.62%.³⁶ The indicated 9 market risk premium is 6.54% (12.16% minus 5.62%).

10 The long-term Treasury bond yield of 5.62% occurred during a period of inflation 11 of approximately 3.02%, thus, implying a real return on long term Treasury bonds 12 of 2.60%.

13 Q HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARED 14 TO THAT ESTIMATED BY KROLL AND MORNINGSTAR?

15 Kroll makes several estimates of a forward-looking market risk premium based on А 16 actual achieved data from the historical period of 1926-2023 as well as normalized 17 data. Using this data, Kroll estimates a market risk premium derived from the total 18 return on the securities that comprise the S&P 500, less the income returns on Treasury 19 bonds. The total return includes capital appreciation, dividend or coupon reinvestment 20 returns, and annual yields received from coupons and/or dividend payments. The income return, in contrast, only reflects the income return received from dividend 21 22 payments or coupon yields.

³⁴ Blue Chip Financial Forecasts, May 1, 2025, at 2.

³⁵ [(1 + 0.0902) * (1 + 0.0230) – 1] * 100.

³⁶ Morningstar Direct.

Kroll's range is based on several methodologies. As noted above, Kroll no
 longer publishes the *SBBI Yearbook*. Utilizing data through 2023 from Morningstar
 Direct, using the same methodology relied on by Kroll, the market risk premium is
 7.32%, which is based on the difference between the total market return on common
 stocks (S&P 500) less the income returns on 20-year Treasury bond investments over
 the 1926-2023 period.³⁷

7 Second, Kroll used the lbbotson & Chen supply-side model which produced a market risk premium estimate of 6.22%.³⁸ Kroll explains that the historical market risk 8 9 premium based on the S&P 500 was influenced by an abnormal expansion of 10 Price-to-Earnings ("P/E") ratios relative to earnings and dividend growth during the 11 period, primarily over the last 30 years. Kroll believes this abnormal P/E expansion is 12 not sustainable. In order to control for the volatility of extraordinary events and their 13 impacts on P/E ratios, Kroll takes into consideration the three-year average P/E ratio 14 as well as the current P/E ratio.³⁹

15 Finally, Kroll develops its own recommended equity, or market risk premium, by 16 employing an analysis that takes into consideration a wide range of economic 17 information, multiple risk premium estimation methodologies, and the current state of 18 the economy by observing measures such as the level of stock indices and corporate 19 spreads as indicators of perceived risk. Based on this methodology and utilizing the 20 higher of a "normalized" risk-free rate of 3.5%, Kroll concludes the current expected, or 21 forward-looking, market risk premium is 5.0%, implying an expected return on the 22 market of 8.5%. However, when the current market risk-free rate exceeds the 23 normalized risk-free rate, Kroll recommends applying the current 20-year Treasury yield

³⁷ Kroll, 2023 SBBI Yearbook at 191; Morningstar Direct.

³⁸ Kroll, 2023 SBBI Yearbook at 198-201 at 198-201.

³⁹ Id. and Kroll, Cost of Capital Navigator, https://www.kroll.com/en/cost-of-capital.

5 6	results of my CAPM analysis should be considered conservative estimates for the cost of equity.
6	of equity.
6	of equity.
5	results of my CAPM analysis should be considered conservative estimates for the cost
4	Treasury bond. Because I am relying on a projected 30-year Treasury bond yield, the
3	Importantly, Kroll's market risk premiums are measured over a 20-year
2	risk-free rate. Hence, based on Kroll's methodology, the risk premium is 9.7%. ⁴⁰
1	of approximately 4.7%. Currently, the 20-year Treasury yield is above the normalized

A As shown on my Exhibit MPG-19, using a current market risk-free rate of 4.40% and a
projected market return of 11.53% produces a market risk premium of 7.13%. When
combined with the current beta of 0.70, this indicates a CAPM return estimate of 9.39%,
rounded to 9.40%.

VIII.H. Return on Equity Summary

13QBASED ON THE RESULTS OF YOUR RETURN ON COMMON EQUITY ANALYSES14DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO YOU

15 **RECOMMEND FOR EKC?**

12

A Based on my analyses, I recommend EKC's current market cost of equity be in the
range of 9.20% to 9.40%, with a point estimate of 9.40% as summarized in Table 13
below.

⁴⁰ "Kroll Raises Recommended U.S. Equity Risk Premium Amid Increased Trade Uncertainty and a Cloudier Economic Outlook," April 15, 2025.

TAE	BLE 13	
Return on Common Equity Summary		
Description	<u>Results</u>	
DCF	9.20%	
Risk Premium	9.60%	
CAPM	9.40%	

1 My market-based return on common equity of 9.40% falls within my estimated 2 range of 9.20% to 9.60%. The low-end of my range is based on my DCF studies, and 3 the high-end is based on my risk premium studies. The CAPM return falls at the 4 midpoint of my range.

5 My return on equity estimates reflects observable market evidence, the impact 6 of the Fed's policies on current and expected long-term capital market costs, an 7 assessment of the current risk premium built into current market securities, and a 8 general assessment of the current investment risk characteristics of the regulated utility 9 industry and the market's demand for utility securities.

10

VIII.I. Financial Integrity

11 Q WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN 12 INVESTMENT GRADE BOND RATING FOR EKC?

A Yes. I have reached this conclusion by comparing the key credit rating financial ratios
 for EKC at my proposed return on equity and capital structure to S&P's benchmark
 financial ratios using S&P's new credit metric ranges.

1 Q PLEASE DESCRIBE THE MOST RECENT S&P FINANCIAL RATIO CREDIT 2 METRIC METHODOLOGY.

A. S&P publishes a matrix of financial ratios corresponding to its assessment of the
 business risk of utility companies and related bond ratings. On May 27, 2009, S&P
 expanded its matrix criteria by including additional business and financial risk
 categories.⁴¹

Based on S&P's most recent credit matrix, the business risk profile categories
are "Excellent," "Strong," "Satisfactory," "Fair," "Weak," and "Vulnerable." Most utilities
have a business risk profile of "Excellent" or "Strong."

10 The financial risk profile categories are "Minimal," "Modest," "Intermediate," 11 "Significant," "Aggressive," and "Highly Leveraged." Most of the utilities have a financial 12 risk profile of "Significant" or "Aggressive." I have assessed EKC credit metrics based 13 on its "Excellent" business risk profile and a "Significant" financial risk profile relying on 14 the medial volatility tables, which is consistent with the ranking of the regulated utilities.

15 Q PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN 16 ITS CREDIT RATING REVIEW.

A S&P evaluates a utility's credit rating based on an assessment of its financial and
business risks. A combination of financial and business risks equates to the overall
assessment of EKC's total credit risk exposure. On November 19, 2013, S&P updated
its methodology. In its update, S&P published a matrix of financial ratios that defines
the level of financial risk as a function of the level of business risk.

⁴¹ S&P updated its 2008 credit metric guidelines in 2009, and incorporated utility metric benchmarks with the general corporate rating metrics. *Standard & Poor's RatingsDirect*: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

S&P publishes ranges for primary financial ratios that it uses as guidance in its
 credit review for utility companies. The two core financial ratio benchmarks it relies on
 in its credit rating process includes, (1) Debt to Earnings Before Interest, Taxes,
 Depreciation and Amortization ("EBITDA"); and (2) Funds From Operations ("FFO") to
 Total Debt.⁴²

6QHOWDIDYOUAPPLYS&P'SFINANCIALRATIOSTOTESTTHE7REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?

8 А I calculated each of S&P's financial ratios based on EKC's cost of service for its 9 regulated utility operations in its Kansas service territory. While S&P would normally 10 look at total consolidated financial ratios in its credit review process, my investigation 11 in this proceeding is not the same as S&P's. I am attempting to judge the 12 reasonableness of my proposed rate of return for rate-setting in EKC's Kansas 13 regulated utility operations. Hence, I am attempting to determine whether my proposed 14 rate of return will in turn support cash flow metrics, balance sheet strength, and 15 earnings that will support an investment grade bond rating and EKC's financial integrity.

16

Q

DID YOU INCLUDE ANY OFF-BALANCE SHEET ("OBS") DEBT EQUIVALENTS?

17 A Yes. I used EKC's off-balance sheet debt equivalents as reported by S&P Capital IQ.
18 I also included the Company's short-term debt as provided by the Company in response
19 to BAI-13. Finally, I used a construction work in progress ("CWIP") allocation factor, to
20 separate the total Company financial obligations that are not used to fund rate base
21 investments.

⁴² Standard & Poor's RatingsDirect: "Criteria: Corporate Methodology," November 19, 2013.

1 Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS AS IT 2 RELATES TO EKC.

A. The S&P financial metric calculations for EKC at a 9.40% return are developed on
Exhibit MPG-20, page 1. The credit metrics are produced below. I relied on EKC's
utility financial risk profile from S&P of "Significant" and business risk profile of "Strong."

Based on an equity return of 9.40% and my proposed common equity ratio,
EKC will be provided an opportunity to produce a Debt to EBITDA ratio of 3.5x. This is
at the low end of S&P's "Significant" guideline range of 3.5x to 4.5x.⁴³

9 EKC's utility operations FFO to total debt coverage at a 9.40% equity return is 10 19%, within S&P's "Significant" metric guideline range of 13% to 23%. This ratio is 11 again within the FFO/total debt range and suggests that EKC's cost of service in this 12 case would support an investment grade credit rating.

I conclude that EKC's core credit metrics ratios, based on my proposed capital
 structure and return on equity, will support its current strong credit standing.

15 VIX. RESPONSE TO COMPANY WITNESS ANN E. BULKLEY

16

VIX.A. Summary of Rebuttal

17 Q WHAT RETURN ON COMMON EQUITY IS EKC PROPOSING IN THIS 18 PROCEEDING?

A Ms. Bulkley recommends a return on equity in the range of 10.25% to 11.25% and
 Kansas Power is requesting a return on equity of 10.50%. Ms. Bulkley's recommended
 range reflects her assessment of the current capital market conditions and the
 Company's business risks relative to the companies included in her proxy group.

⁴³ *Standard & Poor's RatingsDirect*[®]: "Criteria: Corporate Methodology," November 19, 2013.

1 Q ARE MS. BULKLEY'S RETURN ON EQUITY ESTIMATES REASONABLE?

- 2 A No. Ms. Bulkley's estimated return on equity is overstated and should be rejected. Ms.
- 3 Bulkley's analyses produce excessive results for various reasons, including the
- 4 following:

5

6

- Her constant growth DCF results are based on unsustainably high growth rates;
- 7 2. Her CAPM is based on inflated market risk premiums;
- 8 3. Ms. Bulkley's Empirical CAPM ("ECAPM") is based on a flawed
 9 methodology; and
- 104. Both Ms. Bulkley's CAPM and risk premium studies are based on11projected interest rates that are highly uncertain and unreliable.

12 Q PLEASE COMPARE YOUR RECOMMENDED RETURN ON EQUITY WITH MS. 13 BULKLEY'S RETURN ON EQUITY ESTIMATES.

- A Ms. Bulkley's return on equity estimates are summarized in Table 14 below. In the Gorman Adjusted" Column 2, I show the results with prudent and sound adjustments to correct the flaws referenced above. With these adjustments to Ms. Bulkley's proxy group's DCF, RP and CAPM return estimates, Ms. Bulkley's studies reflect that my
- 18 9.40% recommended return on equity for EKC is reasonable.

TABLE 1	4	
Bulkley's Adjusted Return	on Equity Estimates	
Description	Bulkley <u>Mean / Median¹</u> (1)	Gorman <u>Adjusted</u> (2)
Constant Growth DCF	10 0 40/ / 10 0 00/	0 440/ / 0 000/
90-Day Average	10.24% / 10.03%	0.41%/0.00% 8.51%/8.20%
180-Day Average	10.60% / 10.38%	8 82% / 8 67%
Average	10.39% / 10.20%	8.58% / 8.34%
<u>CAPM DCF-Derived Results (Value Line Beta)</u> Current 30-Yr Treasury (4.52%) Near-Term Projected 30-Yr Treasury (4.42%) Long-Term Projected 30-Yr Treasury (4.30%)	11.63% 11.63% 11.62%	9.40% 9.40% Reject
CAPM DCF-Derived Results (Bloomberg Beta)		
Current 30-Yr Treasury (4.52%)	10.43%	9.40%
Near-Term Projected 30-Yr Treasury (4.42%)	10.41%	9.40% Rojoct
<u>CAPM DCF-Derived Results (Historical Beta)</u> Current 30-Yr Treasury (4.52%) Near-Term Projected 30-Yr Treasury (4.42%) Long-Term Projected 30-Yr Treasury (4.30%)	10.20% 10.18% 10.15%	9.40% 9.40% Reject
<u>ECAPM</u>	10.62% to 11.74%	Reject
<u>Risk Premium</u> Current 30-Yr Treasury (4.52%) Near-Term Projected 30-Yr Treasury (4.42%) Long-Term Projected 30-Yr Treasury (4.30%)	10.62% 10.57% 10.50%	9.50% 9.50% Reject
Recommended Return on Equity	10.50%	9.40%
Sources: ¹ Bulkley Direct Testimony at 60, Exhib	bit AEB-1.	

As shown on Table 14 above, reasonable adjustments to Ms. Bulkley's return

on equity estimates support a return on equity for EKC of 9.40%.

1 VIX.B. Ms. Bulkley's Constant Growth DCF Models PLEASE DESCRIBE MS. BULKLEY'S CONSTANT GROWTH DCF RETURN 2 Q ESTIMATES. 3 4 А Ms. Bulkley's constant growth DCF returns are developed on her Exhibit AEB-4. Ms. 5 Bulkley's constant growth DCF models are based on consensus growth rates published 6 by Capital IQ and Zacks, and individual growth rate projections made by Value Line. 7 The average and median growth rate estimates for her proxy groups are approximately 8 6.60%. 9 She relied on dividend yield calculations based on average stock prices over 10 three different time periods: 30-day, 90-day, and 180-day ending November 29, 2024 11 - all reflecting a half year of dividend growth adjustments. Ms. Bulkley's average mean

12 and median DCF results are approximately 10.30%.⁴⁴

13 Q ARE THE CONSTANT GROWTH DCF RESULTS PRODUCED BY MS. BULKLEY 14 REASONABLE?

15 А No. My major concern with Ms. Bulkley's DCF study is her use of unsustainable growth 16 rate estimates. As discussed in regard to my own DCF study, the current consensus 17 analysts' growth rates are higher than the long-term sustainable growth rate of 4.10%. 18 Specifically, Ms. Bulkley's constant growth DCF model is based on an average growth 19 rate of approximately 6.60% for her proxy group. This growth rate is excessive and 20 cannot reasonably be expected to last into perpetuity, the time period which is assumed 21 by the constant growth DCF model. As I discussed in detail above, company growth 22 rates that exceed the growth rate of GDP in the economy in which a company provides 23 goods and services cannot be sustained. I also discussed how over time, even with

⁴⁴Bulkley Direct Testimony at 60, Exhibit AEB-1.

extended capital investment, growth rates will slow. Therefore, it is necessary to
 consider a multi-stage DCF model, which reflects a sustainable growth rate.

3 Q IS THERE A WAY TO CORRECT MS. BULKLEY'S DCF MODEL TO PRODUCE A

4 **REASONABLE DCF RETURN?**

- 5 A Yes. In Column 2 in Table 18 above and my Exhibit MPG-20, using Ms. Bulkley's data, 6 I present the results of a multi-stage DCF model that is similar to my multi-stage model 7 that reflects a reasonable long-term sustainable growth rate of 4.10% as discussed in 8 regard to my own studies.
- 9 Ms. Bulkley's DCF mean and median adjusted results generally support a return 10 on equity no higher than 8.80% for her proxy group. This multi-stage analysis reflects 11 the short-term growth rate used by Ms. Bulkley in her constant growth analysis and the 12 impact on a more economically logical DCF dividend stream that could be used to value 13 the stocks.
- 14

VIX.C. Ms. Bulkley's CAPM Studies

15 Q PLEASE DESCRIBE MS. BULKLEY'S CAPM ANALYSIS.

- 16 A As indicated above, the CAPM analysis is based upon the theory that the market-17 required rate of return for a security is equal to the risk-free rate plus a risk premium 18 associated with the specific security. The risk premium associated with the specific 19 security is expressed mathematically as: 20 B_i = Beta (measure of risk for stock)
- 20 B_i = Beta (measure of fisk for stock) 21 R_m = Expected return for the market portfolio 22 R_f = Risk-free rate
- Ms. Bulkley's CAPM model is based on proxy group average beta estimates of 0.94
 from *Value Line*, 0.79 from Bloomberg, and a historical beta estimate of 0.75. She also

relied on a market risk premium in the range of 7.54% to 7.75% and current risk-free
 rate of 4.52%, near-term projected risk-free rate of 4.42% and long-term projected risk free rate of 4.30%. These parameters produced a CAPM return in the range of 10.15%
 to 11.63%.⁴⁵

5 Q PLEASE DESCRIBE THE ISSUES YOU HAVE WITH MS. BULKLEY'S CAPM 6 STUDIES.

A I have two primary issues with Ms. Bulkley's CAPM studies. First, I believe the market
risk premiums she used in all her CAPM studies are overstated because they do not
reflect a reasonable estimate of the expected return on the market. Second, Ms.
Bulkley relies on a projected risk-free rate based on the 30-year Treasury yield for 2026
to 2030. Ms. Bulkley's consistent reliance on projected interest rates is unreasonable.

12 Q PLEASE DESCRIBE MS. BULKLEY'S ANALYSIS WITH REGARD TO MARKET 13 RISK PREMIUMS.

A Ms. Bulkley derived her market risk premiums by conducting a DCF analysis for the
market (S&P 500). Ms. Bulkley used market risk premium estimates in the range of
7.54% and 7.75%, based on a DCF market return of 12.05% less the current, nearterm and projected 30-year Treasury bond yields of 4.52%, 4.42%, and 4.30%,
respectively.⁴⁶

⁴⁵ Exhibit AEB-1 and Exhibit AEB-4.

⁴⁶ Exhibit AEB-4.

1QPLEASE DESCRIBE YOUR DISAGREEMENTS WITH REGARD TO MS.2BULKLEY'S MARKET RISK PREMIUM ESTIMATES.

A Ms. Bulkley's DCF-derived market risk premium is based on a market return of 12.05%,
which consists of a growth rate component of 10.51% and market-weighted dividend
yield of 1.46%.⁴⁷ As discussed above with respect to my own DCF model, the DCF
model requires a reasonable long-term sustainable growth rate. Ms. Bulkley's
sustainable market growth rate of 10.51% is far too high to be a rational outlook for
sustainable long-term market growth. This growth rate is more than two and a half
times the growth rate of the U.S. GDP long-term growth outlook of 4.10%.

As a result of these unreasonable long-term market growth rate estimates, Ms.
 Bulkley's market DCF returns used in her CAPM analyses are inflated and not reliable.
 Consequently, Ms. Bulkley's market risk premiums should be given minimal weight in

estimating EKC's CAPM-based return on equity.

14 Q DO HISTORICAL ACTUAL RETURNS ON THE MARKET SUPPORT MS. 15 BULKLEY'S PROJECTED MARKET RETURNS?

A No. Historical data shows just how unreasonable Ms. Bulkley's projected DCF return
on the market is on a going-forward basis. Applying Kroll's methodology, and using
updated data from Morningstar Direct, the actual capital appreciation for the S&P 500
over the period 1926 through 2023 to have been 6.2% to 8.1%.⁴⁸ This contrasts sharply
to Ms. Bulkley's own projected growth rate of the market of 10.51%.

13

⁴⁷Exhibit AEB-6.

⁴⁸Kroll, 2023 SBBI Yearbook at 137 and Morningstar Direct.

Further, historically the geometric growth of the market of 6.2%⁴⁹ has reflected
 geometric growth of GDP over this same time period of approximately 6.1%.⁵⁰

3 Notably, this review of historical data establishes two facts. First, historical, 4 actual achieved growth has been substantially less than the one projected by Ms. 5 Bulkley. Second, historical growth of the market has tracked historical growth of the 6 U.S. GDP. Projected growth of the U.S. GDP is now closer to the 4.0% to 4.5% range. 7 All this information strongly supports the conclusion that Ms. Bulkley's projected growth 8 rate on the market of 10.51% is substantially overstated. While I do not endorse the 9 use of a historical growth rate to draw assessments of the market's forward-looking 10 growth rate outlooks, this data can be used as a check of Ms. Bulkley's market return 11 estimate and to show how unreasonable and inflated it is.

12 Q WHY DO YOU BELIEVE MS. BULKLEY'S RELIANCE ON A PROJECTED LONG-

13 TERM RISK-FREE RATE IS UNREASONABLE?

14 А Ms. Bulkley supports the idea that it is important not only to rely on current market data but also to consider projected market data.⁵¹ She assumes that interest rates will 15 remain elevated in the future.⁵² However, her own data shows the opposite. The long-16 17 term projections are highly uncertain and may not reflect the cost of capital in the test 18 year, the period in which rates determined in this proceeding will largely be in effect. 19 As such, the market risk premium should be based on observable bond yields in the 20 market today. Alternatively, the market risk premium should reflect bond yield 21 projections through the rate-effective period in this case. While I disagree the with Ms.

⁴⁹Id.

⁵⁰U.S. Bureau of Economic Analysis, March 27, 2025. ⁵¹Bulkley Direct Testimony at 10-11, 17.

⁵²*Id.* at 17-18.

Bulkley's methodology to rely on projected interest rates five years into the future, I
 would note that her current, near-term and the projected interest rates are very similar.
 Therefore, to limit the issues in this case I will not take issues with Ms. Bulkley's
 projected risk-free rates used in her CAPM analysis.

5 Q DO YOU HAVE ANY FURTHER COMMENTS REGARDING MS. BULKLEY'S CAPM 6 ANALYSES?

7 А Yes. Ms. Bulkley recognizes the recent increase in utility betas and she offers an 8 alternative CAPM analysis relying on historical or long-term average Value Line beta 9 estimates for the period 2013 to 2023, which produces a return on equity that is about 10 100 basis points lower than the CAPM returns produced by the current Value Line beta. Importantly, Ms. Bulkley also used Bloomberg betas based on 10 years of weekly 11 returns,⁵³ which produced betas much lower than the Value Line betas affected by the 12 13 recent market anomalies triggered at the onset of the COVID-19 pandemic as 14 described above.

15 Q CAN MS. BULKLEY'S CAPM ANALYSIS BE REVISED TO REFLECT A MORE 16 REASONABLE MARKET RISK PREMIUM?

Yes. Using my updated forward-looking risk-free rate of around 4.40%, her average
 current *Value Line* and *Bloomberg* beta estimates of 0.94 and 0.79,⁵⁴ and my market
 return of around 11.53%, Ms. Bulkley's CAPM will be 11.10% and 10.00%,
 respectively.⁵⁵ Ms. Bulkley alternative CAPM, reflecting the same parameters will result

⁵⁴Exhibit AEB-4.

⁵³Bulkley Direct Testimony at 30.

 $^{^{55}4.40\%}$ + 0.94(11.53% - 4.40%) = 11.10%, 4.40% + 0.79(11.53% - 4.40%) = 10.03%, and 4.40% + 0.75(11.53% - 4.40%) = 9.75%.

in CAPM estimate of 9.75%, as well. Finally, using the same parameters and my
 calculated *Value Line* beta of 0.70 as described above, will produce a return on equity
 of approximately 9.40%.⁵⁶ As discussed above in regard to my own CAPM analysis,
 the current betas produce CAPM returns that do not correspond to the low risk of the
 regulated utilities. Therefore, I find the results of Ms. Bulkley's revised CAPM of 9.40%
 more reliable.

7

VIX.D. Ms. Bulkley's ECAPM Studies

8 Q PLEASE DESCRIBE MS. BULKLEY'S ECAPM ANALYSIS.

9 А Ms. Bulkley relies on empirical tests of the traditional CAPM model to modify it in such 10 a way to attempt to *correct* the original CAPM for some deficiencies inherent in the 11 original model. Empirical tests show that the expected return line, or security market 12 line, predicted by the CAPM is not as steep as the model would have us believe. In 13 other words, the traditional CAPM understates the expected return for securities with 14 betas less than 1, and overstates the expected return for securities with betas greater 15 than 1. In order to correct for this empirical finding, Ms. Bulkley modifies the traditional 16 CAPM model as follows:

17	$R_i = R_f + 0.75 \times B_i \times (R_m - R_f) + 0.25 \times B_m \times (R_m - R_f)$
18	R_i = Required return for stock <i>i</i>
19	R_f = Risk-free rate
20	R_m = Expected return for the market portfolio
21	B_m = Beta (measure of market volatility)
22	B_i = Beta (measure of stock price volatility)

1 Q WHAT ISSUES DO YOU TAKE WITH MS. BULKLEY'S ECAPM ANALYSIS?

2 The principal issue I have with Ms. Bulkley's ECAPM analysis is her use of an adjusted А 3 beta as published by Value Line. The impact of Ms. Bulkley's ECAPM adjustments increases her beta estimate range of 0.75 to 0.94 to a range of 0.81 to 0.96.⁵⁷ The 4 5 weighting adjustments applied in the ECAPM are mathematically the same as adjusting 6 beta since the inputs are all multiplicative as shown in the formula above. In other 7 words, Ms. Bulkley's adjustment to the betas is duplicative of the adjustments the 8 ECAPM already makes to correct for any shortcomings of the traditional CAPM. As a 9 result, her model produces overstated results.

10 Further, Ms. Bulkley's reliance on an adjusted Value Line beta in her ECAPM 11 study is inconsistent with the academic research that I am aware of supporting the development of the ECAPM.⁵⁸ The end result of using adjusted betas in the ECAPM 12 13 is essentially an expected return line that has been flattened by two adjustments. In 14 other words, the vertical intercept has been raised twice and the security market line 15 has been flattened twice: once through the adjustments Value Line made to the raw 16 beta, and again by weighting the risk-adjusted market risk premium as Ms. Bulkley has 17 done. In addition to the many adjustments employed by Ms. Bulkley, she further 18 increases the intercept and flattens the security market line by using projected long-19 term Treasury yields that are at odds with current market expectations and inconsistent 20 with the Federal Reserve's projections and monetary policy.

- 21 Ms. Bulkley goes over the theory of the ECAPM at pages 32-33 of her Direct 22
 - Testimony. The ECAPM with adjusted betas has the effect of increasing CAPM return

⁵⁷75% x 0.75+ 25% x 1 = 0.81 and 75% x 0.94 + 25% x 1 = 0.96.

⁵⁸See Black, Fischer, "Beta and Return," *The Journal of Portfolio Management*, Fall 1993, 8-18; and Black, Fischer, Michael C. Jensen and Myron Scholes, "The Capital Asset Pricing Model: Some Empirical Tests," 1972.

estimates for companies with betas less than 1 and decreasing the CAPM return
 estimates for companies with betas greater than 1. I have modeled the expected return
 line resulting from the application of the various forms of the CAPM/ECAPM below in

Figure 6.

4



5 Along the horizontal axis in Figure 6 above, I have provided the raw unadjusted 6 beta (top row) and the corresponding adjusted Value Line beta (bottom row). As shown 7 in Figure 6 above, the CAPM using a *Value Line* beta compared to the CAPM using an 8 unadjusted beta shows that the Value Line beta raises the intercept point and flattens 9 the slope of the security market line. As shown in the figure above, the two variations 10 with the most similar slope are the CAPM with the Value Line beta, and the ECAPM 11 with a raw beta. This evidence shows that the ECAPM adjustment has a very similar 12 impact on the expected return line as a Value Line beta. Another observation that can 1 be made from the figure above is the magnifying effect that the ECAPM using a *Value*

2 Line beta has on raising the vertical intercept and flattening the slope relative to all

- 3 other variations. It is unreasonable to use an adjusted beta within an ECAPM because
- 4 it unjustifiably alters the security market line and materially inflates a CAPM return for
- 5 a company with a beta less than 1.

6 Q IN YOUR EXPERIENCE, IS MS. BULKLEY'S PROPOSED USE OF AN ADJUSTED

7 BETA IN AN ECAPM STUDY CONSISTENT WITH WIDELY ACCEPTED

8 **PRACTICES IN THE REGULATORY FIELD?**

- 9 A No. In my experience, regulatory commissions generally disregard the use of the
- 10 ECAPM, particularly when an adjusted beta is used in the model. For example, the
- 11 Illinois Commerce Commission ("ICC") has stated the following regarding the ECAPM:
- 12 The Commission cannot recall a proceeding in which it relied upon the 13 ECAPM in establishing the cost of common equity for a utility. In the instant proceeding, the record supports a finding that use of adjusted 14 15 betas in the ECAPM is inappropriate. As Staff witness Ms. Freetly 16 explained, by using adjusted betas she already effectively transformed her Traditional CAPM into an ECAPM. 17 Therefore, including an 18 additional beta adjustment in the ECAPM model would result in inflated estimates of the samples' cost of common equity.⁵⁹ 19
- 20 Similarly, in a more recent Nicor Gas rate case the ICC stated:
- 21The Company also used ECAPM analyses and bond yield plus risk22premium models to determine an ROE, which the Commission has also23historically rejected.60
- 24 The California Public Utilities Commission has even more recently noted:

⁵⁹Illinois Commerce Commission, Docket No. 11-0767, Illinois-American Water Company, Order at 109, September 19, 2012.

⁶⁰Illinois Commerce Commission, Docket No. 21-0098, Northern Illinois Gas Company d/b/a Nicor Gas Company, Final Order at 94, November 18, 2021.

- We are not persuaded that ECAPM produces a result that should be
 considered. Electric utilities in general have low betas. Adjusting betas
 upward guarantees a higher ROE.⁶¹
- 4 Therefore, the Commission should reject Ms. Bulkley's ECAPM, which as
- 5 described above is based on adjusted beta estimates.
- 6

VIX.E. Ms. Bulkley's Bond Yield Plus Risk Premium ("RP")

7 Q PLEASE DESCRIBE MS. BULKLEY'S RP METHODOLOGY.

8 А As shown on her Exhibit AEB-7, Ms. Bulkley constructs a risk premium return on equity 9 estimate based on the premise that equity risk premiums are inversely related to 10 interest rates. She estimates an average equity risk premium of 6.23% over the period January 1980 through November 29, 2024.⁶² She then applies a regression formula to 11 12 the current, near-term, and long-term projected 30-year Treasury bond yields of 4.52%, 13 4.42%, and 4.30%, respectively, to produce equity risk premiums of 6.11%, 6.15%, and 14 6.20%, respectively. Thus, she calculates return on equity estimates of 10.62%, 10.57%, and 10.50%, respectively.63 15

16 Q DO YOU AGREE WITH MS. BULKLEY'S RP METHODOLOGY?

17 A No. Ms. Bulkley contends that there is a simplistic inverse relationship between equity
18 risk premiums and interest rates without any regard to differences in investment risk.
19 Academic studies are clear that interest rates are a relevant factor in assessing current
20 market equity risk premiums, but the risk premium ties more specifically to the market's

⁶¹Public Utilities Commission of the State of California Application 22-04-008 et al., Decision Addressing Test Year 2023 Cost Of Capital For Pacific Gas And Electric Company, Southern California Edison, Southern California Gas Company, And San Diego Gas & Electric Company, at 23, December 19, 2022.

perception of investment risk of debt and equity securities, and not simply changes in
 interest rates.

More specifically, while academic studies have shown that, in the past, there has been an inverse relationship among these variables, researchers have found that the relationship changes over time and is influenced by changes in perception of the risk of bond investments relative to equity investments, and not simply changes to interest rates.⁶⁴

8 In the 1980s, equity risk premiums were inversely related to interest rates, but 9 that was likely attributable to the interest rate volatility that existed at that time. As 10 such, when interest rates were more volatile, perceptions of bond investment risk 11 increased relative to the investment risk of equities. This changing investment risk 12 perception caused changes in equity risk premiums.

13 In today's marketplace, interest rate volatility is not as extreme as it was during 14 the 1980s.⁶⁵ Nevertheless, changes in the perceived risk of bond investments relative 15 to equity investments still drive changes in equity premiums and cannot be measured 16 simply by observing nominal interest rates. Changes in nominal interest rates are 17 heavily influenced by changes to inflation outlooks, which also change equity return 18 expectations. As such, the relevant factor needed to explain changes in equity risk 19 premiums is the relative changes between the risk of equity versus debt investments, 20 and not simply changes in interest rates.

⁶⁴Robert S. Harris & Felicia C. Marston, "The Market Risk Premium: "Expectational Estimates Using Analysts' Forecasts," *Journal of Applied Finance*, Volume 11, No. 1, 2001 at 10-13; Eugene F. Brigham, Dilip K. Shome, & Steve R. Vinson, "The Risk Premium Approach to Measuring a Utility's Cost of Equity," *Financial Management*, Spring 1985, at 42-43.

⁶⁵"The Risk Premium Approach to Measuring a Utility's Cost of Equity," *Financial Management*, Spring 1985, at 44.

Importantly, Ms. Bulkley's analysis also ignores investment risk differentials.
 She bases her adjustment to the equity risk premium exclusively on changes in nominal
 interest rates. This is a flawed methodology that does not produce accurate or reliable
 risk premium estimates.

5 Q DO YOU BELIEVE THAT THE REGRESSION STUDY USED BY MS. BULKLEY IN 6 HER RP DEMONSTRATES AN ACCURATE CAUSE AND EFFECT BETWEEN 7 INTEREST RATES AND EQUITY RISK PREMIUMS?

- A No. Because the returns on equity she uses are authorized by commissions, those
 returns are not directly adjusted by market forces. While I also use commissionauthorized returns as a proxy for market-required returns, it is significant that Ms.
 Bulkley uses a simple regression analysis that tries to describe and gauge equity risk
 premiums based on only changes in interest rates.
- Equity risk premiums can move based on changes in market conditions that can impact both equity returns and bond returns in a like manner. This simplistic regression analysis of equity risk premiums and interest rates ignores these relevant market factors in describing the current market-required equity risk premium.

Q CAN MS. BULKLEY'S RP ANALYSIS BE REVISED TO REFLECT CURRENT PROJECTIONS OF TREASURY YIELDS?

A Yes. Ms. Bulkley's basic and incomplete notion that equity risk premiums change only
 with changes to nominal interest rates should be rejected. As discussed in regard to
 my own risk premium analysis the current Baa and A utility yields to Treasury spreads
 have significantly declined, which supports a below average equity risk premium. I
 have considered 90% of the average equity risk premium as discussed above of 5.1%

(90% x 5.7%). Therefore, disregarding Ms. Bulkley's inverse relationship methodology
 and adding the equity risk premium over Treasury bonds of 5.1% to an updated near term projected Treasury yield of 4.40% published by independent economists,
 produces an RP of 9.50%.

5

VIX.F. Ms. Bulkley's Consideration of Additional Risks

Q DID MS. BULKLEY DISCUSS CONSIDERATION OF ADDITIONAL BUSINESS 7 RISKS TO JUSTIFY HER RETURN ON EQUITY?

A Yes. Ms. Bulkley believes that the Company is exposed to several additional risks that
should be accounted for: (1) capital expenditures, (2) regulatory risk, (3) nuclear
generation ownership, and (4) wildfire risk. Ms. Bulkley believes that these additional
risks should be considered in determining a fair return on equity for EKC.⁶⁶

12 Q DO YOU BELIEVE THAT EKC FACES RISKS THAT ARE COMPARABLE TO THE

13 **RISKS FACED BY MS. BULKLEY'S AND YOUR PROXY GROUP COMPANIES?**

A The business risks identified by Ms. Bulkley are already considered in the assigning of
a credit rating by the various credit rating agencies.

As shown on my Exhibit MPG-4, the average S&P and Moody's credit rating for my proxy group of BBB+ and Baa2, respectively is actually a notch lower than EKC's credit rating from S&P and Moody's. The relative risks discussed on pages 37-52 of Ms. Bulkley's direct testimony are already incorporated in the credit ratings of the proxy group companies. Indeed, the major credit rating agencies go to great lengths and detail in assessing a utility's business risk and financial risk in order to evaluate total investment risk. This total investment risk assessment of EKC, in comparison to the

⁶⁶Bulkley Direct Testimony at 37-52.

proxy group, is fully absorbed into the market's perception of the proxy group
 companies' risk. Therefore, the proxy group fully captures the investment risk of EKC.

3 Q HOW DOES S&P ASSIGN CORPORATE CREDIT RATINGS FOR REGULATED

4 UTILITIES?

- 5 A In assigning corporate credit ratings, the credit rating agency considers both business
- 6 and financial risks. Business risks, among others, include a company's size,
- 7 competitive position, generation portfolio, and capital expenditure programs, as well as
- 8 consideration of the regulatory environment, current state of the industry, and the
- 9 economy as whole. Specifically, S&P states:
- 10 "To determine the assessment for a corporate issuer's business risk 11 profile, the criteria combine our assessments of industry risk, country 12 risk, and competitive position. Cash flow/leverage analysis determines 13 a company's financial risk profile assessment. The analysis then 14 combines the corporate issuer's business risk profile assessment and 15 its financial risk profile assessment to determine its anchor. In general, 16 the analysis weighs the business risk profile more heavily for investment-grade anchors, while the financial risk profile carries more 17 18 weight for speculative-grade anchors".⁶⁷
- 19 As mentioned above, regulatory risk is a key credit rating consideration by credit 20 analysts in assigning utilities' business risk, which is fully reflected in the utility's bond 21 rating. Ms. Bulkley's focus on a limited number of investment risk characteristics, while 22 ignoring many other significant risk factors such as actual financial performance of 23 regulated utilities generally, and Evergy specifically, renders her analysis incomplete 24 and her findings inconclusive. Credit analysts consider all these risk factors, along with 25 all other risk factors, in assigning a bond rating. Therefore, including companies that 26 have similar investment risk to EKC by reviewing a bond rating of the proxy group

⁶⁷Standard & Poor's RatingsDirect®: "Criteria/Corporates/General: Corporate Methodology," November 19, 2013.

companies is a more robust and reliable assessment of total investment risk, including
 these specific line item risks identified by Ms. Bulkley in selecting comparable risk proxy
 group companies.

4

VIX.G. Capital Market Conditions

5QDID MS. BULKLEY ALSO OFFER AN ASSESSMENT OF CURRENT MARKET6CONDITIONS IN SUPPORT OF HER RECOMMENDED RETURN ON EQUITY?

A Yes. Ms. Bulkley identifies several factors that she believes are helpful in evaluating
 the capital market environment, including inflation, the Federal Reserve's monetary
 policy, and elevated interest rates.⁶⁸

10 Q DO YOU BELIEVE THAT MS. BULKLEY'S USE OF THESE MARKET SENTIMENTS

11 SUPPORTS HER FINDINGS THAT EKC'S MARKET COST OF EQUITY IS 12 CURRENTLY 10.50%?

A No. A fair analysis of utility securities shows the market generally regards utility
securities as low-risk investment instruments and supports a finding that utilities' cost
of capital is low in today's marketplace.

16 Q WHAT IS YOUR ASSESSMENT OF CURRENT MARKET SENTIMENT FOR UTILITY 17 INVESTMENTS?

A Again, the current market sentiment toward utility investments, rather than just general
 corporate investments, is that the market is placing high value on utility securities,
 recognizing their low risk and stable characteristics. This is illustrated by current utility
 bond yield spreads as discussed at length previously. The current strong utility bond

⁶⁸*Id.* at 11-18.

- valuation is an indication of the market's sentiment that utility bonds are lower risk and
 are generally regarded as defensive investments by the investment industry.
- Further, other measures of utility stock valuations also support the conclusion that there is a robust market for utility stocks. As shown on my Exhibit MPG-2, financial valuation measures (*e.g.*, P/E ratio and market price to cash flow ratio) show that utility stock valuation measures are robust.
- For all these reasons, direct assessments of valuation measures and market
 sentiment toward utility securities support the credit rating agencies' findings, as quoted
 above, that the utility industry is largely regarded as a low-risk investment. All of this
 supports my finding that utilities' market cost of equity is very low in today's very lowcost capital market environment.

12 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

13 A Yes, it does.

Qualifications of Michael P. Gorman

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	А	Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,
3		Chesterfield, MO 63017.
4	Q	PLEASE STATE YOUR OCCUPATION.
5	А	I am a consultant in the field of public utility regulation and a Managing Principal with
6		the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory
7		consultants.
	fin	
8	Q	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK
9		EXPERIENCE.
10	А	In 1983 I received a Bachelor of Science Degree in Electrical Engineering from
11		Southern Illinois University, and in 1986, I received a Master's Degree in Business
12		Administration with a concentration in Finance from the University of Illinois at
13		Springfield. I have also completed several graduate level economics courses.
14		In August of 1983, I accepted an analyst position with the Illinois Commerce
15		Commission ("ICC"). In this position, I performed a variety of analyses for both formal
16		and informal investigations before the ICC, including: marginal cost of energy, central
17		dispatch, avoided cost of energy, annual system production costs, and working capital.
18		In October of 1986, I was promoted to the position of Senior Analyst. In this position, I
19		assumed the additional responsibilities of technical leader on projects, and my areas
20		of responsibility were expanded to include utility financial modeling and financial
21		analyses.

In 1987, I was promoted to Director of the Financial Analysis Department. In
this position, I was responsible for all financial analyses conducted by the Staff. Among
other things, I conducted analyses and sponsored testimony before the ICC on rate of
return, financial integrity, financial modeling and related issues. I also supervised the
development of all Staff analyses and testimony on these same issues. In addition, I
supervised the Staff's review and recommendations to the Commission concerning
utility plans to issue debt and equity securities.

8 In August of 1989, I accepted a position with Merrill-Lynch as a financial 9 consultant. After receiving all required securities licenses, I worked with individual 10 investors and small businesses in evaluating and selecting investments suitable to their 11 requirements.

12 In September of 1990, I accepted a position with Drazen-Brubaker & 13 Associates, Inc. ("DBA"). In April 1995, the firm of Brubaker & Associates, Inc. was 14 formed. It includes most of the former DBA principals and Staff. Since 1990, I have 15 performed various analyses and sponsored testimony on cost of capital, cost/benefits 16 of utility mergers and acquisitions, utility reorganizations, level of operating expenses 17 and rate base, cost of service studies, and analyses relating to industrial jobs and economic development. I also participated in a study used to revise the financial policy 18 19 for the municipal utility in Kansas City, Kansas.

At BAI, I also have extensive experience working with large energy users to distribute and critically evaluate responses to requests for proposals ("RFPs") for electric, steam, and gas energy supply from competitive energy suppliers. These analyses include the evaluation of gas supply and delivery charges, cogeneration and/or combined cycle unit feasibility studies, and the evaluation of third-party asset/supply management agreements. I have participated in rate cases on rate design and class cost of service for electric, natural gas, water and wastewater utilities.
 I have also analyzed commodity pricing indices and forward pricing methods for third
 party supply agreements and have also conducted regional electric market price
 forecasts.

In addition to our main office in St. Louis, the firm also has branch offices in
Corpus Christi, Texas; Louisville, Kentucky and Phoenix, Arizona.

7 Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

8 А Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of 9 service and other issues before the Federal Energy Regulatory Commission and 10 numerous state regulatory commissions including: Alaska, Arkansas, Arizona, 11 California, Colorado, Delaware, the District of Columbia, Florida, Georgia, Idaho, 12 Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, 13 Michigan, Minnesota, Mississippi, Missouri, Montana, Kansas, New Hampshire, New 14 Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, 15 Oregon, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, 16 Washington, West Virginia, Wisconsin, Wyoming, and before the provincial regulatory 17 boards in Alberta, Nova Scotia, and Quebec, Canada. I have also sponsored testimony 18 before the Board of Public Utilities in Kansas City, Kansas; presented rate setting 19 position reports to the regulatory board of the municipal utility in Austin, Texas, and Salt 20 River Project, Arizona, on behalf of industrial customers; and negotiated rate disputes 21 for industrial customers of the Municipal Electric Authority of Georgia in the LaGrange, 22 Georgia district.

23QPLEASEDESCRIBEANYPROFESSIONALREGISTRATIONSOR24ORGANIZATIONS TO WHICH YOU BELONG.
1	А	I earned the designation of Chartered Financial Analyst ("CFA") from the CFA Institute.
2		The CFA charter was awarded after successfully completing three examinations which
3		covered the subject areas of financial accounting, economics, fixed income and equity
4		valuation and professional and ethical conduct. I am a member of the CFA Institute's
5		Financial Analyst Society.

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Rate of Return (March 31, 2025)

<u>Line</u>	e <u>Description</u>		<u>Amount</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	Weighted <u>Cost</u> (4)
1	Long-Term Debt	\$	5,009,647	48.75%	4.63%	2.26%
2	Common Equity	\$	5,266,552	<u>51.25%</u>	9.40%	4.82%
3	Total	\$	10,276,199	100.00%		7.07%

Source: QCURB-92_2025 KS CENTRAL Rate Model – TRUE-UP.

Revenue Impact

1. Proposed Capital Structure¹

<u>Line</u>	Description	Amount (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	Weighted <u>Cost</u> (4)	Pre-Tax Weighted <u>Cost</u> (5)
1	Long-Term Debt	\$ 4,927,891	47.95%	4.63%	2.22%	2.22%
2	Common Equity	\$ 5,348,308	<u>52.05%</u>	10.50%	<u>5.46%</u>	<u>6.92%</u>
3	Total	\$ 10,276,199	100.00%		7.68%	9.14%
4	Conversion factor ¹					1.26582

2. Change in Return on Equity

Line	Description	Amount (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	Weighted <u>Cost</u> (4)	Pre-Tax Weighted <u>Cost</u> (5)
5	Long-Term Debt	\$ 4,927,891	47.95%	4.63%	2.22%	2.22%
6	Common Equity	\$ 5,348,308	<u>52.05%</u>	9.40%	<u>4.89%</u>	<u>6.19%</u>
7	Total	\$ 10,276,199	100.00%		7.11%	8.41%

3. Change in Capital Structure³

<u>Line</u>	Description	Amount (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	Weighted <u>Cost</u> (4)	Pre-Tax Weighted <u>Cost</u> (5)	
8	Long-Term Debt	\$ 5,009,647	48.75%	4.63%	2.26%	2.26%	
9	Common Equity	\$ 5,266,552	<u>51.25%</u>	9.40%	<u>4.82%</u>	6.10%	
10	Total	\$ 10,276,199	100.00%		7.07%	8.35%	

11	Rate Base ²		\$6	,843,914,121
12	Revenue Impact			
13	Return on Equity	0.72%	\$	49,596,846
14	Capital Structure	0.06%	\$	3,958,585
15	Total		\$	53,555,431

Sources: ¹QCURB-92_2025 KS CENTRAL Rate Model – TRUE-UP. ²Exhibit MPG-1, Page 1. CONFIDENTIAL MPG-2

Maintenance Expenses Adjustment

Line	Description	Tr M	CS-40 ansmission aintenance (1)	С М	CS-41 Distribution laintenance (2)	N	CS-42 Generation Iaintenance (3)	N	CS-43 Nuclear laintenance (4)	 Total (5)	E	Total Excluding Nuclear (6)
	Evergy Proposed											
1 2	July '23 to June '24 Test Year 3-Year Average (2022, 2023, Test Year)	\$	3,945,939 4,478,968	\$	30,902,888 30,430,606	\$	52,540,144 48,789,824	\$	6,036,605 5,920,793	\$ 93,425,576 89,620,192		
3	Difference	\$	533,029	\$	(472,282)	\$	(3,750,320)	\$	(115,811)	\$ (3,805,384)		
4	Proposed Adjustment	\$	-	\$	-	\$	-	\$	-	\$ -		
	March 2025 True-Up											
5	July '23 to June '24 Test Year	\$	3,945,939	\$	30,902,888	\$	43,313,099 ¹	\$	6,036,605	\$ 84,198,530		
6 7	3-Year Average (2022, 2023, True-Up Year) Difference	\$	4,491,394 545,456	\$	(1,405,481)	\$	1,270,294	\$	4,809,967 (1,226,637)	\$ (816,369)		
8	Proposed Adjustment	\$	545,456	\$	(1,405,481)	\$	1,270,294	\$	-	\$ 410,268		
	Revised Adjustment (12 Months Actuals)											
9 10 11	July '23 to June '24 Test Year April '24 to March '25 True-Up Year Difference	\$ 	3,945,939 3,983,217 37,279	\$ \$	30,902,888 28,103,290 (2,799,598)	\$ \$	43,313,099 39,920,849 (3,392,250)	\$ \$	6,036,605 2,704,127 ² (3,332,477)	\$ 84,198,530 74,711,483 (9,487,047)	\$ \$	78,161,925 72,007,356 (6,154,569)
12	Revised Adjustment (Line 11 - Line 8)	\$	(508,177)	\$	(1,394,117)	\$	(4,662,543)	\$	-	N/A	\$	(6,564,837)

Sources & Notes:

EKC's response to data requests KCC-217, 218, 219, and 291 (provided in Exhibit MPG-2).

¹ This appears to be an error in Adjustment CS-42. The adjustment included costs associated with the Western Plains Wind Farm and the Persimmon Creek Wind Farm which were excluded in the March 2025 true-up.

² EKC states in the workpapers supporting the true-up for Adjustment CS-43 that in April 2024 the Company recorded a correcting entry to nuclear maintenance that was applicable to months prior to April 2024 but not the true-up period.

Amortization of Additional Excess Storm Reserve Regulatory Liability

Line	Description	Amount
		(1)
1	March 31, 2025 Storm Reserve Balance	\$ 8,415,749
2	Proposed Cap	7,000,000
3	Total Excess Storm Reserve	\$ 1,415,749
4	Amortization Period (Years)	3
5	Annual Amortization Expense	\$ 471,916

Source:

EKC response to data request KCC-383 (provided in Exhibit MPG-2).

Incentive Compensation Adjustment

		(Company	
Line	Description	I	Proposed	Adjusted
			(1)	(2)
	Power Marketing Incentive Compensation			
1	2022 Plan Year	\$	3,151,442	\$ 3,151,442
2	2023 Plan Year		3,742,355	3,742,355
3	2024 Plan Year		4,424,530	 4,424,530
4	Three-Year Average	\$	3,772,776	\$ 3,772,776
5	Allocator Factor		48.22%	0.00%
6	O&M Incentive Compensation - Power Marketing	\$	1,819,251	\$ -
7	Difference			\$ (1,819,251)

Source:

EKC response to data request KCC-309 (provided in Exhibit MPG-2).

Electric Utilities (Valuation Metrics)

							Pric	e to Earnings	(P/E) Ratio ¹				
		23-Year								3-Year	Averages		
Line	Company	Average	2024 ²	2023	2022	2021	2020	2017-2019	2014-2016	2011-2013	2008-2010	2005-2007	2002-2004
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	ALLETE	18.24	18.80	16.80	18.10	20.60	18.30	23.30	16.97	16.40	15.33	16.42	25.21
2	Alliant Energy	17.11	20.10	16.40	21.40	21.20	21.20	20.30	19.00	14.77	13.27	14.84	15.54
3	Ameren Corp.	16.89	20.30	15.50	21.50	21.40	22.20	20.33	17.50	13.93	11.07	17.83	15.19
4	American Electric Power	15.35	18.40	15.90	21.10	17.10	19.60	19.57	15.63	13.40	12.17	14.30	11.92
5	Avangrid, Inc.	23.69	N/A	16.30	19.60	23.20	23.60	25.50	27.00	N/A	N/A	N/A	N/A
6	Avista Corp.	18.23	16.20	14.60	20.00	20.20	21.20	20.97	17.90	16.00	13.03	21.91	19.18
7	Black Hills	17.45	13.90	14.20	18.10	17.70	17.00	19.17	19.13	22.13	14.00	16.01	15.20
8	CenterPoint Energy	17.00	19.80	20.40	18.70	26.10	15.90	24.80	19.00	16.03	12.30	14.77	9.83
9	CMS Energy Corp.	18.44	20.50	18.60	22.90	23.60	23.30	21.97	18.83	15.00	12.33	20.53	12.39
10	Consol. Edison	16.17	17.30	17.70	20.30	17.20	19.00	18.87	16.77	15.07	12.70	14.80	15.26
11	Dominion Resources	18.30	17.40	18.30	18.70	19.50	22.60	19.30	22.13	18.47	13.60	20.49	14.12
12	DTE Energy	16.81	18.90	16.90	22.40	30.00	16.30	18.63	17.33	15.43	12.50	16.51	13.67
13	Duke Energy	17.22	17.80	16.50	19.60	18.90	17.10	18.20	19.13	16.23	14.43	16.10	N/A
14	Edison Int'l	16.75	9.70	14.30	40.60	29.70	34.90	16.95	15.23	11.40	10.80	13.58	17.45
15	El Paso Electric	17.68	N/A	N/A	N/A	N/A	N/A	24.32	17.79	14.32	11.14	19.63	21.10
16	Entergy Corp.	14.93	25.80	20.60	21.10	15.00	15.30	15.10	12.10	11.17	13.40	16.62	13.46
17	Eversource Energy	18.01	12.30	13.10	20.90	22.20	23.70	20.10	18.23	17.40	13.03	21.84	16.73
18	Evergy, Inc.	19.20	17.30	14.80	19.90	16.20	21.70	22.25	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	14.45	16.00	15.40	19.90	16.60	12.40	13.80	13.70	14.60	13.50	16.70	11.74
20	FirstEnergy Corp.	15.16	14.50	14.40	17.00	14.10	15.70	14.03	12.83	18.87	13.43	15.30	16.52
21	Fortis Inc.	19.24	18.80	17.00	21.10	21.20	20.60	17.70	21.30	19.63	17.37	19.39	N/A
22	Great Plains Energy	15.52	N/A	N/A	N/A	N/A	N/A	N/A	17.94	15.28	16.23	16.20	11.97
23	Hawaiian Elec.	17.36	11.20	6.00	18.50	18.20	21.50	20.30	16.63	16.37	20.53	19.30	15.47
24	IDACORP, Inc.	17.25	19.60	18.10	21.00	20.80	19.90	21.13	16.67	12.43	11.97	16.66	20.29
25	MGE Energy	20.35	26.00	21.10	24.70	25.50	26.40	27.63	20.80	16.67	14.77	17.76	17.16
26	NextEra Energy, Inc.	18.84	20.60	19.80	27.80	31.30	28.90	24.40	18.30	14.17	12.90	16.81	15.05
27	NorthWestern Corp	16.88	16.00	13.70	17.30	17.40	18.60	18.17	17.27	15.07	12.77	21.58	N/A
28	OGE Energy	15.49	17.70	17.00	17.20	14.30	16.20	17.93	17.90	15.77	12.17	14.14	13.36
29	Otter Tail Corp.	20.31	12.90	14.30	9.50	12.30	18.30	22.60	19.07	30.10	30.65	17.25	17.04
30	Pinnacle West Capital	16.01	18.70	15.80	17.10	14.10	16.70	18.83	16.87	14.73	14.13	15.94	14.73
31	TXNM Energy	18.26	17.80	14.20	17.40	19.90	19.60	20.67	19.93	15.20	16.05	22.85	14.94
32	Portland General	16.56	13.70	14.30	18.20	17.70	16.60	20.23	17.37	14.43	14.23	17.63	N/A
33	PPL Corp.	16.36	19.00	16.20	20.00	54.10	13.90	14.07	13.60	11.40	18.40	15.51	11.39
34	Public Serv. Enterprise	14.77	20.50	18.80	18.50	16.80	15.70	16.97	14.00	12.23	11.33	17.02	11.61
35	SCANA Corp.	13.96	N/A	N/A	N/A	N/A	N/A	14.46	15.05	14.30	12.41	14.94	12.93
36	Sempra Energy	15.43	13.00	15.00	16.80	15.40	17.50	22.40	22.00	15.47	11.50	12.43	8.60
37	Southern Co.	16.46	20.60	18.60	19.60	18.40	17.90	16.07	16.53	16.33	14.83	16.04	14.72
38	Vectren Corp.	17.05	N/A	N/A	N/A	N/A	N/A	23.54	19.03	17.17	14.93	16.45	15.51
39	WEC Energy Group	17.50	19.00	16.50	21.90	22.30	24.90	21.03	19.63	15.50	14.03	15.64	13.47
40	Westar Energy	15.58	N/A	N/A	N/A	N/A	N/A	23.40	18.47	14.08	14.96	13.69	14.08
41	Xcel Energy Inc.	17.88	18.10	15.30	22.20	22.50	23.90	20.47	16.80	14.67	13.50	15.62	22.02
12	Avorago	17.06	17.66	16 19	20.20	20.01	10.0F	10.00	17 79	15.69	14 15	16.95	15 11
42 13	Median	16.25	18.10	16.10	19 90	19 70	10.30	20.27	17.70	15.00	13/3	16.95	1/ 9/
40	Moulall	10.20	10.10	10.23	13.30	13.70	19.50	20.21	17.04	13.20	10.40	10.45	14.34

Sources:

The current year P/E ratio is based on the forward P/E (price over expected earnings per share). All historical year P/E ratios are based on annual average share price over achieved earnings per share. ¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.

Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Electric Utilities (Valuation Metrics)

							Market Pr	ice to Cash Fle	ow (MP/CF) Ra	atio 1			
		23-Year								3-Year	Averages		
Line	Company	Average	2024 ²	2023	2022	2021	2020	2017-2019	2014-2016	2011-2013	2008-2010	2005-2007	2002-2004
	<u> </u>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		0.10	0.00	C CO	7.50	0.01	0.14	10.00	0.10	0.41	0.01	10.07	11.40
1	ALLETE	9.12	8.03	6.69	7.56	0.01	8.14	10.83	8.19	0.41	0.01	10.97	11.40
2	Alliant Energy	8.31	9.74	9.43	10.43	10.31	10.66	11.22	9.31	7.41	6.77	7.01	5.16
3	Ameren Corp.	7.42	7.76	8.05	9.54	9.03	9.63	8.59	7.09	5.70	4.94	8.28	7.65
4	American Electric Power	6.77	7.70	7.68	8.67	/.5/	8.41	8.72	7.22	5.99	5.32	6.15	5.13
5	Avangrid, Inc.	9.53	N/A	7.12	8.69	11.19	9.39	9.83	9.93	N/A	N/A	N/A	N/A
6	Avista Corp.	6.94	6.34	6.73	9.39	8.03	7.80	8.94	7.23	6.50	4.99	6.49	6.28
7	Black Hills	7.90	7.58	7.76	8.92	8.84	8.56	9.56	8.73	7.30	7.22	7.37	6.50
8	CenterPoint Energy	5.67	7.79	7.75	8.01	7.95	5.94	7.48	5.99	5.70	4.35	4.60	2.83
9	CMS Energy Corp.	6.60	8.53	8.28	9.43	9.27	9.87	9.00	7.72	6.04	3.85	4.67	3.04
10	Consol. Edison	8.23	7.97	8.26	8.70	7.26	8.35	9.28	8.42	8.08	7.00	8.52	8.28
11	Dominion Resources	9.82	8.18	9.24	9.35	11.15	14.59	11.92	11.90	10.08	7.79	8.85	7.24
12	DTE Energy	6.80	7.72	7.27	7.96	10.62	7.85	9.09	7.86	5.92	4.39	5.49	5.61
13	Duke Energy	7.60	7.47	7.17	7.75	7.89	8.06	7.82	8.21	8.07	6.37	7.16	N/A
14	Edison Int'l	6.02	6.04	5.67	6.83	7.14	7.57	9.25	6.12	4.76	4.56	6.16	4.21
15	El Paso Electric	5.93	N/A	N/A	N/A	N/A	N/A	8.99	6.75	5.71	4.41	6.45	4.31
16	Entergy Corp.	5.83	7.85	4.62	7.15	5.61	5.78	5.21	4.11	4.06	6.10	8.38	6.51
17	Eversource Energy	7.67	8.13	10.39	9.39	11.41	12.53	10.33	10.13	8.12	4.57	5.25	3.13
18	Evergy, Inc.	7.45	6.96	6.74	8.66	7.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	6.05	5.96	6.41	7.69	5.08	4.44	4.93	4.86	5.34	6.91	8.82	5.66
20	FirstEnergy Corp.	6.96	8.20	7.90	8.93	6.60	9.23	8.23	5.98	6.97	5.66	7.15	5.72
21	Fortis Inc.	8.45	8.09	8.34	9.10	9.57	9.50	8.56	9.00	8.13	7.25	8.54	N/A
22	Great Plains Energy	6.89	N/A	N/A	N/A	N/A	N/A	14.62	7.25	5.85	5.75	7.17	5.86
23	Hawaiian Elec.	7.70	2.16	5.70	7.95	8.23	8.69	8.95	8.11	7.98	7.95	8.24	6.92
24	IDACORP, Inc.	9.05	10.78	11.04	12.42	11.84	11.38	12.01	9.64	7.16	6.31	7.83	7.31
25	MGE Energy	11.75	13.26	12.31	13.63	N/A	14.90	15.98	13.20	10.48	8.62	10.08	9.78
26	NextEra Energy Inc.	9.29	11 20	10.89	15 17	20.40	15 48	11.57	8.38	7 05	6.26	7 42	6 15
27	NorthWestern Corp	7.87	7.33	8.01	8 65	8 83	8 88	8.98	8 88	6.78	5 47	8.39	8 13
28	OGE Energy	7 94	8 14	7 78	8.36	7 64	8.38	10.16	9.64	8 25	6 14	7.37	5.91
29	Otter Tail Corp	9.25	8.91	8.02	7 70	8.61	9.99	11 70	9.29	9.02	9.24	8 79	8 49
30	Pinnacle West Canital	6.20	6 11	6.47	5 19	6 19	7 49	8.04	7 28	6.33	4 56	5 57	5.30
31		6.86	6.06	6.87	6.95	7.81	7.40	7.63	7.20	5 74	5 40	8.60	6.03
32	Portland General	6.00	5 90	6.56	6.65	6.48	6.72	7.00	6.45	5.33	4 52	5 54	N/A
33	PPL Corp	7.87	8.52	7.83	8.82	13 74	7.46	8.37	8 1/	6.14	8.48	8.02	5 73
24	Public Sony Entorprise	9.11	11 60	7.00	10.52	11.22	9.22	8.06	7.04	6.29	6.90	8.05	6.72
25	SCANA Corp	7.00	N/A	5.00 N/A	N/A	N/A	0.22 N/A	8.30	9.49	7.21	6.30	6.53	6.60
26	Sompra Enorgy	9.51	0.76	8 02	0.75	12 22	10.40	10.02	10.55	7.21	6.56	7.60	4.67
27	Sempra Lifergy	0.01	0.71	0.55	9.75	0.70	0.40	7 79	0.00	7.55	7.69	7.00	4.07
37	Southern Corn	0.33	9.71	0.04	9.65	0.72	0.34	10.00	0.49	0.42	7.00	6.50	0.13
30	WEG Energy Group	7.08	N/A	IN/A	IN/A	IN/A	IN/A	11.52	8.00	0.14	5.91	0.99	/.∠ö
39	WEC Energy Group	9.25	9.53	10.12	11.81	11.99	13.67	11.58	11.37	9.08	7.53	/.1/	5.15
40	Westar Energy	5.91	N/A	IN/A	IN/A	N/A	IN/A	10.87	9.28	6.87 C 70	5.97	6.56 F 80	4.57
41	Acei Energy Inc.	7.00	1.13	7.90	0.02	9.19	10.07	0.01	/.00	0.78	0.80	5.69	5.01
42	Average	7.67	8.06	8.01	9.00	9.28	9.26	9.51	8.24	6.99	6.22	7.37	6.18
43	Median	7.57	7.97	7.87	8.69	8.72	8.56	8.99	8.16	6.87	6.14	7.37	5.97

Sources:

The current year P/E ratio is based on the forward P/E (price over expected earnings per share). All historical year P/E ratios are based on annual average share price over achieved earnings per share. ¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.

Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Note:

^a Based on the average of the high and low price and the projected Cash Flow per share.

Electric Utilities (Valuation Metrics)

		Market Price to Book Value (MP/BV) Ratio ¹												
		20-Year								3-Year Averag	es			
Line	Company	Average	2024 ²	<u>2023</u>	2022	<u>2021</u>	2020	2017-2019	<u>2014-2016</u>	<u>2011-2013</u>	2008-2010	2005-2007		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
1	ALLETE	1.53	1.19	1.19	1.24	1.43	1.39	1.83	1.44	1.40	1.33	2.07		
2	Alliant Energy	1.82	2.03	1.92	2.25	2.26	2.30	2.29	1.96	1.58	1.23	1.51		
3	Ameren Corp.	1.61	1.90	2.00	2.15	2.13	2.21	2.04	1.53	1.12	0.95	1.64		
4	American Electric Power	1.65	1.78	1.73	1.99	1.87	2.09	1.97	1.64	1.31	1.27	1.66		
5	Avangrid, Inc.	0.90	N/A	0.71	0.89	1.01	0.97	0.99	0.78	N/A	N/A	N/A		
6	Avista Corp.	1.32	1.11	1.19	1.33	1.42	1.37	1.72	1.42	1.22	1.04	1.24		
7	Black Hills	1.49	1.15	1.28	1.54	1.52	1.55	1.87	1.77	1.32	1.04	1.56		
8	CenterPoint Energy	2.25	1.78	1.86	1.99	1.74	1.90	2.33	2.48	2.05	2.07	2.98		
9	CMS Energy Corp.	2.19	2.38	2.33	2.71	2.69	3.24	3.01	2.47	1.88	1.27	1.52		
10	Consol. Edison	1.43	1.53	1.48	1.55	1.34	1.44	1.57	1.45	1.41	1.15	1.49		
11	Dominion Resources	2.50	1.71	1.68	2.34	2.37	2.72	2.51	3.35	2.73	2.08	2.42		
12	DTE Energy	1.67	2.10	1.97	2.41	2.82	1.80	1.99	1.70	1.35	1.05	1.35		
13	Duke Energy	1.31	1.68	1 49	1.63	1.58	1 47	1 40	1.31	1 14	0.99	1 15		
14	Edison Int'l	1 72	2 10	1.86	2.08	1.67	1.62	1 98	1 78	1.45	1 22	1 93		
15	El Paso Electric	1.56	N/A	N/A	N/A	N/A	N/A	1 91	1 56	1.57	1 16	1 72		
16	Entergy Corp	1 74	1.81	1 45	1.81	1 75	1 93	1.84	1.00	1.07	1 91	2 18		
17	Eversource Energy	1.54	1.01	1.40	1.86	2.00	2 11	1.80	1.55	1 39	1.01	1 29		
18	Everav Inc	1.04	1 20	1 33	1.00	1 50	Ν/Δ	N/A	N/A	N/A	N/A	N/A		
10	Evelop Com	2.04	1 / 1	1.50	1.92	1.30	1 20	1.91	1.01	1.52	2.01	4.00		
20	EirotEnorgy Corp.	2.04	0.10	2.02	1.00	1.37	0.01	2.00	1.21	1.55	1 01	4.03		
20	FirstEnergy Corp.	2.00	1.07	2.00	2.37	2.33	2.01	3.20	1.00	1.55	1.01	1.93		
21	Creat Plaina Energy	1.47	1.37 N/A	1.43 N/A	1.50	1.40 N/A	1.47 N/A	1.00	1.01	1.55	1.40	1.79		
22	Great Flains Energy	1.21	1 E O	1.04	1.04	1 01	1 00	1.00	1.13	0.97	0.93	1.77		
23	Hawalian Elec.	1.00	1.50	1.24	1.94	1.81	1.82	1.85	1.01	1.57	1.40	1.78		
24	IDACORP, Inc.	1.52	1.68	1.75	1.91	1.88	1.84	2.00	1.58	1.23	1.05	1.28		
25	MGE Energy	2.17	2.59	2.35	2.47	N/A	2.54	2.78	2.26	1.91	1.60	1.89		
26	NextEra Energy, Inc.	2.41	2.87	2.89	4.07	4.27	3.58	2.47	2.18	1.74	1.75	2.02		
27	NorthWestern Corp	1.42	1.11	1.18	1.25	1.43	1.45	1.62	1.61	1.44	1.15	1.52		
28	OGE Energy	1.81	1.67	1.62	1.74	1.67	1.86	1.88	1.92	2.03	1.53	1.90		
29	Otter Tail Corp.	1.94	2.18	2.55	2.30	2.33	2.04	2.48	1.86	1.63	1.36	1.81		
30	Pinnacle West Capital	1.42	1.42	1.42	1.31	1.45	1.63	1.85	1.56	1.37	1.03	1.25		
31	TXNM Energy	1.37	1.49	1.75	1.81	1.86	1.87	1.98	1.36	0.96	0.64	1.30		
32	Portland General	1.36	1.28	1.37	1.58	1.55	1.57	1.70	1.45	1.17	0.97	1.34		
33	PPL Corp.	1.97	1.52	1.43	1.44	1.52	1.63	2.02	2.11	1.53	2.30	2.66		
34	Public Serv. Enterprise	1.95	2.34	1.92	2.32	2.11	1.70	1.82	1.61	1.50	2.01	2.63		
35	SCANA Corp.	1.51	N/A	N/A	N/A	N/A	N/A	1.65	1.56	1.44	1.32	1.66		
36	Sempra Energy	1.79	1.74	1.65	1.84	1.64	1.84	2.17	2.12	1.55	1.42	1.77		
37	Southern Co.	2.15	2.68	2.34	2.53	2.39	2.20	2.03	2.01	2.06	1.89	2.27		
38	Vectren Corp.	1.83	N/A	N/A	N/A	N/A	N/A	2.75	2.16	1.64	1.46	1.77		
39	WEC Energy Group	2.07	2.27	2.35	2.57	2.61	2.84	2.27	2.08	2.02	1.54	1.70		
40	Westar Energy	1.37	N/A	N/A	N/A	N/A	N/A	1.94	1.63	1.27	1.04	1.35		
41	Xcel Energy Inc.	1.73	1.77	2.00	2.22	2.27	2.46	2.12	1.70	1.47	1.27	1.44		
42	Average	1.74	1.77	1.72	1.96	1.92	1.96	1.99	1.73	1.52	1.41	1.81		
43	Median	1.70	1.71	1.69	1.89	1.75	1.84	1.95	1.61	1.45	1.27	1.72		
42 43	Median	1.70	1.71	1.69	1.89	1.75	1.84	1.95	1.61	1.45	1.4	27		

Sources:

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¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.

Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Notes:

^b Based on the average of the high and low price and the projected Book Value per share.

Electric Utilities (Valuation Metrics)

							Dividend Yie	ld ¹			
<u>Line Company</u>		19-Year						3	-Year Average	es	
<u>Line</u>	<u>Company</u>	Average	2024 ^{2/a}	2023	2022	<u>2021</u>	2018-2020	<u>2015-2017</u>	<u>2012-2014</u>	<u>2009-2011</u>	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	4.05%	4.63%	4.67%	4.47%	3.88%	3.29%	3.50%	4.10%	5.13%	3.71%
2	Alliant Energy	3.60%	3.46%	3.57%	3.04%	2.97%	2.99%	3.29%	3.78%	4.87%	3.52%
3	Ameren Corp.	4.07%	3.29%	3.13%	2.74%	2.74%	2.74%	3.53%	4.53%	5.67%	5.34%
4	American Electric Power	3.97%	3.96%	4.02%	3.41%	3.61%	3.33%	3.58%	4.21%	5.12%	3.89%
5	Avangrid, Inc.	3.89%	N/A	4.87%	3.94%	3.53%	3.57%	4.03%	N/A	N/A	N/A
6	Avista Corp.	3.93%	5.29%	4.85%	4.26%	3.94%	3.48%	3.50%	4.35%	4.60%	2.86%
7	Black Hills	3.77%	4.53%	4.15%	3.44%	3.50%	3.16%	3.05%	3.47%	5.20%	3.80%
8	CenterPoint Energy	4.08%	2.77%	2.71%	2.46%	2.77%	3.82%	4.85%	3.85%	5.31%	4.42%
9	CMS Energy Corp.	3.20%	3.23%	3.37%	2.92%	2.92%	2.77%	3.07%	3.84%	4.07%	1.93%
10	Consol. Edison	4.24%	3.43%	3.57%	3.51%	4.10%	3.66%	3.71%	4.23%	5.20%	5.18%
11	Dominion Resources	4.11%	5.06%	5.18%	3.66%	3.38%	4.60%	3.78%	3.76%	4.58%	3.56%
12	DTE Energy	3.96%	3.55%	3.67%	3.17%	3.06%	3.33%	3.34%	3.86%	5.24%	4.82%
13	Duke Energy	4.56%	3.92%	4.28%	3.98%	4.02%	4.35%	4.25%	4.46%	5.72%	4.80%
14	Edison Int'l	3.41%	4.17%	4.47%	4.45%	4.39%	3.95%	2.84%	2.82%	3.66%	2.49%
15	El Paso Electric	2.74%	N/A	N/A	N/A	N/A	2.55%	2.79%	2.98%	2.11%	N/A
16	Entergy Corp.	4.01%	3.62%	4.36%	3.70%	3.84%	3.83%	4.54%	4.81%	4.34%	2.71%
17	Eversource Energy	3.34%	4.72%	3.89%	3.09%	2.85%	2.92%	3.23%	3.47%	3.67%	3.04%
18	Evergy, Inc.	4.06%	4.58%	4.42%	3.66%	3.59%	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	3.76%	4.08%	3.67%	2.89%	3.17%	3.40%	3.71%	4.70%	4.72%	2.70%
20	FirstEnergy Corp.	4.30%	4.23%	4.24%	3.71%	4.39%	4.28%	4.39%	4.47%	5.36%	3.24%
21	Fortis Inc.	3.73%	4.16%	4.09%	3.82%	3.77%	3.78%	3.75%	3.79%	3.86%	3.19%
22	Great Plains Energy	4.52%	N/A	N/A	N/A	N/A	N/A	3.66%	3.84%	4.55%	6.02%
23	Hawaiian Elec.	4.40%	N/A	4.09%	3.59%	3.44%	3.32%	3.90%	4.73%	5.81%	4.92%
24	IDACORP, Inc.	3.16%	3.24%	3.18%	2.86%	2.89%	2.67%	2.80%	3.20%	3.66%	3.63%
25	MGE Energy	2.95%	2.06%	2.25%	2.15%	N/A	2.07%	2.32%	2.98%	3.99%	4.21%
26	NextEra Energy, Inc.	2.90%	2.94%	2.80%	2.11%	1.90%	2.40%	2.90%	3.32%	3.93%	N/A
27	NorthWestern Corp	4.18%	5.01%	4.78%	4.51%	4.00%	3.72%	3.52%	3.71%	5.06%	4.37%
28	OGE Energy	3.86%	4.39%	4.63%	4.30%	4.81%	4.06%	3.66%	2.68%	3.90%	4.10%
29	Otter Tail Corp.	3.75%	2.15%	2.33%	2.44%	2.81%	3.04%	3.77%	4.49%	5.54%	3.67%
30	Pinnacle West Capital	4.50%	4.42%	4.51%	4.90%	4.44%	3.60%	3.50%	4.46%	5.67%	5.19%
31	TXNM Energy	3.18%	3.70%	3.27%	3.04%	2.09%	2.68%	2.71%	2.91%	4.01%	3.81%
32	Portland General	3.73%	4.45%	4.20%	3.63%	3.62%	3.19%	3.08%	3.71%	4.98%	3.39%
33	PPL Corp.	4.42%	3.40%	3.53%	3.23%	5.83%	5.56%	4.35%	4.78%	4.91%	3.06%
34	Public Serv. Enterprise	3.71%	3.16%	3.83%	3.37%	3.37%	3.44%	3.78%	4.28%	4.28%	3.15%
35	SCANA Corp.	4.37%	N/A	N/A	N/A	N/A	N/A	3.74%	4.15%	5.13%	4.48%
36	Sempra Energy	3.00%	3.06%	3.27%	2.99%	3.39%	3.11%	2.85%	3.12%	3.32%	2.39%
37	Southern Co.	4.52%	3.57%	4.13%	3.82%	4.17%	4.68%	4.61%	4.53%	5.10%	4.49%
38	Vectren Corp.	4.38%	N/A	N/A	N/A	N/A	N/A	3.23%	4.20%	5.48%	4.61%
39	WEC Energy Group	3.09%	3.75%	3.57%	3.08%	3.00%	2.96%	3.38%	3.38%	3.16%	2.24%
40	Westar Energy	4.37%	N/A	N/A	N/A	N/A	N/A	3.21%	4.24%	5.48%	4.55%
41	Xcel Energy Inc.	3.68%	3.64%	3.28%	2.90%	2.81%	2.86%	3.37%	3.86%	4.63%	4.39%
42	Average	3.83%	3.81%	3.86%	3.42%	3.52%	3.42%	3.53%	3.90%	4.64%	3.83%
43	Median	3.69%	3.73%	3.95%	3.43%	3.50%	3.33%	3.51%	3.86%	4.87%	3.80%

Sources:

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Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

 $^{\rm 3}$ St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.

⁴ Mergent Bond Record, through December 31, 2024.

Notes:

^a Based on the average of the high and low price and the projected Dividends Declared per share, published in the Value Line Investment Survey.

Electric Utilities (Valuation Metrics)

						Div	idend Yield ¹				
		19-Year						3-	Year Average	es	
Line	<u>Company</u>	Average	2024 ^{2/a}	2023	2022	2021	2018-2020	2015-2017	2012-2014	2009-2011	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Average	3.83%	3.81%	3.86%	3.42%	3.52%	3.42%	3.53%	3.90%	4.64%	3.83%
2	Median	3.69%	3.73%	3.95%	3.43%	3.50%	3.33%	3.51%	3.86%	4.87%	3.80%
3	30-Yr Treasury Yields	3.43%	4.41%	4.09%	3.11%	2.06%	2.42%	2.78%	3.24%	4.08%	4.67%
4	20-Yr Treasury Yields3	3.32%	4.50%	4.25%	3.30%	1.98%	2.26%	2.47%	2.91%	3.92%	4.75%
5	20-Yr TIPS ³	1.12%	2.06%	1.73%	0.64%	-0.43%	0.41%	0.73%	0.61%	1.71%	2.28%
6	Forward Inflation ^b	2.17%	2.39%	2.48%	2.64%	2.42%	1.84%	1.73%	2.29%	2.17%	2.42%
7	Real Dividend Yield ^c	1.62%	1.39%	1.34%	0.77%	1.07%	1.55%	1.76%	1.57%	2.42%	1.38%
	A-Rated Utility										
8	Nominal "A" Rated Yield ⁴	4.74%	5.54%	5.55%	4.74%	3.10%	3.69%	4.01%	4.29%	5.51%	6.22%
9	Real "A" Rated Yield	2.52%	3.08%	2.99%	2.05%	0.67%	1.82%	2.24%	1.96%	3.27%	3.72%
	Baa-Rated Utility										
10	Nominal "Baa" Rated Yield	5.24%	5.76%	5.85%	5.05%	3.36%	4.10%	4.69%	4.87%	6.20%	6.63%
11	Real "Baa" Rated Yield	3.00%	3.29%	3.29%	2.35%	0.91%	2.22%	2.91%	2.52%	3.94%	4.11%
	Spreads (A-Rated Utility Bond - Stock)										
12	Nominal Spread ^d	0.91%	1.73%	1.69%	1.32%	-0.41%	0.27%	0.49%	0.40%	0.87%	2.39%
13	Real Spread ^e	0.89%	1.69%	1.65%	1.28%	-0.40%	0.26%	0.48%	0.39%	0.85%	2.33%
	Spreads (Baa-Rated Utility Bond - Stock)										
14	Nominal Spread ^b	1.40%	1.95%	1.99%	1.63%	-0.16%	0.68%	1.17%	0.97%	1.55%	2.80%
15	Real Spread ^c	1.37%	1.90%	1.94%	1.58%	-0.16%	0.67%	1.15%	0.95%	1.52%	2.73%
	Spreads (20-Yr Treasury Bond - Stock)										
16	Nominal ^f	-0.52%	0.69%	0.40%	-0.12%	-1.54%	-1.16%	-1.05%	-0.99%	-0.72%	0.92%
17	Real ^g	-0.51%	0.67%	0.39%	-0.12%	-1.50%	-1.14%	-1.04%	-0.96%	-0.71%	0.90%
	Spreads (30-Yr Treasury Bond - Stock)										
18	Nominal ^h	-0.40%	0.59%	0.24%	-0.31%	-1.46%	-1.00%	-0.75%	-0.66%	-0.56%	0.83%



Sources:

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² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

³ St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.

⁴ Mergent Bond Record, through December 31, 2024.

Notes:

^a Based on the average of the high and low price and the projected Dividends Declared per share, published in the Value Line Investment Survey. ^b Line 47 = (1 + Line 45) / (1 + Line 46) - 1.

^c Line 48 = (1 + Line 43) / (1 + Line 47) - 1.

^d The spread being measured here is the nominal A-rated utility bond yield over the average nominal utility dividend yield; (Line 49 - Line 42).

^e The spread being measured here is the real A-rated utility bond yield over the average real utility dividend yield; Line 50 - Line 48)

¹ The spread being measured here is the nominal 20-Year Treasury yield over the average nominal utility dividend yield; (Line 45 - Line 42).

^g The spread being measured here is the real 20-Year TIPS yield over the average real utility dividend yield; Line 46 - Line 48)

^h The spread being measured here is the nominal utility dividend yield over the nominal 30-Year Treasury yield; (Line 42 - Line 44).

Electric Utilities (Valuation Metrics)

Dividend per Share ¹											
		19-Year						3	-Year Average	es	
Line	<u>Company</u>	Average	2024 ²	2023	2022	<u>2021</u>	2018-2020	<u>2015-2017</u>	<u>2012-2014</u>	<u>2009-2011</u>	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	2.09	2.82	2.71	2.60	2.52	2.35	2.08	1.90	1.77	1.60
2	Alliant Energy	1.16	1.92	1.81	1.71	1.61	1.43	1.18	0.95	0.80	0.64
3	Ameren Corp.	1.99	2.68	2.52	2.36	2.20	1.92	1.72	1.60	1.55	2.54
4	American Electric Power	2.30	3.57	3.37	3.17	3.00	2.69	2.27	1.95	1.73	1.57
5	Avangrid, Inc.	1.75	N/A	1.76	1.76	1.76	1.75	1.73	N/A	N/A	N/A
6	Avista Corp.	1.28	1.90	1.84	1.76	1.69	1.55	1.37	1.22	0.97	0.62
7	Black Hills	1.79	2.60	2.50	2.41	2.29	2.05	1.70	1.52	1.44	1.36
8	CenterPoint Energy	0.85	0.81	0.77	0.72	0.66	0.96	1.12	0.86	0.78	0.67
9	CMS Energy Corp.	1.20	2.06	1.95	1.84	1.74	1.53	1.24	1.02	0.67	0.28
10	Consol. Edison	2.70	3.32	3.24	3.16	3.10	2.96	2.68	2.47	2.38	2.32
11	Dominion Resources	2.43	2.67	2.67	2.67	2.52	3.49	2.81	2.25	1.85	1.47
12	DTE Energy	3.00	4.15	3.88	3.54	3.88	3.85	3.09	2.57	2.21	2.11
13	Duke Energy	3.37	4.14	4.06	3.98	3.90	3.74	3.36	3.09	2.90	2.64
14	Edison Int'l	1.93	3.17	2.99	2.84	2.69	2.49	1.98	1.39	1.27	1.17
15	El Paso Electric	1.11	N/A	N/A	N/A	N/A	1.42	1.24	1.04	0.66	N/A
16	Entergy Corp	1 72	2 30	2 17	2 05	1.93	1.83	1 71	1.66	1.59	1 29
17	Eversource Energy	1.69	2.86	2.70	2.55	2.41	2.14	1.78	1.45	1.03	0.78
18	Everay Inc	2 40	2 60	2 48	2.33	2 18	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp	1 61	1.52	1 44	1.35	1.53	1 45	1 27	1.60	2 10	1 84
20	FirstEnergy Corp	1 77	1 70	1 60	1.56	1.56	1.64	1 44	1 76	2 20	2 03
21	Fortis Inc	1.51	2 39	2 29	2 17	2.08	1.86	1.54	1 25	1 11	0.83
22	Great Plains Energy	1 11	N/A	N/A	N/A	N/A	N/A	1.05	0.89	0.83	1.66
23	Hawaijan Elec	1 25	N/A	1.08	1 40	1.36	1.28	1 24	1 24	1 24	1 24
24	IDACORP Inc	2.02	3 35	3.20	3.04	2.88	2.56	2.08	1.57	1.20	1.20
25	MGE Energy	1 21	1 76	1.67	1 59	N/A	1.38	1 21	1.07	0.99	0.94
26	NextEra Energy Inc	0.96	2.06	1.87	1 70	1.54	1.00	0.87	0.66	0.51	0.01
27	NorthWestern Corp	1.88	2.60	2 56	2 52	2 48	2.30	2 01	1 53	1.38	1 28
28	OGE Energy	1 13	1.68	1.66	1 64	1.63	1 49	1 16	0.87	0.74	0.68
29	Otter Tail Corp	1 34	1.00	1.00	1.65	1.56	1.10	1.10	1 20	1 19	1 17
30	Pinnacle West Capital	2.65	3 55	3 49	3 42	3.36	3.05	2 57	2 4 1	2 10	2.08
31	TXNM Energy	0.92	1 57	1 49	1 41	0.00	1 17	0.89	0.67	0.50	0.79
32	Portland General	1 30	1.07	1.10	1 79	1 70	1.51	1.26	1 10	1.03	0.86
33	PPL Corp	1.38	1.00	0.95	0.88	1.66	1.61	1.53	1 47	1.39	1 22
34	Public Serv Enternrise	1.66	2.40	2.28	2 16	2 04	1.88	1.64	1.45	1 36	1.20
35	SCANA Corp	2.00	Δ.+0 N/Δ	N/A	N/A	N/A	N/A	2 31	2.04	1 91	1.20
36	Sempra Energy	2.68	2.48	2 38	4 58	4 40	3.88	3.04	2.04	1.68	1.70
37	Southern Co	2.00	2.40	2.30	2 70	2.62	2.46	2.04	2.02	1.00	1.60
38	Vectren Corp	1 /2	N/A	N/A	N/A	N/A	N/A	1.62	1 /3	1.00	1.00
30	WEC Energy Group	1.42	3 34	3 12	2 91	2 71	2 37	1 93	1.40	0.84	0.50
40	Westar Energy Gloup	1 30	N/A	0.12 N/Δ	2.31 N/Δ	Δ./ Ι	2.37 N/Δ	1.55	1.40	1 24	1.07
40 //1	Yeal Energy Inc	1.30	2 10	2 08	1 05	1.82	1 62	1.32	1 13	1.00	0.01
41	AGEI LINEIGY IIIG.	1.07	2.13	2.00	1.55	1.03	1.02	1.00	1.13	1.00	0.91
42	Average	1.75	2.47	2.31	2.27	2.23	2.07	1.75	1.53	1.37	1.29
43	industry Average Growth	4.05%	7.04%	1.37%	2.05%	2.46%	5.49%	5./1%	3.52%	1.68%	5.43%

Sources:

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Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Electric Utilities (Valuation Metrics)

Earnings per Share ¹											
		19-Year						3	-Year Average	es	
Line	<u>Company</u>	Average	<u>2024²</u>	<u>2023²</u>	2022	<u>2021</u>	2018-2020	<u>2015-2017</u>	<u>2012-2014</u>	2009-2011	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	3.01	3.10	4.30	3.38	3.23	3.35	3.22	2.70	2.24	2.89
2	Alliant Energy	1.86	2.69	2.78	2.73	2.63	2.33	1.78	1.64	1.23	1.22
3	Ameren Corp.	3.07	4.59	4.37	4.14	3.84	3.39	2.61	2.30	2.67	2.84
4	American Electric Power	3.77	5.61	5.24	5.09	4.96	4.13	3.81	3.17	2.90	2.90
5	Avangrid, Inc.	1.88	N/A	2.09	2.32	1.97	2.02	1.50	N/A	N/A	N/A
6	Avista Corp.	1.85	2.29	2.24	2.12	2.10	2.31	2.00	1.67	1.65	1.18
7	Black Hills	2.77	3.91	3.91	3.97	3.74	3.58	2.95	2.49	1.66	1.69
8	CenterPoint Energy	1.25	1.58	1.37	1.59	0.94	1.17	1.22	1.34	1.12	1.27
9	CMS Energy Corp.	1.91	3.33	3.01	2.84	2.58	2.45	2.01	1.64	1.24	0.84
10	Consol. Edison	3.99	5.35	5.04	4.55	4.74	4.19	4.03	3.80	3.39	3.26
11	Dominion Resources	2.85	2.75	1.99	4.11	3.19	2.42	3.39	2.96	2.76	2.52
12	DTE Energy	4.68	6.77	6.76	5.52	4.10	6.52	5.00	4.25	3.55	2.61
13	Duke Energy	4.19	5.90	5.56	5.27	4.93	4.37	4.01	3.94	3.85	3.12
14	Edison Int'l	3.32	4.91	4.76	1.60	2.00	1.48	4.20	4.22	3.27	3.43
15	El Paso Electric	2.02	N/A	N/A	N/A	N/A	2.07	2.28	2.24	2.02	1.54
16	Entergy Corp.	3.15	2.45	5.55	2.69	3.44	3.18	2.98	2.79	3.42	2.86
17	Eversource Energy	2.79	4.55	4.34	4.09	3.54	3.42	2.94	2.32	2.08	1.42
18	Evergy, Inc.	3.52	3.80	3.17	3.26	3.83	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	2.82	2.45	2.38	2.26	1.74	2.56	2.37	2.11	3.97	3.88
20	FirstEnergy Corp.	2.58	2.65	2.56	2.41	2.69	1.67	2.28	1.98	2.82	4.14
21	Fortis Inc.	2.10	3.28	3.10	2.78	2.61	2.60	2.22	1.55	1.62	1.39
22	Great Plains Energy	1.33	N/A	N/A	N/A	N/A	N/A	0.97	1.51	1.27	1.54
23	Hawaiian Elec.	2.09	10.42	1.81	2.20	2.25	1.88	1.81	1.64	1.19	1.17
24	IDACORP, Inc.	3.82	5.50	5.14	5.11	4.85	4.60	4.01	3.62	2.98	2.13
25	MGE Energy	2.19	3.45	3.25	3.07	N/A	2.51	2.15	2.11	1.63	1.49
26	NextEra Energy, Inc.	1.65	3.43	3.17	2.90	1.81	1.90	1.53	1.25	1.13	0.88
27	NorthWestern Corp	2.73	3.27	3.22	3.29	3.60	3.33	3.21	2.57	2.23	1.51
28	OGE Energy	1.82	2.19	2.07	2.25	2.36	2.15	1.77	1.90	1.52	1.26
29	Otter Tail Corp.	2.47	7.17	7.00	6.78	4.23	2.19	1.67	1.32	0.51	1.52
30	Pinnacle West Capital	3.85	5.24	4.41	4.26	5.47	4.73	4.10	3.58	2.78	2.75
31	TXNM Energy	1.64	2.74	2.82	2.69	2.27	2.03	1.74	1.39	0.84	0.86
32	Portland General	2.08	3.14	2.38	2.74	2.72	2.16	2.16	1.94	1.64	1.62
33	PPL Corp.	2.12	1.70	1.60	1.41	0.53	2.33	2.42	2.46	2.03	2.46
34	Public Serv. Enterprise	2.99	3.65	3.48	3.47	2.55	3.42	2.98	2.63	3.09	2.45
35	SCANA Corp.	3.30	N/A	N/A	N/A	N/A	N/A	4.06	3.44	2.93	2.76
36	Sempra Energy	4.95	4.65	4.61	9.21	4.01	6.01	4.70	4.40	4.42	4.31
37	Southern Co.	2.90	4.05	3.64	3.61	3.42	3.14	2.96	2.71	2.41	2.21
38	Vectren Corp.	1.94	N/A	N/A	N/A	N/A	N/A	2.51	1.87	1.72	1.63
39	WEC Energy Group	2.88	4.89	4.63	4.46	4.11	3.57	2.81	2.48	1.90	1.42
40	Westar Energy	1.96	N/A	N/A	N/A	N/A	N/A	2.26	2.26	1.62	1.68
41	Xcel Energy Inc.	2.22	3.50	3.35	3.17	2.96	2.63	2.20	1.93	1.59	1.39
42	Average	2.73	4.03	3.64	3.54	3.14	2.99	2.72	2.47	2.23	2.10
43	Industry Average Growth	4.01%	10.59%	2.96%	12.61%	2.56%	2.94%	3.17%	3.36%	3.58%	2.13%

Sources:

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Electric Utilities (Valuation Metrics)

				Ca	sh Flow / C	Capital Spe	ending ¹		
	-								3 - 5 yr²
Line	Company	2019	2020	2021	2022	2023	2024	2025 ²	Projection
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	ALLETE	0.63x	0.74x	0.80x	2.26x	1.42x	2.21x	1.36x	1.39x
2	Alliant Energy	0.73x	0.82x	0.97x	0.94x	0.95x	0.97x	1.04x	1.27x
3	Ameren Corp.	0.79x	0.51x	0.59x	0.72x	0.74x	0.84x	0.88x	0.98x
4	American Electric Power	0.75x	0.74x	0.69x	0.73x	0.72x	0.82x	0.87x	1.11x
5	Avista Corp.	0.89x	0.85x	0.87x	0.83x	0.78x	0.84x	0.95x	0.77x
6	Black Hills	0.51x	0.72x	0.76x	0.85x	0.82x	0.68x	0.67x	0.73x
7	CenterPoint Energy	0.83x	0.88x	0.62x	0.62x	0.57x	0.55x	0.52x	0.53x
8	CMS Energy Corp.	0.79x	0.82x	0.77x	0.78x	0.92x	0.80x	0.61x	0.95x
9	Consol. Edison	0.79x	0.82x	0.89x	0.83x	0.72x	0.84x	0.88x	0.99x
10	Dominion Resources	0.81x	1.00x	0.89x	0.74x	0.63x	0.51x	0.61x	0.74x
11	DTE Energy	0.83x	0.67x	0.70x	0.75x	0.82x	0.87x	0.90x	1.01x
12	Duke Energy	0.78x	0.86x	0.93x	0.81x	0.79x	0.77x	0.85x	0.99x
13	Edison Int'l	0.69x	0.67x	0.74x	0.67x	0.75x	0.82x	0.85x	0.90x
14	Entergy Corp.	0.79x	0.81x	1.05x	0.98x	0.85x	0.81x	0.73x	0.75x
15	Eversource Energy	0.78x	0.95x	0.74x	0.72x	0.86x	0.76x	0.66x	0.84x
16	Evergy, Inc.	1.34x	1.06x	0.96x	0.94x	0.86x	0.86x	0.92x	1.01x
17	Exelon Corp.	1.18x	1.30x	1.32x	0.96x	0.99x	0.80x	0.83x	0.91x
18	FirstEnergy Corp.	0.74x	0.96x	0.91x	0.86x	0.80x	0.82x	0.84x	1.03x
19	Fortis Inc.	0.68x	0.60x	0.74x	0.75x	0.82x	0.85x	0.89x	0.98x
20	Hawaiian Elec.	1.12x	1.10x	1.42x	1.30x	1.51x	1.20x	1.29x	1.40x
21	IDACORP, Inc.	1.25x	1.25x	1.16x	0.83x	0.63x	0.56x	0.56x	0.55x
22	MGE Energy	0.97x	0.73x	0.87x	N/A	1.26x	1.10x	0.95x	1.10x
23	NextEra Energy, Inc.	0.67x	0.58x	0.69x	0.54x	0.59x	0.59x	0.60x	0.67x
24	NorthWestern Corp	1.07x	0.98x	0.82x	0.66x	0.75x	0.87x	0.86x	0.98x
25	OGE Energy	1.26x	1.43x	1.13x	0.99x	0.97x	0.99x	1.06x	1.28x
26	Otter Tail Corp.	0.80x	0.45x	1.42x	1.45x	1.08x	1.46x	1.47x	1.09x
27	Pinnacle West Capital	0.98x	0.98x	0.85x	0.78x	0.95x	0.74x	0.77x	0.93x
28	TXNM Energy	0.72x	0.59x	0.51x	0.63x	0.63x	0.53x	0.52x	0.56x
29	Portland General	0.99x	0.75x	0.97x	1.01x	0.58x	0.62x	0.71x	0.87x
30	PPL Corp.	0.92x	1.06x	1.12x	1.35x	0.98x	0.97x	1.00x	1.06x
31	Public Serv. Enterprise	1.07x	1.00x	1.05x	0.82x	0.87x	0.90x	0.92x	0.97x
32	Sempra Energy	0.66x	0.92x	0.78x	0.92x	0.96x	0.63x	0.59x	0.69x
33	Southern Co.	0.88x	1.01x	0.93x	0.97x	0.97x	0.90x	0.97x	1.14x
34	WEC Energy Group	0.91x	0.70x	0.75x	0.87x	0.92x	1.01x	1.09x	1.35x
35	Xcel Energy Inc.	0.69x	0.99x	0.86x	0.80x	0.92x	0.65x	0.61x	0.90x
36	Average	0.87x	0.87x	0.89x	0.90x	0.87x	0.86x	0.85x	0.96x
37	Median	0.80x	0.85x	0.87x	0.83x	0.85x	0.82x	0.86x	0.98x

Sources:

¹ Data for the years 2019 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Notes:

Based on the projected Cash Flow per share and Capital Spending per share.

Electric Utilities (Valuation Metrics)

		Percent Dividends to Book Value ¹									
		19-Year							3-Year Averages	3	
Line	Company	Average	2024 ^{2/a}	2023	2022	2021	<u>2018-2020</u>	<u>2015-2017</u>	2012-2014	<u>2009-2011</u>	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	5 88%	5 51%	5 56%	5 52%	5 56%	5 47%	5 40%	5 83%	6 44%	6 73%
2	Alliant Energy	6.42%	7.04%	6.84%	6.84%	6 73%	6.75%	6.99%	6.43%	6 10%	5.25%
3	Ameren Corp	6.04%	6.26%	6.26%	5.88%	5 84%	5.82%	5.88%	5.87%	4 74%	7 85%
4	American Electric Power	6.38%	7.05%	6.95%	6.80%	6 74%	6 75%	6 25%	5.94%	6.03%	6.28%
5	Avangrid, Inc.	3.15%	N/A	3.46%	3.51%	3.57%	3.57%	2.36%	N/A	N/A	N/A
6	Avista Corp.	5.11%	5.87%	5.78%	5.65%	5.61%	5.47%	5.38%	5.49%	4.91%	3.49%
7	Black Hills	5.32%	5.19%	5.30%	5.32%	5.32%	5.32%	5.63%	5.18%	5.18%	5.35%
8	CenterPoint Energy	9.08%	4.95%	5.03%	4.90%	4.82%	7.96%	12.50%	8.41%	9.87%	12.21%
9	CMS Energy Corp.	6.76%	7.69%	7.84%	7.89%	7.87%	8.58%	8.25%	7.96%	5.78%	1.81%
10	Consol. Edison	5.94%	5.23%	5.29%	5.42%	5.48%	5.50%	5.70%	5.91%	6.30%	7.04%
11	Dominion Resources	10.08%	8.64%	8.69%	8.54%	8.00%	11.14%	11.88%	11.63%	9.35%	8.52%
12	DTE Energy	6.32%	7.43%	7.25%	7.64%	8.64%	6.38%	6.08%	5.72%	5.56%	5.99%
13	Duke Energy	5.54%	6.57%	6.37%	6.47%	6.34%	6.18%	5.73%	5.32%	5.73%	3.52%
14	Edison Int'l	5.82%	8.76%	8.30%	9.24%	7.36%	7.09%	5.53%	4.48%	4.06%	4.46%
15	El Paso Electric	2.94%	N/A	N/A	N/A	N/A	5.04%	4.64%	4.57%	1.16%	0.00%
16	Entergy Corp.	6.69%	6.55%	6.32%	6.68%	6.72%	7.21%	7.31%	6.17%	6.65%	6.27%
17	Eversource Energy	5.17%	6.63%	6.66%	5.74%	5.69%	5.57%	5.27%	4.77%	4.76%	4.14%
18	Evergy, Inc.	5.62%	5.90%	5.90%	5.57%	5.41%	5.32%	N/A	N/A	N/A	N/A
19	Exelon Corp.	6.96%	5.77%	5.59%	5.42%	4.36%	4.45%	4.39%	6.19%	10.30%	11.70%
20	FirstEnergy Corp.	8.80%	8.99%	8.81%	8.78%	10.26%	12.46%	10.48%	5.79%	7.54%	7.20%
21	Fortis Inc.	5.44%	5.72%	5.84%	5.95%	5.59%	5.17%	4.99%	5.54%	5.74%	5.31%
22	Great Plains Energy	5.31%	N/A	N/A	N/A	N/A	N/A	4.42%	3.95%	3.92%	8.94%
23	Hawaiian Elec.	7.09%	N/A	5.07%	6.96%	6.22%	6.18%	6.62%	7.33%	7.88%	8.47%
24	IDACORP, Inc.	4.74%	5.43%	5.57%	5.48%	5.45%	5.23%	4.86%	4.23%	3.87%	4.49%
25	MGE Energy	6.07%	5.33%	5.30%	5.32%	N/A	5.47%	5.74%	6.02%	6.55%	7.29%
26	NextEra Energy, Inc.	6.79%	8.46%	8.08%	8.61%	8.13%	6.78%	6.51%	6.40%	5.98%	6.24%
27	NorthWestern Corp	5.81%	5.58%	5.63%	5.65%	5.73%	5.74%	5.77%	5.56%	6.07%	6.09%
28	OGE Energy	6.88%	7.35%	7.49%	7.47%	8.04%	7.65%	6.53%	5.70%	6.28%	7.32%
29	Otter Tail Corp.	6.91%	4.69%	5.95%	5.61%	6.54%	7.18%	7.43%	8.06%	6.88%	6.59%
30	Pinnacle West Capital	6.21%	6.26%	6.41%	6.40%	6.43%	6.31%	5.96%	6.37%	6.21%	6.00%
31	TXNM Energy	4.11%	5.50%	5.72%	5.52%	3.88%	5.31%	4.23%	3.17%	2.68%	3.74%
32	Portland General	4.94%	5.71%	5.73%	5.75%	5.61%	5.26%	4.79%	4.66%	4.87%	4.12%
33	PPL Corp.	8.33%	5.19%	5.03%	4.66%	8.89%	9.81%	10.27%	7.57%	8.40%	8.78%
34	Public Serv. Enterprise	6.99%	7.40%	7.34%	7.82%	7.12%	6.26%	6.20%	6.36%	7.20%	8.36%
35	SCANA Corp.	6.44%	N/A	N/A	N/A		N/A	6.04%	6.15%	6.61%	6.98%
36	Sempra Energy	5.33%	5.32%	5.41%	5.49%	5.56%	6.31%	6.08%	5.67%	4.37%	4.09%
37	Southern Co.	9.56%	9.57%	9.65%	9.67%	9.96%	9.65%	9.34%	9.36%	9.38%	9.88%
38	Vectren Corp.	7.71%	N/A	N/A	N/A	N/A	N/A	7.61%	7.54%	7.78%	7.90%
39	WEC Energy Group	6.53%	8.54%	8.38%	7.92%	7.83%	/.3/%	6.76%	7.44%	5.13%	3.76%
40	westar Energy	5./1%	N/A		N/A	N/A	N/A	5.68%	5.69%	5.82%	5.65%
41	Acei Energy Inc.	6.20%	o.44%	6.55%	6.43%	6.38%	6.38%	6.26%	5.87%	5.99%	6.16%
42	Average	6.35%	6.54%	6.43%	6.46%	6.50%	6.60%	6.44%	6.16%	6.10%	6.26%
43	Median	6.10%	6.26%	6.10%	5.92%	6.34%	6.26%	6.00%	5.87%	6.03%	6.24%

Sources:

¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.

Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

^a Based on the projected 2024 Dividend Declared per share and Book Value per share, published in The Value Line Investment Survey, April 19, May 10, and June 7, 2024.

Electric Utilities (Valuation Metrics)

		Dividends to Earnings Ratio ¹									
		19-Year							3-Year Averages	3	
Line	Company	Average	2024 ^{2/b}	2023	2022	2021	2018-2020	<u>2015-2017</u>	<u>2012-2014</u>	<u>2009-2011</u>	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	0.70	0.91	0.63	0.77	0.78	0.70	0.65	0.70	0.80	0.56
2	Alliant Energy	0.62	0.71	0.65	0.63	0.61	0.61	0.67	0.58	0.66	0.53
3	Ameren Corp.	0.66	0.58	0.58	0.57	0.57	0.57	0.66	0.70	0.58	0.90
4	American Electric Power	0.61	0.64	0.64	0.62	0.60	0.65	0.60	0.62	0.60	0.54
5	Avangrid, Inc.	0.88	N/A	0.84	0.76	0.89	0.87	0.95	N/A	N/A	N/A
6	Avista Corp.	0.69	0.83	0.82	0.83	0.80	0.70	0.69	0.74	0.59	0.57
7	Black Hills	1.04	0.66	0.64	0.61	0.61	0.57	0.58	0.62	0.98	2.96
8	CenterPoint Energy	0.71	0.51	0.56	0.45	0.70	0.93	0.94	0.65	0.70	0.53
9	CMS Energy Corp.	0.58	0.62	0.65	0.65	0.67	0.62	0.62	0.62	0.54	0.30
10	Consol. Edison	0.68	0.62	0.64	0.69	0.65	0.71	0.67	0.65	0.70	0.71
11	Dominion Resources	0.89	0.97	1.34	0.65	0.79	1.53	0.83	0.76	0.67	0.59
12	DTE Energy	0.66	0.61	0.57	0.64	0.95	0.59	0.62	0.61	0.62	0.81
13	Duke Energy	0.80	0.70	0.73	0.76	0.79	0.86	0.84	0.79	0.76	0.80
14	Edison Int'l	0.48	0.65	0.63	1.78	1.35	0.06	0.47	0.33	0.39	0.34
15	El Paso Electric	0.50	N/A	N/A	N/A	N/A	0.68	0.54	0.46	0.27	N/A
16	Entergy Corp.	0.56	0.94	0.39	0.76	0.56	0.58	0.58	0.60	0.47	0.45
17	Eversource Energy	0.60	0.63	0.62	0.62	0.68	0.63	0.61	0.63	0.49	0.61
18	Evergy, Inc.	0.69	0.68	0.78	0.71	0.57	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	0.60	0.62	0.61	0.60	0.88	0.58	0.55	0.77	0.53	0.47
20	FirstEnergy Corp.	0.78	0.64	0.63	0.65	0.58	1.01	0.64	1.09	0.84	0.49
21	Fortis Inc.	0.72	0.73	0.74	0.78	0.80	0.71	0.71	0.81	0.68	0.60
22	Great Plains Energy	- 0.82	N/A	N/A	N/A	N/A	N/A	- 5.65	0.59	0.67	1.12
23	Hawaiian Elec.	0.82	N/A	0.60	0.64	0.60	0.68	0.71	0.75	1.08	1.07
24	IDACORP, Inc.	0.52	0.61	0.62	0.59	0.59	0.56	0.52	0.43	0.41	0.57
25	MGE Energy	0.56	0.51	0.51	0.52	N/A	0.55	0.56	0.51	0.61	0.63
26	NextEra Energy, Inc.	0.56	0.60	0.59	0.59	0.85	0.66	0.57	0.53	0.45	0.47
27	NorthWestern Corp	0.70	0.80	0.80	0.77	0.69	0.69	0.63	0.60	0.62	0.86
28	OGE Energy	0.61	0.77	0.80	0.73	0.69	0.70	0.66	0.45	0.49	0.54
29	Otter Tail Corp.	0.95	0.26	0.25	0.24	0.37	0.64	0.75	0.93	2.48	0.81
30	Pinnacle West Capital	0.70	0.68	0.79	0.80	0.61	0.64	0.63	0.67	0.77	0.78
31	TXNM Energy	0.84	0.57	0.53	0.52	0.43	0.58	0.51	0.48	0.63	2.40
32	Portland General	0.63	0.63	0.79	0.65	0.63	0.72	0.58	0.57	0.65	0.56
33	PPL Corp.	0.77	0.61	0.59	0.62	3.13	0.72	0.64	0.60	0.77	0.50
34	Public Serv. Enterprise	0.56	0.66	0.66	0.62	0.80	0.56	0.55	0.55	0.44	0.50
35	SCANA Corp.	0.61	N/A	N/A	N/A		N/A	0.57	0.59	0.65	0.64
36	Sempra Energy	0.54	0.53	0.52	0.50	1.10	0.65	0.65	0.57	0.38	0.29
37	Southern Co.	0.75	0.71	0.76	0.75	0.77	0.78	0.75	0.74	0.75	0.72
38	Vectren Corp.	0.75	N/A	N/A	N/A	N/A	N/A	0.65	0.77	0.80	0.78
39	WEC Energy Group	0.57	0.68	0.67	0.65	0.66	0.66	0.69	0.56	0.44	0.35
40	Westar Energy	0.68	N/A	N/A	N/A	N/A	N/A	0.67	0.60	0.78	0.66
41	Xcel Energy Inc.	0.62	0.63	0.62	0.62	0.62	0.62	0.62	0.58	0.63	0.66
42	Average	0.66	0.66	0.66	0.68	0.78	0.68	0.49	0.64	0.68	0.73
43	Median	0.63	0.64	0.63	0.64	0.68	0.66	0.63	0.61	0.63	0.59

Sources:

¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.

Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Note:

^b Based on the projected 2024 Dividends Declared per share and Earnings per share,

published in The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Electric Utilities (Valuation Metrics)

		Cash Flow to Capital Spending Ratio ¹									
		19-Year 3-Year Averages									
Line	Company	Average	2024 ^{2/c}	<u>2023</u>	<u>2022</u>	2021	2018-2020	<u>2015-2017</u>	<u>2012-2014</u>	<u>2009-2011</u>	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	0.94	1.30	1.76	2.12	0.55	0.80	1.37	0.54	0.60	0.78
2	Alliant Energy	0.79	0.65	0.74	0.91	0.95	N/A	0.65	0.83	0.65	0.96
3	Ameren Corp.	0.86	0.83	0.78	0.71	0.62	0.74	0.75	0.91	1.16	0.95
4	American Electric Power	0.86	0.84	0.79	0.81	0.81	0.75	0.79	0.95	1.15	0.74
5	Avangrid, Inc.	0.71	N/A	0.66	0.79	0.56	0.68	0.77	N/A	N/A	N/A
6	Avista Corp.	0.89	0.85	0.88	0.73	0.88	0.86	0.79	0.82	1.02	1.02
7	Black Hills	0.68	0.68	0.95	0.86	0.61	0.67	0.84	0.72	0.47	0.55
8	CenterPoint Energy	0.96	0.66	0.53	0.52	0.73	0.85	1.09	1.25	1.00	1.07
9	CMS Energy Corp.	0.86	0.74	0.85	0.82	0.78	0.78	0.84	0.79	1.05	0.91
10	Consol. Edison	0.83	0.85	0.84	0.88	0.83	0.84	0.72	0.92	0.88	0.75
11	Dominion Resources	0.75	0.51	0.46	0.86	0.73	0.91	0.70	0.71	0.80	0.81
12	DTE Energy	0.97	0.87	0.85	0.86	0.74	0.80	0.90	0.97	1.37	1.03
13	Duke Energy	0.88	0.81	0.81	0.87	0.85	0.82	0.88	1.05	0.81	0.93
14	Edison Int'l	0.75	0.85	0.83	0.62	0.55	0.52	0.88	0.79	0.67	0.91
15	El Paso Electric	0.87	N/A	N/A	N/A	0.83	0.86	0.86	0.77	0.90	0.96
16	Entergy Corp.	0.95	0.72	1.03	0.62	0.74	0.76	0.97	1.03	1.14	1.07
17	Eversource Energy	0.82	0.63	0.54	0.89	0.80	0.80	0.86	0.96	0.94	0.70
18	Evergy, Inc.	0.90	0.88	0.90	0.78	1.03	N/A	N/A	N/A	N/A	N/A
19	Exelon Corp.	1.18	0.80	0.82	0.84	1.09	1.12	0.88	0.99	1.50	1.77
20	FirstEnergy Corp.	0.99	0.81	0.82	0.98	0.83	0.80	0.96	0.77	1.20	1.42
21	Fortis Inc.	0.71	0.88	0.93	0.89	0.65	0.68	0.72	0.70	0.66	0.62
22	Great Plains Energy	0.79	N/A	N/A	N/A		N/A	0.95	0.85	0.80	0.56
23	Hawaiian Elec.	1.22	2.99	1.14	1.56	1.27	1.07	1.05	0.98	1.19	1.09
24	IDACORP, Inc.	1.06	0.51	0.75	1.00	1.33	1.40	1.21	1.26	0.87	0.79
25	MGE Energy	1.08	1.02	0.98	1.12	0.82	0.82	1.41	1.10	1.42	0.75
26	NextEra Energy, Inc.	0.60	0.52	0.50	0.55	0.58	0.60	0.62	0.61	0.63	0.64
27	NorthWestern Corp	0.99	0.79	0.72	0.75	0.84	1.07	1.11	0.91	0.89	1.26
28	OGE Energy	0.92	1.02	1.03	0.87	1.24	1.27	1.00	0.84	0.61	0.74
29	Otter Tail Corp.	1.02	1.83	1.98	2.13	0.48	0.92	0.89	0.74	0.94	0.82
30	Pinnacle West Capital	0.93	0.70	0.73	0.89	0.91	1.00	0.83	0.93	0.98	1.04
31	TXNM Energy	0.69	0.51	0.55	0.63	0.72	0.77	0.66	0.77	0.76	0.58
32	Portland General	0.81	0.65	0.51	0.86	0.78	0.93	0.92	0.78	0.83	0.76
33	PPL Corp.	0.97	0.97	1.06	1.05	0.90	0.94	0.84	0.78	1.08	1.18
34	Public Serv. Enterprise	1.09	0.90	0.92	1.05	1.13	0.97	0.68	0.98	1.31	1.64
35	SCANA Corp.	0.86	N/A	N/A	N/A		N/A	0.78	0.84	0.83	0.98
36	Sempra Energy	0.79	0.59	0.61	0.92	0.77	0.81	0.68	0.77	0.88	0.90
37	Southern Co.	0.90	0.93	0.88	0.97	0.99	0.90	0.85	0.86	0.88	0.93
38	Vectren Corp.	1.00	N/A	N/A	N/A		N/A	0.88	1.06	1.11	0.93
39	WEC Energy Group	0.98	1.01	0.95	1.09	0.97	0.93	1.03	1.36	0.96	0.62
40	Westar Energy	0.72	N/A	N/A	N/A		N/A	0.80	0.70	0.76	0.61
41	Xcel Energy Inc.	0.75	0.66	0.75	0.93	0.66	0.74	0.75	0.68	0.83	0.79
42	Average	0.89	0.88	0.86	0.94	0.83	0.86	0.88	0.88	0.94	0.91
43	Median	0.83	0.81	0.83	0.87	0.81	0.82	0.85	0.84	0.89	0.91

Sources:

¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.

Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Notes:

 $^{\rm c}$ Based on the 2024 projected Cash Flow per share and Capital Spending per share

published in The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Natural Gas Utilities (Valuation Metrics)

		Price to Earnings (P/E) Ratio ¹										
		19-Year						3	-Year Average	es		
Line	Company	Average	2024 ²	2023	2022	2021	2018-2020	2015-2017	2012-2014	2009-2011	2006-2008	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
1	Atmos Energy	17.54	19.80	16.80	19.30	18.80	22.40	20.10	15.97	13.37	14.34	
2	Chesapeake Utilities	19.59	23.30	21.60	25.80	25.60	23.07	23.07	16.03	13.53	16.25	
3	New Jersey Resources	17.02	14.80	14.90	17.00	17.50	19.20	20.10	14.83	15.57	16.68	
4	NiSource Inc.	22.03	21.30	16.90	19.60	18.00	19.77	41.63	19.83	16.33	16.69	
5	Northwest Nat. Gas	20.26	14.10	15.40	19.60	19.50	27.50	25.30	20.40	17.07	16.88	
6	ONE Gas Inc.	20.51	16.90	16.00	19.90	18.90	23.37	22.00	17.80	N/A	N/A	
7	Southwest Gas	17.95	19.70	23.00	NMF	14.30	19.57	21.07	16.23	13.97	17.85	
8	Spire Inc.	18.32	18.20	14.50	17.50	13.60	30.20	18.63	18.53	13.37	14.03	
9	UGI Corp.	15.05	10.50	8.40	14.10	13.90	18.33	19.27	15.87	12.07	14.12	
10	Average	18.52	17.62	16.39	19.10	17.79	22.60	23.46	17.28	14.41	15.85	
11	Median	17.80	18.20	16.00	19.45	18.00	22.40	21.07	16.23	13.75	16.46	

		Market Price to Cash Flow (MP/CF) Ratio 1										
		19-Year						3	-Year Average	s		
Line	<u>Company</u>	Average	2024 ²	2023	2022	2021	2018-2020	2015-2017	2012-2014	2009-2011	2006-2008	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
12	Atmos Energy	9.46	11.93	11.27	11.87	10.99	12.83	10.88	7.85	6.26	6.76	
13	Chesapeake Utilities	10.91	14.53	15.77	14.21	14.20	12.91	12.00	8.28	7.73	8.62	
14	New Jersey Resources	11.83	9.95	11.22	11.55	11.56	12.84	13.37	10.84	11.79	11.31	
15	NiSource Inc.	7.86	8.13	7.13	8.13	7.89	8.52	10.35	9.03	5.32	6.14	
16	Northwest Nat. Gas	11.91	7.26	7.56	8.76	8.57	11.66	26.92	8.98	8.76	8.37	
17	ONE Gas Inc.	9.98	7.01	7.73	9.91	9.32	11.82	10.73	8.16	N/A	N/A	
18	Southwest Gas	7.27	7.88	7.35	19.83	6.87	8.43	7.69	5.95	4.78	5.20	
19	Spire Inc.	9.47	7.29	7.53	8.34	7.55	11.63	9.73	11.53	8.26	8.62	
20	UGI Corp.	7.70	4.67	5.84	7.20	9.56	9.78	9.19	6.78	6.42	7.50	
21	Average	9.50	8.74	9.04	11.09	9.61	11.16	12.32	8.60	7.42	7.82	
22	Median	8.37	7.88	7.56	9.91	9.32	11.66	10.73	8.28	7.07	7.94	

Market Price to Book Value (MP/BV) Ratio ¹											
		19-Year						3	-Year Average	s	
Line	Company	Average	2024 ²	2023	2022	2021	2018-2020	2015-2017	2012-2014	2009-2011	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
23	Atmos Energy	1.59	1.68	1.55	1.65	1.59	2.03	2.00	1.41	1.18	1.31
24	Chesapeake Utilities	2.06	1.94	1.93	2.69	2.77	2.49	2.32	1.87	1.46	1.78
25	New Jersey Resources	2.26	2.06	2.32	2.35	2.26	2.43	2.50	2.17	2.19	2.03
26	NiSource Inc.	1.54	1.42	1.14	2.15	1.86	1.99	1.92	1.63	0.92	1.10
27	Northwest Nat. Gas	1.78	1.08	1.29	1.51	1.45	2.23	1.99	1.62	1.73	1.90
28	ONE Gas Inc.	1.63	1.32	1.43	1.73	1.57	2.01	1.61	1.07	N/A	N/A
29	Southwest Gas	1.53	1.33	1.28	1.62	1.32	1.70	1.93	1.60	1.21	1.38
30	Spire Inc.	1.53	1.25	1.29	1.43	1.47	1.69	1.57	1.40	1.51	1.69
31	UGI Corp.	1.94	1.30	1.59	1.39	1.64	2.36	2.44	1.70	1.65	2.13
32	Average	1.76	1.49	1.53	1.83	1.77	2.10	2.03	1.61	1.48	1.66
33	Median	1.67	1.33	1.43	1.65	1.59	2.03	1.99	1.62	1.49	1.73

Sources:

¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.

Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 21, 2025.

^a Based on the average of the high and low price for year and the projected Cash Flow per share, published in The Value Line Investment Survey.

^b Based on the average of the high and low price for the year and the projected Book Value per share, published in The Value Line Investment Survey.

Notes:

Natural Gas Utilities (Valuation Metrics)

							Dividend Yield ¹				
		19-Year						3	-Year Average	es	
Line	Company	Average	2024 2/a	2023	2022	2021	2018-2020	2015-2017	2012-2014	2009-2011	2006-2008
	·	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Atmos Energy	3.30%	2.45%	2.62%	2.46%	2.63%	2.17%	2.51%	3.59%	4.74%	4.53%
2	Chesapeake Utilities	2.62%	2.12%	2.08%	1.61%	1.50%	1.77%	1.93%	2.85%	3.79%	3.83%
3	New Jersey Resources	3.25%	3.75%	3.29%	3.25%	3.50%	2.86%	2.90%	3.53%	3.49%	3.19%
4	NiSource Inc.	3.92%	3.34%	3.85%	3.33%	3.60%	3.12%	3.03%	3.28%	5.94%	4.73%
5	Northwest Nat. Gas	3.69%	4.93%	4.40%	3.86%	3.90%	3.06%	3.43%	4.06%	3.73%	3.37%
6	ONE Gas Inc.	2.82%	3.87%	3.72%	3.08%	3.21%	2.47%	2.47%	2.28%	N/A	N/A
7	Southwest Gas	3.03%	3.60%	4.07%	3.20%	3.65%	2.87%	2.65%	2.72%	3.32%	2.78%
8	Spire Inc.	3.86%	4.65%	4.44%	3.89%	3.79%	3.15%	3.24%	3.95%	4.31%	4.24%
9	UGI Corp.	3.15%	5.82%	4.64%	3.61%	3.25%	2.60%	2.29%	3.10%	3.34%	2.83%
10	Average	3.34%	3.84%	3.68%	3.14%	3.23%	2.67%	2.72%	3.26%	4.08%	3.69%
11	Median	3.42%	3.75%	3.85%	3.25%	3.50%	2.86%	2.65%	3.28%	3.76%	3.60%
12	20-Yr Treasury Yields ³	3.32%	4.50%	4.25%	3.30%	1.98%	2.26%	2.47%	2.91%	3.92%	4.75%
13	20-Yr TIPS ³	1.12%	2.06%	1.73%	0.64%	-0.43%	0.41%	0.73%	0.61%	1.71%	2.28%
14	Implied Inflation ^b	2.17%	2.39%	2.48%	2.64%	2.42%	1.84%	1.73%	2.29%	2.17%	2.42%
15	Real Dividend Yield ^c	1 14%	1 41%	1 17%	0.49%	0 79%	0.82%	0.97%	0.95%	1 87%	1 24%
10		1.14%	1.41/0	1.17 /0	0.4570	0.1370	0.02 /0	0.01 /0	0.0070	1.01 /0	1.2470
	Utility										
16	Nominal "A" Rated Yield	4.74%	5.54%	5.55%	4.74%	3.10%	3.69%	4.01%	4.29%	5.51%	6.22%
17	Real "A" Rated Field	2.52%	3.08%	2.99%	2.05%	0.67%	1.82%	2.24%	1.96%	3.27%	3.72%
	Spreads (Utility Bond - Stock)	_									
18	Nominal ^d	1.41%	1.70%	1.87%	1.60%	-0.12%	1.02%	1.30%	1.03%	1.43%	2.54%
19	Real ^e	1.38%	1.67%	1.82%	1.56%	-0.12%	1.00%	1.28%	1.01%	1.40%	2.48%
	Spreads (Treasury Bond - Stock)										
20	Nominal ¹	0.02%	0 66%	0 57%	0 16%	-1 25%	-0 42%	-0.24%	-0.25%	-0 16%	1 07%
20	Deela	-0.02%	0.00%	0.57%	0.10%	-1.25%	-0.42%	-0.24%	-0.35%	-0.10%	1.07%
21	Real	-0.02%	0.65%	0.56%	0.15%	-1.22%	-0.41%	-0.24%	-0.34%	-0.16%	1.04%



Sources:

³ St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.

¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.

Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 21, 2025.

A Mergent Bond Record, through December 31, 2024.
Notes:
Besed on the average of the high and low price for the year and the projected Dividends Declared per share published in the Value Line Investment Survey.

Line 16 = (1 + Line 14) / (1 + Line 15) - 1.

Line 17 = (1 + Line 12) / (1 + Line 16) - 1.

The spread being measured here is the nominal A-rated utility bond yield over the average nominal utility dividend yield; (Line 18 - Line 12).

^e The spread being measured here is the real A-rated utility bond yield over the average real utility dividend yield; Line 19 - Line 17)

¹ The spread being measured here is the nominal 20-Year Treasury yield over the average nominal utility dividend yield; (Line 14 - Line 12).

⁹ The spread being measured here is the real 20-Year TIPS yield over the average real utility dividend yield; Line 15 - Line 17)

Natural Gas Utilities (Valuation Metrics)

		Dividend per Share ¹											
		19-Year						3	Year Average	s		2018	2017
Line	Company	Average	2024 ²	2023	2022	2021	2018-2020	2015-2017	2012-2014	2009-2011	2006-2008	CAGR	CAGR
_		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Atmos Energy	1.84	3.22	2.96	2.72	2.50	2.11	1.68	1.42	1.34	1.28	2.08%	2.15%
2	Chesapeake Utilities	1.30	2.46	2.25	2.03	1.84	1.54	1.19	1.01	0.87	0.79	2.89%	3.02%
3	New Jersey Resources	0.98	1.71	1.56	1.45	1.36	1.19	0.98	0.81	0.67	0.51	3.97%	4.59%
4	NiSource Inc.	0.89	1.06	1.00	0.94	0.88	0.81	0.72	0.98	0.92	0.92	-0.82%	-1.69%
5	Northwest Nat. Gas	1.78	1.95	1.94	1.93	1.92	1.90	1.87	1.82	1.68	1.45	1.36%	1.68%
6	ONE Gas Inc.	1.92	2.64	2.60	2.48	2.32	2.00	1.43	0.84	N/A	N/A	3.58%	4.30%
7	Southwest Gas	1.65	2.48	2.48	2.48	2.38	2.18	1.80	1.32	1.00	0.86	4.48%	5.35%
8	Spire Inc.	2.02	3.02	2.88	2.74	2.60	2.37	1.97	1.71	1.57	1.45	2.20%	2.34%
9	UGI Corp.	0.92	1.52	1.47	1.41	1.35	1.16	0.93	0.75	0.60	0.48	3.80%	4.41%
10	Average	1.44	2.23	2.13	2.02	1.91	1.70	1.40	1.18	1.08	0.97	2.62%	2.91%
11	Industry Average Growth	4.94%	4.81%	5.28%	6.01%	5.54%	6.64%	6.41%	3.16%	4.06%	3.28%		

Sources: ¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021. Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys. ² The Value Line Investment Survey, February 21, 2025.

Natural Gas Utilities (Valuation Metrics)

							Earnings per Sh	are ¹			
		19-Year				_		3-Y	ear Averages		
Line	Company	Average	2024 ²	2023	2022	2021	<u>2018-2020</u>	2015-2017	<u>2012-2014</u>	2009-2011	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Atmos Energy	3.51	6.83	6.10	5.60	5.12	4.36	3.36	2.52	2.13	1.98
2	Chesapeake Utilities	2.88	5.05	4.73	4.97	4.70	3.79	2.74	2.24	1.72	1.28
3	New Jersey Resources	1.78	2.95	2.70	2.50	2.16	2.25	1.71	1.60	1.24	1.02
4	NiSource Inc.	1.23	1.75	1.60	1.47	1.35	1.31	0.67	1.54	0.98	1.21
5	Northwest Nat. Gas	2.17	2.30	2.59	2.54	2.50	2.27	0.71	2.21	2.65	2.56
6	ONE Gas Inc.	3.30	3.85	4.14	4.08	3.85	3.48	2.64	2.07	N/A	N/A
7	Southwest Gas	2.86	2.80	2.13	3.10	3.80	3.92	3.24	2.99	2.21	1.77
8	Spire Inc.	3.09	4.19	3.85	3.95	4.96	3.10	3.28	2.39	2.74	2.44
9	UGI Corp.	2.03	3.06	2.84	2.90	2.96	2.56	2.12	1.56	1.51	1.20
10	Average	2.47	3.64	3.41	3.46	3.49	3.00	2.27	2.12	1.90	1.68
11	Industry Average Growth	5.20%	6.84%	-1.38%	-0.92%	18.27%	14.40%	-2.65%	5.77%	3.58%	3.74%

Sources:

¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021.

Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 21, 2025.

Natural Gas Utilities (Valuation Metrics)

						-	-	3 - 5 yr ²
Line	<u>Company</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025²</u>	Projection
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Atmos Energy	0.53x	0.53x	0.54x	0.54x	0.55x	0.51x	0.64x
2	Chesapeake Utilities	0.64x	0.82x	1.23x	0.84x	0.61x	0.60x	0.68x
3	New Jersey Resources	0.65x	0.72x	0.59x	0.68x	1.03x	0.89x	0.93x
4	NiSource Inc.	0.65x	0.69x	0.55x	0.43x	0.54x	0.73x	0.76x
5	Northwest Nat. Gas	0.75x	0.61x	0.60x	0.68x	0.63x	0.68x	0.65x
6	ONE Gas Inc.	0.88x	0.86x	0.74x	0.83x	0.81x	0.89x	1.22x
7	Southwest Gas	0.53x	0.61x	0.31x	0.84x	0.76x	0.79x	0.82x
8	Spire Inc.	0.65x	0.70x	0.80x	0.71x	0.64x	0.68x	0.85x
9	UGI Corp.	1.54x	1.66x	1.42x	1.33x	1.24x	1.47x	1.49x
10	Average	0.76x	0.80x	0.75x	0.75x	0.76x	0.81x	0.89x
11	Median	0.65x	0.70x	0.60x	0.69x	0.64x	0.73x	0.82x

Sources:

 $^{\rm 1}$ Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 21, 2025.

Notes:

Based on the projected Cash Flow per share and Capital Spending per share.

Natural Gas Utilities (Valuation Metrics)

		Percent Dividends to Book Value 1									
		19-Year						3-	Year Averag	es	
Line	Company	Average	2024 2/a	2023	2022	2021	2018-2020	2015-2017	2012-2014	2009-2011	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Atmos Energy	4.94%	4.11%	4.04%	4.07%	4.19%	4.38%	4.97%	5.00%	5.53%	5.94%
2	Chesapeake Utilities	5.04%	4.11%	4.01%	4.32%	4.15%	4.38%	4.45%	5.27%	5.50%	6.77%
3	New Jersey Resources	7.27%	7.73%	7.65%	7.63%	7.92%	6.77%	7.21%	7.64%	7.63%	6.45%
4	NiSource Inc.	5.56%	4.74%	4.40%	7.15%	6.69%	6.20%	5.81%	5.23%	5.22%	5.11%
5	Northwest Nat. Gas	6.39%	5.34%	5.69%	5.83%	5.66%	6.81%	6.70%	6.58%	6.48%	6.37%
6	ONE Gas Inc.	4.53%	5.10%	5.32%	5.31%	5.04%	4.94%	3.92%	2.44%	N/A	N/A
7	Southwest Gas	4.52%	4.80%	5.20%	5.17%	4.80%	4.85%	5.07%	4.35%	3.92%	3.79%
8	Spire Inc.	5.86%	5.83%	5.73%	5.58%	5.56%	5.31%	5.07%	5.52%	6.46%	7.16%
9	UGI Corp.	5.78%	7.56%	7.35%	5.02%	5.34%	5.92%	5.55%	5.19%	5.51%	6.03%
10	Average	5.60%	5.48%	5.49%	5.57%	5.48%	5.51%	5.42%	5.25%	5.78%	5.95%
11	Median	5.32%	5.10%	5.32%	5.31%	5.34%	5.31%	5.07%	5.23%	5.52%	6.20%

		Dividends to Earnings Ratio ¹									
		19-Year					_	3-	Year Averag	es	
Line	Company	Average	2024 ^{2/a}	2023	2022	2021	2018-2020	2015-2017	2012-2014	2009-2011	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
12	Atmos Energy	0.55	0.47	0.49	0.49	0.49	0.49	0.50	0.57	0.63	0.65
13	Chesapeake Utilities	0.48	0.49	0.48	0.41	0.39	0.41	0.43	0.45	0.51	0.62
14	New Jersey Resources	0.55	0.58	0.58	0.58	0.63	0.54	0.58	0.52	0.54	0.53
15	NiSource Inc.	0.80	0.61	0.63	0.64	0.65	0.62	1.25	0.64	0.95	0.77
16	Northwest Nat. Gas	0.66	0.85	0.75	0.76	0.77	0.84	0.29	0.83	0.64	0.57
17	ONE Gas Inc.	0.57	0.69	0.63	0.61	0.60	0.57	0.54	0.41	N/A	N/A
18	Southwest Gas	0.58	0.89	1.16	0.80	0.63	0.56	0.56	0.44	0.46	0.50
19	Spire Inc.	0.69	0.72	0.75	0.69	0.52	0.97	0.60	0.73	0.58	0.59
20	UGI Corp.	0.45	0.50	0.52	0.49	0.46	0.46	0.44	0.49	0.40	0.40
21	Average	0.59	0.64	0.66	0.61	0.57	0.61	0.58	0.57	0.59	0.58
22	Median	0.58	0.61	0.63	0.61	0.60	0.56	0.54	0.52	0.56	0.58

					Casl	n Flow to	Capital Spen	ding Ratio ¹			
		19-Year						3-	Year Averag	es	
Line	Company	Average	2024 2/a	2023	2022	2021	2018-2020	2015-2017	2012-2014	2009-2011	2006-2008
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
23	Atmos Energy	0.64	0.58	0.53	0.54	0.58	0.53	0.60	0.60	0.74	0.86
24	Chesapeake Utilities	0.76	0.61	0.81	1.23	0.81	0.60	0.51	0.72	1.12	0.70
25	New Jersey Resources	1.18	0.87	0.82	0.59	0.62	0.69	0.66	1.58	1.60	1.97
26	NiSource Inc.	0.74	0.74	0.61	0.55	0.68	0.62	0.51	0.59	0.97	1.14
27	Northwest Nat. Gas	0.88	0.56	0.67	0.60	0.68	0.69	0.76	1.05	0.97	1.30
28	ONE Gas Inc.	0.83	0.81	0.77	0.74	0.86	0.85	0.88	0.79	N/A	N/A
29	Southwest Gas	0.81	0.74	0.68	0.31	0.86	0.59	0.78	0.98	1.16	0.78
30	Spire Inc.	1.01	0.60	0.69	0.80	0.75	0.54	0.87	0.90	1.69	1.45
31	UGI Corp.	1.45	1.52	1.18	1.42	1.32	1.48	1.37	1.46	1.39	1.68
32	Average	0.94	0.78	0.75	0.75	0.80	0.73	0.77	0.96	1.20	1.23
33	Median	0.84	0.74	0.69	0.60	0.75	0.62	0.76	0.90	1.14	1.22

Sources:

¹ Data for years 2019 and prior were retrieved from the Value Line Investment Survey Investment Analyzer Software, downloaded on June 18, 2021. Data for the years 2020 - 2024 was retrieved from Value Line Investment Surveys.

² The Value Line Investment Survey, February 21, 2025.

Notes:

^a Based on the projected Dividends Declared per share and Book Value per share, published in The Value Line Investment Survey.

^b Based on the projected Dividends Declared per share and Earnings per share, published in The Value Line Investment Survey.

^c Based on the projected Cash Flow per share and Capital Spending per share, published in The Value Line Investment Survey.

Proxy Group

<u>Line</u>		Credit	Ratings ¹	Common Equity Ratios			
<u>Line</u>	<u>Company</u>	<u>S&P</u>	Moody's	<u>MI¹</u>	Value Line ²		
		(1)	(2)	(3)	(4)		
1	Alliant Energy Corporation	BBB+	Baa2	39.7%	45.2%		
2	Ameren Corporation	BBB+	Baa1	39.0%	43.8%		
3	American Electric Power Company, Inc.	BBB+	Baa2	36.9%	42.0%		
4	Avista Corporation	BBB	Baa2	45.3%	48.8%		
5	CMS Energy Corporation	BBB+	Baa2	31.6%	33.1%		
6	DTE Energy Company	BBB+	Baa2	33.5%	38.0%		
7	Duke Energy Corporation	BBB+	Baa2	35.9%	38.8%		
8	Entergy Corporation	BBB+	Baa2	33.7%	38.6%		
9	IDACORP, Inc.	BBB	Baa2	52.0%	51.2%		
10	NextEra Energy, Inc.	A-	Baa1	34.7%	43.6%		
11	NorthWestern Corporation	BBB	Baa2	48.0%	50.9%		
12	OGE Energy Corp.	BBB+	Baa1	45.5%	49.6%		
13	Pinnacle West Capital Corporation	BBB+	Baa2	37.7%	45.0%		
14	Portland General Electric Company	BBB+	A3	42.5%	44.2%		
15	PPL Corporation	A-	Baa1	45.6%	48.8%		
16	The Southern Company	A-	Baa1	32.3%	37.6%		
17	Xcel Energy Inc.	BBB+	Baa1	39.2%	41.4%		
18	Average	BBB+	Baa2	39.6%	43.6%		
19	Evergy Kansas Central	BBB+ ³	Baa1 ³		51.97% ⁴		

Sources:

¹ S&P Global Market Intelligence, Downloaded on May 2, 2025.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

³ S&P Capital IQ.

⁴ Direct Testimony of Ann E. Bulkley, page 5.

Consensus Analysts' Growth Rates

		Zao	cks	Ν	11	I/B/E/S		Average of
		Estimated	Number of	Estimated	Number of	Estimated	Number of	Growth
<u>Line</u>	<u>Company</u>	Growth % ¹	Estimates	Growth % ²	Estimates	Growth % ³	Estimates	Rates
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Alliant Energy Corporation	6.73%	N/A	6.71%	6	6.43%	N/A	6.63%
2	Ameren Corporation	6.95%	N/A	6.94%	6	6.80%	N/A	6.90%
3	American Electric Power Company, Inc.	6.43%	N/A	N/A	N/A	6.37%	N/A	6.40%
4	Avista Corporation	6.07%	N/A	5.98%	4	6.85%	N/A	6.30%
5	CMS Energy Corporation	7.84%	N/A	7.31%	6	7.70%	N/A	7.62%
6	DTE Energy Company	7.64%	N/A	7.50%	7	7.93%	N/A	7.69%
7	Duke Energy Corporation	6.33%	N/A	6.32%	6	6.70%	N/A	6.45%
8	Entergy Corporation	9.46%	N/A	9.12%	3	9.63%	N/A	9.40%
9	IDACORP, Inc.	8.47%	N/A	8.26%	4	6.80%	N/A	7.84%
10	NextEra Energy, Inc.	7.72%	N/A	7.70%	10	8.00%	N/A	7.81%
11	NorthWestern Corporation	6.87%	N/A	6.24%	4	6.45%	N/A	6.52%
12	OGE Energy Corp.	6.32%	N/A	6.53%	5	5.60%	N/A	6.15%
13	Pinnacle West Capital Corporation	2.12%	N/A	5.00%	4	2.20%	N/A	3.11%
14	Portland General Electric Company	3.44%	N/A	4.58%	5	3.57%	N/A	3.86%
15	PPL Corporation	7.46%	N/A	7.40%	5	7.60%	N/A	7.49%
16	The Southern Company	6.55%	N/A	6.36%	7	7.60%	N/A	6.84%
17	Xcel Energy Inc.	7.52%	N/A	7.84%	6	8.40%	N/A	7.92%
18	Average	6.70%	N/A	6.86%	6	6.74%	N/A	6.76%

Sources:

¹ Zacks, http://www.zacks.com/, downloaded on May 2, 2025.

² S&P Global Market Intelligence, https://platform.mi.spglobal.com, downloaded on May 2, 2025.

³ LSEG Workspace, https://www.lseg.com/en/data-analytics/products/workspace, downloaded on May 2, 2025

Constant Growth DCF Model (Consensus Analysts' Growth Rates)

		13-Week AVG	Analysts'	Annualized	Nominal	Adjusted	Constant
Line	<u>Company</u>	Stock Price ¹	Growth ²	Dividend ³	Yield	Yield	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)
1	Alliant Energy Corporation	\$61.86	6.63%	\$1.92	3.10%	3.31%	9.94%
2	Ameren Corporation	\$98.20	6.90%	\$2.84	2.89%	3.09%	9.99%
3	American Electric Power Company, Inc.	\$104.63	6.40%	\$3.72	3.56%	3.78%	10.18%
4	Avista Corporation	\$39.56	6.30%	\$1.96	4.96%	5.27%	11.57%
5	CMS Energy Corporation	\$71.97	7.62%	\$2.17	3.02%	3.24%	10.86%
6	DTE Energy Company	\$131.73	7.69%	\$4.36	3.31%	3.56%	11.26%
7	Duke Energy Corporation	\$117.67	6.45%	\$4.18	3.55%	3.78%	10.23%
8	Entergy Corporation	\$83.11	9.40%	\$2.40	2.89%	3.16%	12.56%
9	IDACORP, Inc.	\$114.86	7.84%	\$3.44	3.00%	3.23%	11.07%
10	NextEra Energy, Inc.	\$69.30	7.81%	\$2.06	2.97%	3.20%	11.01%
11	NorthWestern Corporation	\$55.77	6.52%	\$2.64	4.73%	5.04%	11.56%
12	OGE Energy Corp.	\$44.42	6.15%	\$1.69	3.79%	4.03%	10.18%
13	Pinnacle West Capital Corporation	\$91.83	3.11%	\$3.58	3.90%	4.02%	7.13%
14	Portland General Electric Company	\$43.01	3.86%	\$2.00	4.65%	4.83%	8.69%
15	PPL Corporation	\$34.83	7.49%	\$1.03	2.96%	3.18%	10.67%
16	The Southern Company	\$89.01	6.84%	\$2.88	3.24%	3.46%	10.29%
17	Xcel Energy Inc.	\$69.29	7.92%	\$2.28	3.29%	3.55%	11.47%
18	Average	\$77.71	6.76%	\$2.66	3.52%	3.75%	10.51%
19	Median	\$71.97	6.84%	\$2.40	3.29%	3.55%	10.67%

Sources:

¹ S&P Global Intelligence, Downloaded on May 2, 2025.

² Exhibit MPG-8.

³ *The Value Line Investment Survey*, February 7, March 7, and April 18, 2025.

Payout Ratios

		Dividend	s Per Share	Earnings	Per Share	Payout Ratio	
Line	<u>Company</u>	2022	Projected	2022	Projected	2022	Projected
		(1)	(2)	(3)	(4)	(5)	(6)
1	Alliant Energy Corporation	\$1.81	\$2.43	\$2.78	\$4.25	65.1%	57.2%
2	Ameren Corporation	\$2.52	\$3.57	\$4.37	\$6.50	57.7%	54.9%
3	American Electric Power Company, Inc.	\$3.37	\$4.31	\$5.24	\$7.50	64.3%	57.5%
4	Avista Corporation	\$1.84	\$2.20	\$2.24	\$2.95	82.1%	74.6%
5	CMS Energy Corporation	\$1.95	\$2.50	\$3.01	\$4.20	64.8%	59.5%
6	DTE Energy Company	\$3.88	\$5.15	\$6.76	\$9.60	57.4%	53.6%
7	Duke Energy Corporation	\$4.06	\$5.00	\$5.56	\$8.00	73.0%	62.5%
8	Entergy Corporation	\$2.17	\$3.00	\$5.55	\$4.20	39.1%	71.4%
9	IDACORP, Inc.	\$3.20	\$4.20	\$5.14	\$7.10	62.3%	59.2%
10	NextEra Energy, Inc.	\$1.87	\$3.22	\$3.17	\$5.10	59.0%	63.1%
11	NorthWestern Corporation	\$2.56	\$2.80	\$3.22	\$4.30	79.5%	65.1%
12	OGE Energy Corp.	\$1.66	\$1.79	\$2.07	\$2.95	80.2%	60.7%
13	Pinnacle West Capital Corporation	\$3.49	\$3.85	\$4.41	\$6.25	79.1%	61.6%
14	Portland General Electric Company	\$1.88	\$2.60	\$2.38	\$4.00	79.0%	65.0%
15	PPL Corporation	\$0.95	\$1.40	\$1.60	\$2.40	59.4%	58.3%
16	The Southern Company	\$2.78	\$3.10	\$3.64	\$5.50	76.4%	56.4%
17	Xcel Energy Inc.	\$2.08	\$3.00	\$3.35	\$5.00	62.1%	60.0%
18	Average	\$2.47	\$3.18	\$3.79	\$5.28	67.1%	61.2%

Source:

The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Sustainable Growth Rate

		3 to 5 Year Projections									Sustainable	
		Dividends	Earnings	Book Value	Book Value		Adjustment	Adjusted	Payout	Retention	Internal	Growth
<u>Line</u>	<u>Company</u>	Per Share	Per Share	Per Share	Growth	ROE	Factor	ROE	Ratio	Rate	Growth Rate	Rate
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Alliant Energy Corporation	\$2.43	\$4.25	\$31.90	2.71%	13.32%	1.01	13.50%	57.18%	42.82%	5.78%	5.85%
2	Ameren Corporation	\$3.57	\$6.50	\$52.65	3.91%	12.35%	1.02	12.58%	54.92%	45.08%	5.67%	7.02%
3	American Electric Power Company, Inc.	\$4.31	\$7.50	\$60.90	3.32%	12.32%	1.02	12.52%	57.47%	42.53%	5.32%	6.06%
4	Avista Corporation	\$2.20	\$2.95	\$35.75	1.67%	8.25%	1.01	8.32%	74.58%	25.42%	2.12%	2.41%
5	CMS Energy Corporation	\$2.50	\$4.20	\$30.75	3.08%	13.66%	1.02	13.87%	59.52%	40.48%	5.61%	6.30%
6	DTE Energy Company	\$5.15	\$9.60	\$63.10	2.37%	15.21%	1.01	15.39%	53.65%	46.35%	7.13%	7.13%
7	Duke Energy Corporation	\$5.00	\$8.00	\$76.25	3.20%	10.49%	1.02	10.66%	62.50%	37.50%	4.00%	4.10%
8	Entergy Corporation	\$3.00	\$4.20	\$43.45	3.41%	9.67%	1.02	9.83%	71.43%	28.57%	2.81%	4.39%
9	IDACORP, Inc.	\$4.20	\$7.10	\$74.00	3.69%	9.59%	1.02	9.77%	59.15%	40.85%	3.99%	5.44%
10	NextEra Energy, Inc.	\$3.22	\$5.10	\$36.00	6.52%	14.17%	1.03	14.61%	63.14%	36.86%	5.39%	7.38%
11	NorthWestern Corporation	\$2.80	\$4.30	\$53.55	2.36%	8.03%	1.01	8.12%	65.12%	34.88%	2.83%	2.98%
12	OGE Energy Corp.	\$1.79	\$2.95	\$26.25	2.44%	11.24%	1.01	11.37%	60.68%	39.32%	4.47%	4.47%
13	Pinnacle West Capital Corporation	\$3.85	\$6.25	\$70.00	3.65%	8.93%	1.02	9.09%	61.60%	38.40%	3.49%	4.45%
14	Portland General Electric Company	\$2.60	\$4.00	\$42.25	3.68%	9.47%	1.02	9.64%	65.00%	35.00%	3.37%	4.14%
15	PPL Corporation	\$1.40	\$2.40	\$23.45	3.13%	10.23%	1.02	10.39%	58.33%	41.67%	4.33%	4.34%
16	The Southern Company	\$3.10	\$5.50	\$32.25	1.62%	17.05%	1.01	17.19%	56.36%	43.64%	7.50%	7.61%
17	Xcel Energy Inc.	\$3.00	\$5.00	\$43.70	4.67%	11.44%	1.02	11.70%	60.00%	40.00%	4.68%	5.87%
18	Average	\$3.18	\$5.28	\$46.84	3.26%	11.50%	1.02	11.68%	61.21%	38.79%	4.62%	5.29%

Sources and Notes:

Cols. (1), (2) and (3): The Value Line Investment Survey, February 7, March 7, and April 18, 2025. Col. (4): [Col. (3) / Page 2 Col. (2)] ^ (1/number of years projected) - 1. Col. (5): Col. (2) / Col. (3). Col. (6): [2 * (1 + Col. (4))] / (2 + Col. (4)). Col. (7): Col. (6) * Col. (5). Col. (8): Col. (1) / Col. (2). Col. (9): 1 - Col. (8). Col. (10): Col. (9) * Col. (7). Col. (11): Col. (10) + Page 2 Col. (9).

Sustainable Growth Rate

		13-Week	2022	Market	Commo	on Shares				
		Average	Book Value	to Book	Outstandir	ng (in Millions) ²				
Line	Company	Stock Price ¹	Per Share ²	Ratio	2022	3-5 Years	Growth	S Factor ³	V Factor ⁴	S * V
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Alliant Energy Corporation	\$61.86	\$26.46	2.34	\$256.10	\$257.00	0.05%	0.12%	57.22%	0.07%
2	Ameren Corporation	\$98.20	\$40.26	2.44	\$267.00	\$285.00	0.94%	2.28%	59.00%	1.35%
3	American Electric Power Company, Inc.	\$104.63	\$48.46	2.16	\$526.18	\$550.00	0.63%	1.37%	53.68%	0.74%
4	Avista Corporation	\$39.56	\$31.83	1.24	\$78.08	\$85.00	1.22%	1.52%	19.53%	0.30%
5	CMS Energy Corporation	\$71.97	\$24.86	2.89	\$294.40	\$302.00	0.36%	1.06%	65.46%	0.69%
6	DTE Energy Company	\$131.73	\$53.55	2.46	\$206.36	\$206.00	- 0.02%	- 0.06%	59.35%	- 0.04%
7	Duke Energy Corporation	\$117.67	\$61.15	1.92	\$771.00	\$777.00	0.11%	0.21%	48.03%	0.10%
8	Entergy Corporation	\$83.11	\$34.35	2.42	\$425.70	\$460.00	1.11%	2.69%	58.67%	1.58%
9	IDACORP, Inc.	\$114.86	\$57.44	2.00	\$50.62	\$56.00	1.45%	2.91%	49.99%	1.45%
10	NextEra Energy, Inc.	\$69.30	\$23.13	3.00	\$2,052.00	\$2,200.00	1.00%	3.00%	66.62%	2.00%
11	NorthWestern Corporation	\$55.77	\$45.48	1.23	\$61.25	\$64.00	0.63%	0.77%	18.44%	0.14%
12	OGE Energy Corp.	\$44.42	\$22.17	2.00	\$200.30	\$200.20	- 0.01%	- 0.01%	50.09%	- 0.01%
13	Pinnacle West Capital Corporation	\$91.83	\$54.47	1.69	\$113.42	\$125.00	1.40%	2.36%	40.68%	0.96%
14	Portland General Electric Company	\$43.01	\$32.81	1.31	\$101.16	\$120.00	2.47%	3.24%	23.72%	0.77%
15	PPL Corporation	\$34.83	\$18.90	1.84	\$737.13	\$738.00	0.02%	0.03%	45.73%	0.01%
16	The Southern Company	\$89.01	\$28.82	3.09	\$1,091.00	\$1,095.00	0.05%	0.16%	67.62%	0.11%
17	Xcel Energy Inc.	\$69.29	\$31.74	2.18	\$554.94	\$595.00	1.00%	2.18%	54.19%	1.18%
18	Average	\$77.71	\$37.40	2.13	458.04	477.36	0.73%	1.40%	49.30%	0.67%

Sources and Notes:

¹ S&P Global Intelligence, Downloaded on May 2, 2025.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.
³ Expected Growth in the Number of Shares, Column (3) * Column (6).

⁴ Expected Profit of Stock Investment, [1 - 1 / Column (3)].

Constant Growth DCF Model (Sustainable Growth Rate)

		13-Week AVG	Sustainable	Annualized	Adjusted	Constant	
Line	Company	Stock Price ¹	Growth ²	Dividend ³	Yield	Growth DCF (5)	
		(1)	(2)	(3)	(4)		
1	Alliant Energy Corporation	\$61.86	5.85%	\$1.92	3.29%	9.13%	
2	Ameren Corporation	\$98.20	7.02%	\$2.84	3.10%	10.11%	
3	American Electric Power Company, Inc.	\$104.63	6.06%	\$3.72	3.77%	9.83%	
4	Avista Corporation	\$39.56	2.41%	\$1.96	5.07%	7.49%	
5	CMS Energy Corporation	\$71.97	6.30%	\$2.17	3.21%	9.51%	
6	DTE Energy Company	\$131.73	7.13%	\$4.36	3.55%	10.68%	
7	Duke Energy Corporation	\$117.67	4.10%	\$4.18	3.70%	7.80%	
8	Entergy Corporation	\$83.11	4.39%	\$2.40	3.01%	7.40%	
9	IDACORP, Inc.	\$114.86	5.44%	\$3.44	3.16%	8.60%	
10	NextEra Energy, Inc.	\$69.30	7.38%	\$2.06	3.19%	10.58%	
11	NorthWestern Corporation	\$55.77	2.98%	\$2.64	4.88%	7.85%	
12	OGE Energy Corp.	\$44.42	4.47%	\$1.69	3.96%	8.44%	
13	Pinnacle West Capital Corporation	\$91.83	4.45%	\$3.58	4.07%	8.52%	
14	Portland General Electric Company	\$43.01	4.14%	\$2.00	4.84%	8.98%	
15	PPL Corporation	\$34.83	4.34%	\$1.03	3.09%	7.44%	
16	The Southern Company	\$89.01	7.61%	\$2.88	3.48%	11.09%	
17	Xcel Energy Inc.	\$69.29	5.87%	\$2.28	3.48%	9.35%	
18	Average	\$77.71	5.29%	\$2.66	3.70%	8.99%	
19	Median	\$71.97	5.44%	\$2.40	3.48%	8.98%	

Sources:

¹ S&P Global Intelligence, Downloaded on May 2, 2025.

² Exhibit MPG-11.

³ The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

Electricity Sales Are Linked to U.S. Economic Growth



Note:

1988 represents the base year. Graph depicts increases or decreases from the base year.

Sources:

U.S. Energy Information Administration Federal Reserve Bank of St. Louis

Multi-Stage Growth DCF Model

		13-Week AVG	Annualized	nnualized First Stage	Second Stage Growth				Third Stage	Multi-Stage	
Line	<u>Company</u>	Stock Price ¹	Dividend ²	Growth ³	Year 6	Year 7	Year 8	Year 9	Year 10	_ <u>Growth</u> ⁴	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Alliant Energy Corporation	\$61.86	\$1.92	6.63%	6.20%	5.78%	5.36%	4.94%	4.52%	4.10%	7.89%
2	Ameren Corporation	\$98.20	\$2.84	6.90%	6.43%	5.97%	5.50%	5.03%	4.57%	4.10%	7.70%
3	American Electric Power Company, Inc.	\$104.63	\$3.72	6.40%	6.02%	5.63%	5.25%	4.87%	4.48%	4.10%	8.37%
4	Avista Corporation	\$39.56	\$1.96	6.30%	5.93%	5.57%	5.20%	4.83%	4.47%	4.10%	9.99%
5	CMS Energy Corporation	\$71.97	\$2.17	7.62%	7.03%	6.44%	5.86%	5.27%	4.69%	4.10%	8.02%
6	DTE Energy Company	\$131.73	\$4.36	7.69%	7.09%	6.49%	5.90%	5.30%	4.70%	4.10%	8.41%
7	Duke Energy Corporation	\$117.67	\$4.18	6.45%	6.06%	5.67%	5.27%	4.88%	4.49%	4.10%	8.38%
8	Entergy Corporation	\$83.11	\$2.40	9.40%	8.52%	7.64%	6.75%	5.87%	4.98%	4.10%	8.29%
9	IDACORP, Inc.	\$114.86	\$3.44	7.84%	7.22%	6.59%	5.97%	5.35%	4.72%	4.10%	8.05%
10	NextEra Energy, Inc.	\$69.30	\$2.06	7.81%	7.19%	6.57%	5.95%	5.34%	4.72%	4.10%	8.01%
11	NorthWestern Corporation	\$55.77	\$2.64	6.52%	6.12%	5.71%	5.31%	4.91%	4.50%	4.10%	9.80%
12	OGE Energy Corp.	\$44.42	\$1.69	6.15%	5.81%	5.47%	5.13%	4.78%	4.44%	4.10%	8.59%
13	Pinnacle West Capital Corporation	\$91.83	\$3.58	3.11%	3.27%	3.44%	3.60%	3.77%	3.93%	4.10%	7.91%
14	Portland General Electric Company	\$43.01	\$2.00	3.86%	3.90%	3.94%	3.98%	4.02%	4.06%	4.10%	8.87%
15	PPL Corporation	\$34.83	\$1.03	7.49%	6.92%	6.36%	5.79%	5.23%	4.66%	4.10%	7.92%
16	The Southern Company	\$89.01	\$2.88	6.84%	6.38%	5.93%	5.47%	5.01%	4.56%	4.10%	8.10%
17	Xcel Energy Inc.	\$69.29	\$2.28	7.92%	7.28%	6.65%	6.01%	5.37%	4.74%	4.10%	8.45%
18	Average	\$77.71	\$2.66	6.76%	6.32%	5.87%	5.43%	4.99%	4.54%	4.10%	8.40%
19	Median	\$71.97	\$2.40	6.84%	6.38%	5.93%	5.47%	5.01%	4.56%	4.10%	8.29%

Sources:

¹ S&P Global Intelligence, Downloaded on May 2, 2025.

² The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

³ Exhibit MPG-8.

⁴ Blue Chip Economic Indicators, March 10, 2025 at page 14.

Exhibit MPG-15 Page 1 of 1

Evergy Kansas Central, Inc.

Common Stock Market/Book Ratio



Source:

1980 - 2000: Mergent Public Utility Manual.

2001 - 2015: AUS Utility Reports, multiple dates.

2016 - 2023: Value Line Investment Survey, multiple dates.

* Value Line Investment Survey Reports, February 7, February 21, March 7, and April 18, 2025.

Equity Risk Premium - Treasury Bond

Lina	Voor	Authorized Electric	30 yr. Treasury Bond Vield ²	Indicated Risk	Rolling 5 - Year	Rolling 10 - Year
Line	rear	(1)	(2)	(3)	(4)	Average (5)
		(1)	λ -γ	(-)		(-)
1	1986	13.93%	7.80%	6.13%		
2	1987	12.99%	8.58%	4.41%		
3	1988	12.79%	8.96%	3.83%		
4	1989	12.97%	8.45%	4.52%		
5	1990	12.70%	8.61%	4.09%	4.60%	
6	1991	12.55%	8.14%	4.41%	4.25%	
7	1992	12.09%	7.67%	4.42%	4.26%	
8	1993	11.41%	6.60%	4.81%	4.45%	
9	1994	11.34%	7.37%	3.97%	4.34%	
10	1995	11.55%	6.88%	4.67%	4.46%	4.53%
11	1996	11.39%	6.70%	4.69%	4.51%	4.38%
12	1997	11.40%	6.61%	4.79%	4.59%	4.42%
13	1998	11.66%	5.58%	6.08%	4.84%	4.65%
14	1999	10.77%	5.87%	4.90%	5.03%	4.68%
15	2000	11.43%	5.94%	5.49%	5.19%	4.82%
16	2001	11.09%	5.49%	5.60%	5.37%	4.94%
17	2002	11.16%	5.43%	5.73%	5.56%	5.07%
18	2003	10.97%	4.96%	6.01%	5.55%	5.19%
19	2004	10.75%	5.05%	5.70%	5.71%	5.37%
20	2005	10.54%	4.65%	5.89%	5.79%	5.49%
21	2006	10.34%	4.87%	5.47%	5.76%	5.5/%
22	2007	10.31%	4.83%	5.48%	5.71%	5.64%
23	2008	10.37%	4.28%	6.09%	5.73%	5.64%
24	2009	10.52%	4.07%	6.45%	5.88%	5.79%
25	2010	10.29%	4.25%	6.04%	5.90%	5.85%
26	2011	10.19%	3.91%	6.28%	6.07%	5.91%
27	2012	10.01%	2.92%	7.09%	6.39%	6.05%
28	2013	9.81%	3.45%	0.30%	0.44%	6.09%
29	2014	9.75%	3.34%	6.41%	0.44%	6.16%
30	2015	9.60%	2.84%	0.70%	0.38%	6.24%
31	2016	9.60%	2.60%	7.00%	6.72%	6.40%
32 33	2017	9.00%	2.90%	6.79%	0.00%	0.00%
33	2010	9.55%	0.11%	0.44%	0.00%	0.30%
34 25	2019	9.04%	2.30%	7.00%	0.01%	0.02% 6 90%
35	2020	9.39%	2.05%	7.03%	7.02%	6.00%
30 37	2021	J.JJ/0 0 E00/	2.00%	1.04% 6./10/	7.03%	0.91%
30 30	2022	9.02% 0.60%	J. 12 /0 1 000/	0.41% 5.50%	1.01%	0.04%
30 90	2023	J.02%	4.03%	5.00%	0.0070 6 400/	0./0%
39 40	2024 2025 ³	9.70%	4 71%	5.01%	5.93%	6 48%
10	2020	0.7270		0.0170	0.0070	0.1076
41	Average	10.81%	5.13%	5.68%	5.74%	5.77%
42	Minimum				4.25%	4.38%
43	Maximum				7.09%	6.91%

¹ Regulatory Research Associates, Inc., Regulatory Focus, Major Rate Case Decisions, Jan. 1997 p. 5, and Jan. 2011 p. 3. S&P Global Market Intelligence, RRA Regulatory Focus, Major Electric Rate Case Decisions in the US, January - March 2025, February April 25, 2025 at page 3.
2006 - 2025 Authorized Returns exclude limited issue rider cases.
² St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.
The uride from 2002 to 2005 represent the 20 Yoor Transmit winde abtained from the Federal Reserve.

The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

³ Data represents January - March, 2025.

Sources:

Equity Risk Premium - Utility Bond

<u>Line</u>	Year	Authorized Electric <u>Returns¹</u> (1)	Average "A" Rated Utility <u>Bond Yield²</u> (2)	Indicated Risk <u>Premium</u> (3)	Rolling 5 - Year <u>Average</u> (4)	Rolling 10 - Year <u>Average</u> (5)
1	1986	13.93%	9.58%	4.35%		
2	1987	12.99%	10.10%	2.89%		
3	1988	12.79%	10.49%	2.30%		
4	1989	12.97%	9.77%	3.20%		
5	1990	12.70%	9.86%	2.84%	3.12%	
6	1991	12.55%	9.36%	3.19%	2.88%	
7	1992	12.09%	8.69%	3.40%	2.99%	
8	1993	11.41%	7.59%	3.82%	3.29%	
9	1994	11.34%	8.31%	3.03%	3.26%	
10	1995	11.55%	7.89%	3.66%	3.42%	3.27%
11	1996	11.39%	7.75%	3.64%	3.51%	3.20%
12	1997	11.40%	7.60%	3.80%	3.59%	3.29%
13	1998	11.66%	7.04%	4.62%	3.75%	3.52%
14	1999	10.77%	7.62%	3.15%	3.77%	3.52%
15	2000	11.43%	8.24%	3.19%	3.68%	3.55%
16	2001	11.09%	7.76%	3.33%	3.62%	3.56%
17	2002	11.16%	7.37%	3.79%	3.61%	3.60%
18	2003	10.97%	6.58%	4.39%	3.57%	3.66%
19	2004	10.75%	6.16%	4.59%	3.86%	3.82%
20	2005	10.54%	5.65%	4.89%	4.20%	3.94%
21	2006	10.34%	6.07%	4.27%	4.39%	4.00%
22	2007	10.31%	6.07%	4.24%	4.48%	4.04%
23	2008	10.37%	6.53%	3 84%	4 37%	3.97%
24	2009	10.52%	6.04%	4 48%	4 34%	4 10%
25	2010	10.29%	5 46%	4 83%	4 33%	4 26%
26	2011	10 19%	5.04%	5 15%	4 51%	4 45%
27	2012	10.01%	4 13%	5.88%	4 84%	4 66%
28	2013	9.81%	4.48%	5.33%	5.13%	4.75%
29	2014	9.75%	4.28%	5.47%	5.33%	4.84%
30	2015	9.60%	4 12%	5 49%	5 46%	4 90%
31	2016	9.60%	3.93%	5.67%	5.57%	5 04%
32	2017	9.68%	4 00%	5.68%	5 53%	5 18%
33	2018	9.55%	4 25%	5.30%	5 52%	5 33%
34	2019	9.64%	3 77%	5.87%	5.60%	5 47%
35	2020	9.39%	3.02%	6.38%	5 78%	5.62%
36	2021	9.39%	3.11%	6.28%	5.90%	5.73%
37	2022	9.52%	4.72%	4.80%	5.73%	5.63%
38	2023	9.62%	5.54%	4.08%	5.48%	5.50%
39	2024	9.78%	5.54%	4.24%	5.15%	5.38%
40	2025 ³	9.72%	5.77%	3.95%	4.67%	5.22%
41	Average	10.81%	6.48%	4.33%	4.39%	4.42%
42	Minimum				2.88%	3.20%
43	Maximum				5.90%	5.73%

Sources:

¹ *Regulatory Research Associates, Inc.*, Regulatory Focus, Major Rate Case Decisions, Jan. 1997 p. 5, and Jan. 2011 p. 3.
S&P Global Market Intelligence, RRA Regulatory Focus, Major Electric Rate Case Decisions in the US, January - March 2025, February April 25, 2025 at page 3.
2006 - 2025 Authorized Returns exclude limited issue rider cases.
² St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.
The vield fram 2002 to 2005 rearcoart the 20 Xera Tacagemy vielde abteined fram the Enderal Reserve.

The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

³ Data represents January - March, 2025.
Bond Yield Spreads

				Publi	c Utility Bond	i		Co	rporate Bond		Utility to	Corporate
		T-Bond			A-T-Bond	Baa-T-Bond			Aaa-T-Bond	Baa-T-Bond	Baa	A-Aaa
Line	Year	Yield ¹	<u>A²</u>	Baa ²	Spread	Spread	Aaa ³	Baa ³	Spread	Spread	Spread	Spread
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	1980	11.30%	13.34%	13.95%	2.04%	2.65%	11.94%	13.67%	0.64%	2.37%	0.28%	1.40%
2	1981	13.44%	15.95%	16.60%	2.51%	3.16%	14.17%	16.04%	0.73%	2.60%	0.56%	1.78%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	0.34%	2.07%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.38%	0.65%	1.62%
5	1984	12.39%	14.03%	14.53%	1.64%	2.14%	12.71%	14.19%	0.32%	1.80%	0.34%	1.32%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	0.24%	1.10%
7	1986	7.80%	9.58%	10.00%	1.78%	2.20%	9.02%	10.39%	1.22%	2.59%	-0.39%	0.56%
8	1987	8.58%	10.10%	10.53%	1.52%	1.95%	9.38%	10.58%	0.80%	2.00%	-0.05%	0.72%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.17%	0.78%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1./3%	-0.21%	0.51%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	-0.30%	0.54%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.67%	-0.25%	0.59%
13	1992	7.07%	8.09%	0.00% 7.01%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	-0.12%	0.55%
14	1993	0.00%	7.59%	7.91%	0.99%	1.31%	7.22%	7.93%	0.62%	1.33%	-0.02%	0.37%
10	1994	7.37%	8.31%	8.03%	0.94%	1.20%	7.96%	8.62%	0.59%	1.25%	0.01%	0.35%
10	1995	0.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%	0.30%
10	1996	6.70%	7.75%	0.17% 7.0E%	1.05%	1.47%	7.37%	8.05%	0.67%	1.35%	0.12%	0.38%
10	1997	0.01%	7.00%	7.95%	0.99%	1.04%	7.20% 6.50%	7.00%	0.00%	1.20%	0.09%	0.54%
19	1996	5.36%	7.04%	7.20%	1.40%	1.00%	7.04%	7.22%	0.95%	0.01%	0.04%	0.51%
20	1999	5.07%	7.02%	7.00%	1.75%	2.01%	7.04%	1.01%	1.10%	2.01%	0.01%	0.00%
21	2000	5.94%	0.24%	0.30%	2.30%	2.42%	7.02%	0.30% 7.0E%	1.00%	2.42%	-0.01%	0.62%
22	2001	5.49%	7.70%	0.03%	1 0/9/	2.54 /0	6 400/	7.93%	1.05%	2.43/0	0.00%	0.00 %
23	2002	1 06%	6 59%	6 9/9/	1.54 /0	1 90%	0.49 /o 5 67%	6 77%	0.71%	2.37 /0	0.22 /0	0.00 %
24	2003	4.90 % 5.05%	6 16%	6.40%	1.02 /6	1.05%	5.63%	6 39%	0.71%	1.01%	0.00%	0.51%
26	2004	1 65%	5 65%	5 93%	1.00%	1.00%	5 24%	6.06%	0.50%	1.00%	-0.14%	0.00%
27	2000	4.00%	6.07%	6 2 2 9/	1.00%	1 4 4 9/	5 5 9%	6 / 90/	0.71%	1 61%	0.14%	0.49%
21	2000	4.07 /0	6.07%	6.000/	1.20%	1.44 /0	5.50 /6 E EC0/	0.40 /o	0.71%	1.01%	-0.10%	0.40%
20	2007	4.03%	0.07%	0.33%	1.24%	1.50%	5.56%	0.40%	0.72%	1.03%	-0.15%	0.52%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	-0.20%	0.90%
30	2009	4.07%	6.04%	7.06%	1.97%	2.99%	5.31%	7.30%	1.24%	3.23%	-0.24%	0.73%
31	2010	4.25%	5.46%	5.96%	1.21%	1./1%	4.94%	6.04%	0.69%	1.79%	-0.08%	0.52%
32	2011	3.91%	5.04%	5.57%	1.13%	1.66%	4.64%	5.66%	0.73%	1.75%	-0.10%	0.40%
33	2012	2.92%	4.13%	4.86%	1.21%	1.93%	3.67%	4.94%	0.75%	2.01%	-0.08%	0.46%
34	2013	3.45%	4.48%	4.98%	1.03%	1.54%	4.24%	5.10%	0.79%	1.65%	-0.12%	0.24%
35	2014	3.34%	4.28%	4.80%	0.94%	1.46%	4.16%	4.85%	0.82%	1.51%	-0.05%	0.12%
36	2015	2.84%	4.12%	5.03%	1.27%	2.19%	3.89%	5.00%	1.05%	2.16%	0.03%	0.23%
37	2016	2.60%	3.93%	4.68%	1.34%	2.08%	3.67%	4.72%	1.07%	2.12%	-0.04%	0.27%
38	2017	2.90%	4.00%	4.38%	1.10%	1.48%	3.74%	4.44%	0.85%	1.55%	-0.06%	0.26%
39	2018	3.11%	4.25%	4.67%	1.14%	1.56%	3.93%	4.80%	0.82%	1.69%	-0.13%	0.32%
40	2019	2 58%	3 77%	4 19%	1 19%	1.61%	3 39%	4 38%	0.81%	1 79%	-0.18%	0.38%
41	2020	1.56%	3.02%	3 39%	1 45%	1.83%	2 48%	3.60%	0.91%	2 04%	-0.21%	0.54%
12	2021	2.05%	3 1 1 0/	3 36%	1.06%	1 31%	2 71%	3 /0%	0.66%	1 35%	-0.04%	0.40%
42	2021	2.00%	/ 720/	5.00%	1.00%	1.01%	2.11/0	5.40%	0.00%	1.00%	-0.04%	0.40%
40	2022	1 00%	4.1∠/0 5.549/	5.03 /0	1 / 59/	1.31/0	4.05/0	5.00%	0.37 /0	1.57 /0	-0.03 %	0.04 %
44	2023	4.09%	5.54%	J.04%	1.40%	1./3%	4.04%	5.00%	0.75%	1./0%	-0.01%	0.70%
45	2024	4.41%	5.54%	5./b%	1.14%	1.36%	5.04%	5.75%	0.64%	1.35%	0.01%	0.50%
46	2025 *	4./1%	5.81%	5.99%	1.10%	1.28%	5.38%	6.03%	0.67%	1.32%	-0.04%	0.43%
47	Average	6.02%	7.49%	7.91%	1.47%	1.88%	6.85%	7.91%	0.83%	1.89%	0.00%	0.64%





Sources:

¹ St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.

- St. Louis Federal Reserve: Economic Research, http://research.strouisreu.org/.
 ² The utility yields for the period 1980-2000 were obtained from Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2005 were obtained from the Mergent Bond Record.
 ³ The corporate yields for the period 1980-2009 were obtained from the St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/.
 ⁴ The corporate yields for the period 1980-2009 were obtained from the Mergent Bond Record.
 ⁵ The corporate yields for the period 1980-2009 were obtained from the Mergent Bond Record.

⁴ Data represents January - April, 2025.

3-Month Treasury and Utility Bond Yields

<u>Line</u>	Date	Treasury <u>Bond Yield¹</u> (1)	"A" Rated Utility <u>Bond Yield²</u> (2)	"Baa" Rated Utility <u>Bond Yield²</u> (3)
1	April-25	4.71%	5.91%	6.11%
2	March-25	4.60%	5.72%	5.91%
3	February-25	4.68%	5.73%	5.90%
4	3-Month Average	4.66%	5.79%	5.97%
5	Unadjusted Stock Yield ³	3.29%		
	Spreads			
6	Utility vs. Treasury Bond		1.13%	1.31%
7	Utility Bond vs. Stock	1.37%	2.50%	2.68%

Sources:

¹ St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org.

² Mergent Bond Record.

³ Exhibit MPG-9, column 4.

Trends in Bond Yields



Sources:

Mergent Bond Record.

www.moodys.com, Bond Yields and Key Indicators.

St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

Exhibit MPG-19 Page 3 of 3

Evergy Kansas Central, Inc.

Yield Spread Between Utility Bonds and 30-Year Treasury Bonds



Sources:

Mergent Bond Record.

www.moodys.com, Bond Yields and Key Indicators.

St. Louis Federal Reserve: Economic Research, http://research.stlouisfed.org/

Value Line Beta

			C	alculated VL Beta	
Line	Company	Beta ¹	<u>5-Year²</u>	<u>5-Year³</u>	<u>3-Year⁴</u>
		(1)	(2)	(3)	(4)
1	Alliant Energy Corporation	0.95	0.87	0.66	0.77
2	Ameren Corporation	0.90	0.85	0.67	0.77
3	American Electric Power Company, Inc.	0.85	0.82	0.60	0.64
4	Avista Corporation	0.75	0.84	0.64	0.67
5	CMS Energy Corporation	0.90	0.83	0.61	0.67
6	DTE Energy Company	1.00	0.89	0.65	0.73
7	Duke Energy Corporation	0.90	0.82	0.55	0.62
8	Entergy Corporation	1.00	0.98	0.72	0.77
9	IDACORP, Inc.	0.75	0.85	0.64	0.65
10	NextEra Energy, Inc.	1.05	0.94	0.79	0.79
11	NorthWestern Corporation	0.80	1.00	0.68	0.68
12	OGE Energy Corp.	1.05	1.02	0.77	0.80
13	Pinnacle West Capital Corporation	0.80	0.94	0.70	0.72
14	Portland General Electric Company	0.80	0.87	0.66	0.71
15	PPL Corporation	1.10	1.05	0.73	0.76
16	The Southern Company	0.95	0.88	0.64	0.62
17	Xcel Energy Inc.	0.75	0.81	0.61	0.68
18	Average	0.90	0.90	0.67	0.71

Source:

¹ The Value Line Investment Survey, February 7, March 7, and April 18, 2025.

 2 S&P Global Market Intelligence, betas for the period 3/07/2020 - 3/07/2025.

Adjusted using Value Line's Blume adjustment methodology.

³ S&P Global Market Intelligence, betas for the period 5/02/2020 - 5/02/2025. Adjusted using Value Line's Blume adjustment methodology.

⁴ S&P Global Market Intelligence, betas for the period 5/02/2022 - 5/02/2025. Adjusted using Value Line's Blume adjustment methodology.

Value Line Historical Betas

Line	Company	Average	1Q25	4Q24	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
			0.05						0.05	0.05	0.05	0.05	0.05		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	
1	Alliant Energy Corporation	0.78	0.95	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.80	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.80	0.55
2	Ameren Corporation	0.75	0.90	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.85	0.80	0.80	0.85	0.80	0.80	0.50
3	American Electric Power Company, Inc.	0.70	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.50
4	Avista Corporation	0.81	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.95	0.60	0.60
5	CMS Energy Corporation	0.72	0.90	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.75	0.80	0.80	0.80	0.80	0.75	0.80	0.80	0.80	0.50
6	DTE Energy Company	0.80	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.50
7	Duke Energy Corporation	0.71	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.90	0.85	0.85	0.85	0.85	0.85	0.45
8	Entergy Corporation	0.79	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.90	0.95	0.95	0.95	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.60
9	IDACORP, Inc.	0.75	0.85	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.80	0.80	0.80	0.80	0.50	0.55
10	NextEra Energy, Inc.	0.79	1.05	1.00	1.05	1.05	1.00	0.95	0.95	0.95	0.95	0.90	0.95	0.90	0.95	0.90	0.95	0.90	0.90	0.90	0.85	0.85	0.50
11	NorthWestern Corporation	0.78	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.55	0.60
12	OGE Energy Corp.	0.96	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.10	1.05	1.05	0.70
13	Pinnacle West Capital Corporation	0.77	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.90	0.90	0.90	0.85	0.85	0.45	0.50
14	Portland General Electric Company	0.78	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.55	0.55
15	PPL Corporation	0.88	1.10	1.10	1.15	1.15	1.10	1.05	1.10	1.05	1.05	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.15	1.10	1.05	0.65
16	The Southern Company	0.72	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.95	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.50
17	Xcel Energy Inc.	0.69	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.75	0.45	0.50
18	Average	0.78	0.95	0.94	0.95	0.94	0.93	0.92	0.90	0.88	0.89	0.89	0.89	0.88	0.90	0.90	0.91	0.90	0.89	0.89	0.88	0.75	0.54

Value Line Historical Betas

Line	Company	4Q19	3Q19	2Q19	1Q19	4Q18	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16	1Q16	4Q15	3Q15	2Q15	1Q15	4Q14	3Q14
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1	Alliant Energy Corporation	0.60	0.60	0.60	0.65	0.60	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80
2	Ameren Corporation	0.55	0.55	0.60	0.60	0.55	0.60	0.65	0.65	0.70	0.65	0.65	0.70	0.65	0.70	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
3	American Electric Power Company, Inc.	0.55	0.55	0.55	0.55	0.55	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
4	Avista Corporation	0.60	0.60	0.65	0.65	0.65	0.70	0.70	0.75	0.75	0.70	0.70	0.70	0.70	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.75
5	CMS Energy Corporation	0.50	0.55	0.55	0.55	0.55	0.55	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.75	0.75	0.70	0.75	0.75	0.70	0.75
6	DTE Energy Company	0.55	0.55	0.55	0.55	0.55	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.75	0.75	0.75	0.75	0.75	0.75	0.75
7	Duke Energy Corporation	0.50	0.50	0.50	0.50	0.55	0.55	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.65	0.50	0.60	0.60	0.60	0.60	0.60
8	Entergy Corporation	0.60	0.60	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.65	0.70	0.70	0.70	0.70
9	IDACORP, Inc.	0.55	0.60	0.60	0.55	0.60	0.65	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
10	NextEra Energy, Inc.	0.55	0.55	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.75	0.70	0.75	0.70	0.70	0.70
11	NorthWestern Corporation	0.60	0.60	0.60	0.55	0.60	0.65	0.65	0.70	0.70	0.65	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.70	0.70	0.70	0.70
12	OGE Energy Corp.	0.75	0.80	0.80	0.85	0.85	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.85
13	Pinnacle West Capital Corporation	0.55	0.55	0.55	0.55	0.60	0.65	0.65	0.70	0.70	0.65	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.70	0.70	0.70	0.70	0.70
14	Portland General Electric Company	0.60	0.60	0.60	0.60	0.60	0.65	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.75
15	PPL Corporation	0.70	0.65	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.65	0.65	0.65	0.60	0.65
16	The Southern Company	0.50	0.50	0.50	0.50	0.50	0.50	0.55	0.65	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.60	0.60	0.55	0.60	0.55	0.55	0.60
17	Xcel Energy Inc.	0.50	0.50	0.50	0.50	0.55	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.65
18	Average	0.57	0.58	0.59	0.59	0.60	0.63	0.67	0.69	0.69	0.67	0.68	0.68	0.68	0.69	0.72	0.74	0.73	0.72	0.73	0.72	0.72	0.72

Value Line Electric Industry Historical Betas

Line	Company	Average	1Q25	4Q24	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	Electric																						
1	ALLETE, Inc.	0.82	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.60
2	Alliant Energy Corporation	0.78	0.95	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.80	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.80	0.55
3	Ameren Corporation	0.75	0.90	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.85	0.80	0.80	0.85	0.80	0.80	0.50
4	American Electric Power Company, Inc.	0.70	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.50
5	Avangrid, Inc.	0.70	N/A	0.95	0.95	0.95	0.95	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	N/A	0.85	0.80	0.80	0.40
6	Avista Corporation	0.81	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.95	0.60	0.60
7	Black Hills Corporation	0.92	1.05	1.05	1.05	1.05	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.65	0.70
8	CenterPoint Energy, Inc.	0.97	1.10	1.15	1.15	1.15	1.15	1.15	1.10	1.10	1.10	1.10	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.10	1.15	0.70
9	CMS Energy Corporation	0.72	0.90	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.75	0.80	0.80	0.80	0.80	0.75	0.80	0.80	0.80	0.50
10	Consolidated Edison, Inc.	0.64	0.80	0.80	0.80	0.80	0.80	0.75	0.80	0.75	0.80	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.40
11	Dominion Resources, Inc.	0.74	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.50
12	DTE Energy Company	0.80	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.50
13	Duke Energy Corporation	0.71	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.90	0.85	0.85	0.85	0.85	0.85	0.45
14	Edison International	0.79	1.05	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	0.95	0.90	0.90	0.55	0.55
15	Entergy Corporation	0.79	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.90	0.95	0.95	0.95	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.60
16	Evergy, Inc.	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.05	NMF
17	Eversource Energy	0.78	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.55
18	Exelon Corporation	0.77	NMF	0.95	NMF	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.65								
19	FirstEnergy Corp.	0.75	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.80	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.60
20	Fortis Inc.	0.70	0.75	0.75	0.75	0.75	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.75	N/A	0.80	0.80	0.60
21	Hawalian Electric Industries, Inc.	0.77	0.95	0.95	1.00	1.00	0.95	0.95	0.85	0.85	0.85	0.80	0.80	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.55	0.55
22	IDACORP, Inc.	0.75	0.85	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.80	0.80	0.80	0.80	0.50	0.55
23	MGE Energy, Inc.	0.71	0.80	0.85	0.80	0.80	0.80	0.75	0.75	0.70	N/A	N/A	N/A	N/A	0.75	0.75	0.75	0.75	0.70	0.70	0.70	0.70	0.50
24	NextEra Energy, Inc.	0.79	1.05	1.00	1.05	1.05	1.00	0.95	0.95	0.95	0.95	0.90	0.95	0.90	0.95	0.90	0.95	0.90	0.90	0.90	0.85	0.85	0.50
25	NorthWestern Corporation	0.79	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.55	0.60
26	OGE Energy Corp.	0.96	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.05	1.10	1.05	1.05	0.70
27	Otter Tail Corporation	0.85	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.85	0.90	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.70
28	PG&E Corporation	0.77	1.10	1.15	1.10	1.10	1.10	1.05	N/A														
29	Pinnacle West Capital Corporation	0.77	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.90	0.90	0.90	0.85	0.85	0.45	0.50
30	Dettland Organish Florida Organish	0.82	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.50	0.60
31	Portiand General Electric Company	0.78	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.55	0.55
32	PPL Corporation	0.00	1.10	1.10	1.15	1.15	1.10	1.05	1.10	1.05	1.05	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.15	1.10	1.05	0.65
33	Public Service Enterprise Group Incorporated	0.80	1.00	0.95	0.95	0.95	0.95	0.90	0.95	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.90	0.90	0.90	0.90	0.90	0.60
34 25	Southarn Company	0.00	0.05	0.05	0.05	0.95	0.05	0.00	0.00	0.95	0.95	0.95	0.95	0.95	0.95	0.05	0.05	0.95	0.05	0.95	0.95	0.05	0.70
20	WEC Eporal Group Inc	0.73	0.35	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.95	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.30
27	Vool Energy Group, mb.	0.70	0.90	0.05	0.05	0.85	0.05	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.00	0.80	0.80	0.80	0.60	0.45
37	AGEI LITETAN ING.	0.09	0.00	0.00	0.05	0.05	0.00	0.05	0.05	0.80	0.00	0.00	0.80	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.45	0.30
38	Electric Average	0.78	0.95	0.94	0.94	0.94	0.93	0.91	0.90	0.88	0.88	0.88	0.89	0.88	0.89	0.90	0.90	0.89	0.89	0.89	0.88	0.77	0.56

Value Line Natural Gas Industry Historical Betas

Line	Company	Average	1Q25	4Q24	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	Natural Gas																						
1	Atmos Energy Corporation	0.76	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.55
2	Chesapeake Utilities Corporation	0.73	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.75	0.80	0.80	0.80	0.75	0.80	0.80	0.80	N/A	N/A	N/A	N/A	N/A	N/A
3	New Jersey Resources Corporation	0.86	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	0.90	0.90	0.65
4	NiSource Inc.	0.78	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.85	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.55
5	Northwest Natural Gas Company	0.73	0.90	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.55
6	ONE Gas, Inc.	0.76	0.85	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.60
7	Southwest Gas Corporation	0.84	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.65
8	Spire Inc.	0.76	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.80	0.85	0.85	0.80	0.80	0.85	0.85	0.85	0.85	0.85	1.00	0.80	0.80	0.60
9	UGI Corporation	0.97	1.15	1.15	1.10	1.10	1.10	1.10	1.05	1.05	1.05	1.05	1.00	1.05	1.05	1.05	1.05	N/A	N/A	1.00	1.00	0.95	0.75
10	Natural Gas Average	0.80	0.94	0.93	0.91	0.91	0.89	0.89	0.88	0.86	0.88	0.87	0.86	0.86	0.88	0.88	0.88	0.87	0.86	0.89	0.86	0.85	0.61

Source: Value Line Software Analyzer

Evergy Kansas Central, Inc.

Value Line Water Industry Historical Betas

Line	Company	Average	1Q25	4Q24	3Q24	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22	3Q22	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	Water																						
1	American States Water Company	0.70	0.75	0.75	0.70	0.70	0.70	0.70	0.65	0.70	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
2	American Water Works Company, Inc.	0.77	1.00	1.00	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
3	California Water Service Group	0.72	0.75	0.75	0.75	0.75	0.75	0.70	0.70	0.70	0.70	0.70	0.65	0.65	0.70	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
4	Essential Utilities, Inc.	0.82	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95	N/A	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90
5	Middlesex Water Company	0.73	0.80	0.75	0.75	0.75	0.75	0.75	0.70	0.75	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
6	SJW Group	0.76	0.85	0.85	0.85	0.85	0.85	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
7	Water Average	0.75	0.86	0.85	0.83	0.83	0.83	0.83	0.78	0.80	0.78	0.78	0.77	0.77	0.74	0.77	0.77	0.77	0.77	0.76	0.76	0.76	0.76

Value Line Electric Industry Historical Betas

Line	Company	4Q19	3Q19	2Q19	1Q19	4Q18	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16	1Q16	4Q15	3Q15	2Q15	1Q15	4Q14
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
	Electric																					
1	ALLETE, Inc.	0.65	0.65	0.65	0.65	0.65	0.70	0.75	0.75	0.80	0.75	0.80	0.80	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80
2	Alliant Energy Corporation	0.60	0.60	0.60	0.65	0.60	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80
3	Ameren Corporation	0.55	0.55	0.60	0.60	0.55	0.60	0.65	0.65	0.70	0.65	0.65	0.70	0.65	0.70	0.75	0.75	0.75	0.75	0.75	0.75	0.75
4	American Electric Power Company, Inc.	0.55	0.55	0.55	0.55	0.55	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.70
5	Avangrid, Inc.	0.40	0.40	0.40	0.40	0.30	0.30	0.40	0.35	NMF	NMF	NMF	NMF	NMF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Avista Corporation	0.60	0.60	0.65	0.65	0.65	0.70	0.70	0.75	0.75	0.70	0.70	0.70	0.70	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80
7	Black Hills Corporation	0.70	0.75	0.80	0.75	0.80	0.85	0.90	0.90	0.90	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90
8	CenterPoint Energy, Inc.	0.80	0.80	0.80	0.80	0.85	0.85	0.90	0.85	0.90	0.90	0.85	0.85	0.85	0.80	0.85	0.85	0.85	0.80	0.80	0.80	0.75
9	CMS Energy Corporation	0.50	0.55	0.55	0.55	0.55	0.55	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.75	0.75	0.70	0.75	0.75	0.70
10	Consolidated Edison, Inc.	0.45	0.45	0.45	0.45	0.45	0.45	0.50	0.50	0.50	0.50	0.50	0.55	0.55	0.55	0.55	0.55	0.60	0.60	0.60	0.60	0.60
11	Dominion Resources, Inc.	0.55	0.55	0.55	0.55	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.70	0.65	0.70	0.70	0.70	0.78	0.70	0.70	0.70	0.70
12	DIE Energy Company	0.55	0.55	0.55	0.55	0.55	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.75	0.75	0.75	0.75	0.75	0.75
13	Duke Energy Corporation	0.50	0.50	0.50	0.50	0.55	0.55	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.65	0.50	0.60	0.60	0.60	0.60
14	Edison International	0.60	0.60	0.60	0.55	0.60	0.60	0.60	0.65	0.65	0.60	0.60	0.65	0.65	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75
10	Entergy Corporation	0.60	U.OU	U.OU	0.60	U.60	U.OU	0.65	0.65	0.65	0.05	0.65	0.65	0.65	0.65	0.70 N/A	0.70 N/A	0.70 N/A	0.05 N/A	0.70 N/A	0.70 N/A	0.70 N/A
17	Evergy, inc. Everguirce Energy	0.55	0.60	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.75	0.75	0.75
18	Evelop Corporation	0.35	0.00	0.00	0.00	0.65	0.65	0.00	0.00	0.00	0.00	0.65	0.70	0.65	0.70	0.65	0.70	0.70	0.65	0.70	0.70	0.70
19	FirstEnergy Corp.	0.65	0.60	0.65	0.65	0.60	0.60	0.65	0.70	0.70	0.65	0.65	0.65	0.65	0.65	0.70	0.65	0.70	0.65	0.70	0.70	0.70
20	Fortis Inc.	0.60	0.65	0.65	0.65	0.60	0.65	0.70	0.70	0.70	0.70	0.65	0.65	0.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
21	Hawaiian Electric Industries, Inc.	0.55	0.55	0.60	0.60	0.60	0.65	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80
22	IDACORP, Inc.	0.55	0.60	0.60	0.55	0.60	0.65	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80
23	MGE Energy, Inc.	0.55	0.55	0.55	0.60	0.60	0.65	0.70	0.70	0.75	0.75	0.75	0.70	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.70	0.70
24	NextEra Energy, Inc.	0.55	0.55	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.75	0.70	0.75	0.70	0.70
25	NorthWestern Corporation	0.60	0.60	0.60	0.55	0.60	0.65	0.65	0.70	0.70	0.65	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.70	0.70	0.70
26	OGE Energy Corp.	0.75	0.80	0.80	0.85	0.85	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90	0.90
27	Otter Tail Corporation	0.70	0.65	0.70	0.70	0.75	0.80	0.85	0.85	0.90	0.90	0.90	0.85	0.85	0.85	0.80	0.85	0.85	0.85	0.90	0.90	0.90
28	PG&E Corporation	N/A	N/A	N/A	N/A	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.65	0.65	0.65	0.65	0.65
29	Pinnacle West Capital Corporation	0.55	0.55	0.55	0.55	0.60	0.65	0.65	0.70	0.70	0.65	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.70	0.70	0.70	0.70
30	TXNM Energy, Inc.	0.60	0.60	0.65	0.65	0.60	0.75	0.70	0.75	0.75	0.75	0.70	0.75	0.75	0.80	0.80	0.80	0.85	0.85	0.85	0.85	0.85
31	Portland General Electric Company	0.60	0.60	0.60	0.60	0.60	0.65	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80
32	PPL Corporation	0.70	0.65	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.65	0.65	0.65	0.60
33	Public Service Enterprise Group Incorporated	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.65	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.75	0.75	0.75
34	Sempra Energy	0.75	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.80	0.80	0.80	0.80	0.75	0.75
30	WEC Energy Croup Inc.	0.50	0.50	0.50	0.50	0.50	0.50	0.55	0.65	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.60	0.80	0.55	0.00	0.55	0.55
30	Veol Energy Group, Inc.	0.50	0.50	0.50	0.55	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.70	0.70	0.70	0.70	0.00	0.05
3/	AGEI LIIEIGY IIIC.	0.50	0.50	0.50	0.50	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.05	0.05	0.00	0.00	0.70
38	Electric Average	0.59	0.60	0.61	0.61	0.61	0.64	0.68	0.69	0.70	0.69	0.69	0.70	0.69	0.71	0.73	0.74	0.75	0.74	0.75	0.74	0.73

Value Line Natural Gas Industry Historical Betas

Line	Company	4Q19	3Q19	2Q19	1Q19	4Q18	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16	1Q16	4Q15	3Q15	2Q15	1Q15	4Q14
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
	Natural Gas																					
1	Atmos Energy Corporation	0.60	0.60	0.65	0.60	0.60	0.60	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.75	0.80	0.80	0.85	0.85	0.85	0.80
2	Chesapeake Utilities Corporation	N/A	N/A	0.65	0.70	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.65	0.60	0.60	0.65	0.65	0.65	0.65	NA	0.65
3	New Jersey Resources Corporation	0.70	0.70	0.70	0.70	0.70	0.70	0.80	0.75	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.85	0.80	0.80	0.80
4	NiSource Inc.	0.55	0.55	0.55	0.55	0.50	0.55	0.60	0.60	0.60	NMF	0.65	NMF	0.85	0.85	0.85						
5	Northwest Natural Gas Company	0.60	0.60	0.60	0.65	0.60	0.65	0.70	0.65	0.70	0.70	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70
6	ONE Gas, Inc.	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.70	N/A									
7	Southwest Gas Corporation	0.70	0.70	0.70	0.70	0.70	0.75	0.80	0.75	0.80	0.75	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.85	0.85	0.85	0.85
8	Spire Inc.	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
9	UGI Corporation	N/A	N/A	0.80	0.80	0.80	0.85	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.90	0.85
10	Natural Gas Average	0.64	0.64	0.66	0.67	0.65	0.68	0.73	0.71	0.73	0.74	0.73	0.74	0.74	0.74	0.74	0.76	0.76	0.79	0.79	0.81	0.78

Source: Value Line Software Analyzer

Evergy Kansas Central, Inc.

Value Line Water Industry Historical Betas

Line	Company	4Q19	3Q19	2Q19	1Q19	4Q18	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16	1Q16	4Q15	3Q15	2Q15	1Q15	4Q14
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
	Water																					
1	American States Water Company	0.65	0.65	0.65	0.65	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
2	American Water Works Company, Inc.	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.70
3	California Water Service Group	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.70
4	Essential Utilities, Inc.	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.70
5	Middlesex Water Company	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.70
6	SJW Group	0.60	0.60	0.60	0.60	0.65	0.65	0.65	0.65	0.75	0.75	0.75	0.75	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.85
7	Water Average	0.65	0.65	0.65	0.65	0.70	0.70	0.70	0.70	0.75	0.75	0.75	0.75	0.70	0.70	0.70	0.70	0.73	0.73	0.73	0.73	0.73

CAPM Return

<u>Line</u>	Description	CAPM <u>Parameters</u> (2)
1	Risk-Free Rate ¹	4.40%
2	Risk Premium ²	7.13%
3	Beta ³	0.70
4	САРМ	9.39%

Sources:

¹ Blue Chip Financial Forecasts, May 1, 2025.
 ² Morningstar Direct.
 ³ Exhibit MPG-20, Page 1.

Standard & Poor's Credit Metrics

			Retail				
		Co	st of Service	S&P Bench	mark (Media	l Volatility)	
Line	Description		Amount	Intermediate	Significant	Aggressive	References
			(1)	(2)	(3)	(4)	(5)
1	Rate Base	\$6	,843,914,121				Schedule 1.
1a	Construction Work in Progress						Response to BAI-13.
2	Weighted Common Return		4.82%				Page 2, Line 3, Col. 4.
3	Pre-Tax Rate of Return		8.35%				Page 2, Line 4, Col. 5.
3a	Rate of Return		7.07%				Page 2, Line 4, Col. 4.
4	Income to Common	\$	329,705,563				Line 1 x Line 2.
5	EBIT	\$	644,537,934				Line 1 x Line 3 + Line 1a x Line 3a.
6	Depreciation & Amortization	\$	471,359,038				Schedule 9.
7	Imputed Depreciation Expense*	\$	27,402,196				S&P Capital IQ, downloaded May 22, 2025 * CWIP AF.
8	Capitalized Interest	\$	(23,209,639)				Line 1a x Page 2, Line 1, Col. 4.
9	Deferred Income Taxes & ITC	\$	(21,907,675)				Schedule 9.
10	Funds from Operations (FFO)	\$	783,349,483				Sum of Line 4 and Lines 6 through 9.
11	Imputed Interest Expense*	\$	26,230,569				S&P Capital IQ, downloaded May 22, 2025 * CWIP AF.
12	EBITDA	\$1	,169,529,736				Sum of Lines 5 through 7 and Line 11.
13	Adjusted Debt*	\$4	,232,583,066				Page 3, Line 4, Col. 3 x CWIP AF.
14	² S&P Capital IQ, downloaded May 22, 2025.		53.8%				Page 3, Line 4, Col. 4.
15	Debt to EBITDA		3.6x	2.5x - 3.5x	3.5x - 4.5x	4.5x - 5.5x	Line 13 / Line 12.
16	FFO to Total Debt		19%	23% - 35%	13% - 23%	9% - 13%	Line 10 / Line 13.
17	Indicative Credit Rating			A-/BBB+	BBB	BB+	S&P Methodology, November 19, 2013.

Sources:

Standard & Poor's: "Criteria: Corporate Methodology," November 19, 2013. *The adjusted debt balance reflects a CWIP allocation factor ("AF") of 69%.

Note:

Based on the December 2024 S&P report, EKC has a "BBB+" credit rating, an "Excellent" business profile, a "Significant" financial profile, and falls under the 'Medial Volatility' matrix.

S&P Business/Financial Risk Profile Matrix								
Business Risk	Financial Risk Profile							
Profile	3 (intermediate)	4 (significant)	5 (aggressive)					
1 (excellent)	a+/a	a-	bbb					
2 (strong)	a-/bbb+	bbb	bb+					
3 (satisfactory)	bbb/bbb-	bbb-/bb+	bb					

Standard & Poor's Credit Metrics (Pre-Tax Rate of Return)

<u>Line</u>	Description	<u>Amount</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	Weighted <u>Cost</u> (4)	Pre-Tax Weighted <u>Cost</u> (5)
1	Long-Term Debt	\$ 5,009,647	48.75%	4.63%	2.26%	2.26%
2	Common Equity	\$ 5,266,552	<u>51.25%</u>	9.40%	<u>4.82%</u>	<u>6.10%</u>
3	Total	\$ 10,276,199	100.00%		7.07%	8.35%

4 Tax Conversion Factor

1.2658

Source: Exhibit MPG-1.

Standard & Poor's Credit Metrics (Financial Capital Structure)

		Gorman Propo	osed
<u>Line</u>	Description	<u>Amount</u>	Weight
		(1)	(2)
1	Long-Term Debt	\$ 5,009,647,239	43.98%
2	Short-Term Debt ¹		5.91%
3	Debt Equivalent Adjustment ²		<u>3.87%</u>
4	Total Debt	\$ 6,124,026,008 ³	53.76%
5	Common Equity	5.266.552.226	46.24%
U	Common Equity	-,,	
6	Total	\$11,390,578,234	100.00%
7	Data Dasa	¢ c 042 044 424	
/ 0	Rate Base	\$ 6,843,914,121	
0	CWIP Plus Pate base		60%
9	UNIT FIUS RALE DASE		03 /0

Sources:

Exhibit MPG-1.

¹Response to BAI-13.

²S&P Capital IQ, downloaded May 22, 2025.

³The adjusted debt balance on page 1 reflects a CWIP allocation factor of 69%.

Bulkley's Revised Multi-Stage Growth DCF Model

		30-Day AVG	Annualized	First Stage		Sec	ond Stage Gro	wth		Third Stage	Multi-Stage
Line	<u>Company</u>	Stock Price ¹	Dividend ²	Growth ³	Year 6	Year 7	Year 8	Year 9	Year 10	_ Growth⁴	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Alliant Energy Corporation	\$60.54	\$1.92	6.46%	6.07%	5.67%	5.28%	4.89%	4.49%	4.10%	7.93%
2	Ameren Corporation	\$90.04	\$2.68	6.53%	6.13%	5.72%	5.32%	4.91%	4.51%	4.10%	7.72%
3	American Electric Power Company, Inc.	\$97.21	\$3.72	6.33%	5.96%	5.59%	5.22%	4.84%	4.47%	4.10%	8.68%
4	Avista Corporation	\$37.55	\$1.90	4.53%	4.46%	4.39%	4.32%	4.24%	4.17%	4.10%	9.51%
5	CMS Energy Corporation	\$69.03	\$2.06	6.96%	6.48%	6.01%	5.53%	5.05%	4.58%	4.10%	7.82%
6	DTE Energy Company	\$123.55	\$4.08	6.77%	6.33%	5.88%	5.44%	4.99%	4.55%	4.10%	8.17%
7	Duke Energy Corporation	\$114.30	\$4.18	5.93%	5.63%	5.32%	5.02%	4.71%	4.41%	4.10%	8.37%
8	Entergy Corporation	\$144.84	\$4.80	5.45%	5.23%	5.00%	4.78%	4.55%	4.33%	4.10%	7.86%
9	IDACORP, Inc.	\$111.29	\$3.44	7.14%	6.63%	6.13%	5.62%	5.11%	4.61%	4.10%	8.00%
10	NextEra Energy, Inc.	\$78.02	\$2.06	8.30%	7.60%	6.90%	6.20%	5.50%	4.80%	4.10%	7.69%
11	NorthWestern Corporation	\$54.86	\$2.60	5.15%	4.98%	4.80%	4.63%	4.45%	4.28%	4.10%	9.36%
12	OGE Energy Corporation	\$42.03	\$1.69	5.91%	5.61%	5.31%	5.01%	4.70%	4.40%	4.10%	8.78%
13	Pinnacle West Capital Corporation	\$89.78	\$3.58	6.58%	6.17%	5.75%	5.34%	4.93%	4.51%	4.10%	8.94%
14	Portland General Electric Company	\$47.45	\$2.00	9.13%	8.29%	7.45%	6.62%	5.78%	4.94%	4.10%	10.03%
15	PPL Corporation	\$33.28	\$1.03	7.11%	6.61%	6.11%	5.61%	5.10%	4.60%	4.10%	8.00%
16	Southern Company	\$88.95	\$2.88	6.59%	6.18%	5.76%	5.35%	4.93%	4.52%	4.10%	8.04%
17	Xcel Energy Inc.	\$67.57	\$2.19	6.64%	6.22%	5.79%	5.37%	4.95%	4.52%	4.10%	8.06%
18	Average	\$79.43	\$2.75	6.56%	6.15%	5.74%	5.33%	4.92%	4.51%	4.10%	8.41%
19	Median	\$78.02	\$2.60	6.58%	6.17%	5.75%	5.34%	4.93%	4.51%	4.10%	8.06%

Sources:

¹ Exhibit AEB-3, column 2, page 1 of 3.

² Exhibit AEB-3, column 1, page 1 of 3.

³ Exhibit AEB-3, column 8, page 1 of 3. ⁴ *Blue Chip Economic Indicators*, March 10, 2025 at page 14.

Bulkley's Revised Multi-Stage Growth DCF Model

		90-Day AVG	Annualized	First Stage		Sec	ond Stage Gro	wth		Third Stage	Multi-Stage
Line	Company	Stock Price ¹	Dividend ²	Growth ³	Year 6	Year 7	Year 8	Year 9	Year 10	_ Growth⁴	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Alliant Energy Corporation	\$58.88	\$1.92	6.46%	6.07%	5.67%	5.28%	4.89%	4.49%	4.10%	8.04%
2	Ameren Corporation	\$85.54	\$2.68	6.53%	6.13%	5.72%	5.32%	4.91%	4.51%	4.10%	7.90%
3	American Electric Power Company, Inc.	\$98.33	\$3.72	6.33%	5.96%	5.59%	5.22%	4.84%	4.47%	4.10%	8.62%
4	Avista Corporation	\$37.70	\$1.90	4.53%	4.46%	4.39%	4.32%	4.24%	4.17%	4.10%	9.49%
5	CMS Energy Corporation	\$68.06	\$2.06	6.96%	6.48%	6.01%	5.53%	5.05%	4.58%	4.10%	7.88%
6	DTE Energy Company	\$123.46	\$4.08	6.77%	6.33%	5.88%	5.44%	4.99%	4.55%	4.10%	8.17%
7	Duke Energy Corporation	\$113.29	\$4.18	5.93%	5.63%	5.32%	5.02%	4.71%	4.41%	4.10%	8.41%
8	Entergy Corporation	\$129.94	\$4.80	5.45%	5.23%	5.00%	4.78%	4.55%	4.33%	4.10%	8.29%
9	IDACORP, Inc.	\$104.54	\$3.44	7.14%	6.63%	6.13%	5.62%	5.11%	4.61%	4.10%	8.25%
10	NextEra Energy, Inc.	\$79.31	\$2.06	8.30%	7.60%	6.90%	6.20%	5.50%	4.80%	4.10%	7.63%
11	NorthWestern Corporation	\$54.44	\$2.60	5.15%	4.98%	4.80%	4.63%	4.45%	4.28%	4.10%	9.40%
12	OGE Energy Corporation	\$40.34	\$1.69	5.91%	5.61%	5.31%	5.01%	4.70%	4.40%	4.10%	8.98%
13	Pinnacle West Capital Corporation	\$87.62	\$3.58	6.58%	6.17%	5.75%	5.34%	4.93%	4.51%	4.10%	9.05%
14	Portland General Electric Company	\$47.22	\$2.00	9.13%	8.29%	7.45%	6.62%	5.78%	4.94%	4.10%	10.05%
15	PPL Corporation	\$32.12	\$1.03	7.11%	6.61%	6.11%	5.61%	5.10%	4.60%	4.10%	8.13%
16	Southern Company	\$87.75	\$2.88	6.59%	6.18%	5.76%	5.35%	4.93%	4.52%	4.10%	8.10%
17	Xcel Energy Inc.	\$63.47	\$2.19	6.64%	6.22%	5.79%	5.37%	4.95%	4.52%	4.10%	8.31%
18	Average	\$77.18	\$2.75	6.56%	6.15%	5.74%	5.33%	4.92%	4.51%	4.10%	8.51%
19	Median	\$79.31	\$2.60	6.58%	6.17%	5.75%	5.34%	4.93%	4.51%	4.10%	8.29%

Sources:

¹ Exhibit AEB-3, column 2, page 2 of 3.

² Exhibit AEB-3, column 1, page 2 of 3.

³ Exhibit AEB-3, column 8, page 2 of 3. ⁴ *Blue Chip Economic Indicators*, March 10, 2025 at page 14.

Bulkley's Revised Multi-Stage Growth DCF Model

		180-Day AVG	Annualized	First Stage		Sec	ond Stage Gro	wth		Third Stage	Multi-Stage
Line	<u>Company</u>	Stock Price ¹	Dividend ²	Growth ³	Year 6	Year 7	Year 8	Year 9	Year 10	_ Growth⁴	Growth DCF
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Alliant Energy Corporation	\$54.28	\$1.92	6.46%	6.07%	5.67%	5.28%	4.89%	4.49%	4.10%	8.37%
2	Ameren Corporation	\$78.62	\$2.68	6.53%	6.13%	5.72%	5.32%	4.91%	4.51%	4.10%	8.23%
3	American Electric Power Company, Inc.	\$91.99	\$3.72	6.33%	5.96%	5.59%	5.22%	4.84%	4.47%	4.10%	8.93%
4	Avista Corporation	\$36.08	\$1.90	4.53%	4.46%	4.39%	4.32%	4.24%	4.17%	4.10%	9.73%
5	CMS Energy Corporation	\$63.61	\$2.06	6.96%	6.48%	6.01%	5.53%	5.05%	4.58%	4.10%	8.14%
6	DTE Energy Company	\$116.80	\$4.08	6.77%	6.33%	5.88%	5.44%	4.99%	4.55%	4.10%	8.40%
7	Duke Energy Corporation	\$105.61	\$4.18	5.93%	5.63%	5.32%	5.02%	4.71%	4.41%	4.10%	8.72%
8	Entergy Corporation	\$117.51	\$4.80	5.45%	5.23%	5.00%	4.78%	4.55%	4.33%	4.10%	8.72%
9	IDACORP, Inc.	\$98.14	\$3.44	7.14%	6.63%	6.13%	5.62%	5.11%	4.61%	4.10%	8.51%
10	NextEra Energy, Inc.	\$74.17	\$2.06	8.30%	7.60%	6.90%	6.20%	5.50%	4.80%	4.10%	7.87%
11	NorthWestern Corporation	\$51.94	\$2.60	5.15%	4.98%	4.80%	4.63%	4.45%	4.28%	4.10%	9.65%
12	OGE Energy Corporation	\$37.38	\$1.69	5.91%	5.61%	5.31%	5.01%	4.70%	4.40%	4.10%	9.36%
13	Pinnacle West Capital Corporation	\$80.85	\$3.58	6.58%	6.17%	5.75%	5.34%	4.93%	4.51%	4.10%	9.46%
14	Portland General Electric Company	\$44.77	\$2.00	9.13%	8.29%	7.45%	6.62%	5.78%	4.94%	4.10%	10.36%
15	PPL Corporation	\$29.84	\$1.03	7.11%	6.61%	6.11%	5.61%	5.10%	4.60%	4.10%	8.44%
16	Southern Company	\$81.04	\$2.88	6.59%	6.18%	5.76%	5.35%	4.93%	4.52%	4.10%	8.42%
17	Xcel Energy Inc.	\$58.37	\$2.19	6.64%	6.22%	5.79%	5.37%	4.95%	4.52%	4.10%	8.67%
18	Average	\$71.82	\$2.75	6.56%	6.15%	5.74%	5.33%	4.92%	4.51%	4.10%	8.82%
19	Median	\$74.17	\$2.60	6.58%	6.17%	5.75%	5.34%	4.93%	4.51%	4.10%	8.67%

Sources:

¹ Exhibit AEB-3, column 2, page 3 of 3.

² Exhibit AEB-3, column 1, page 3 of 3.

³ Exhibit AEB-3, column 8, page 3 of 3. ⁴ *Blue Chip Economic Indicators*, March 10, 2025 at page 14.

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<u>CERTIFICATE OF SERVICE</u>

I hereby certify that on this 6th day of June 2025, the foregoing was electronically filed

with the Kansas Corporation Commission and that one copy was delivered electronically to all

parties on the service list as follows:

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